

**Compendium of
Special Teams, Capabilities and Assets
for Responses in EPA Region 9
with a focus on California**

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1 Introduction

This is an informational guide for federal, state, tribal and local responders and planners located in EPA Region IX. This Region encompasses California, Arizona, Nevada, Hawaii, Pacific Island Trust Territories (i.e., American Samoa, Guam) and Commonwealth Islands (i.e., Northern Marianas). It provides a reference source for emergency responders and planners on the capabilities of various Federal special teams and assets that may be called upon to support federal, state, tribal and local response to major incidents involving oil spills, hazardous material incidents, natural disasters, Weapons of Mass Destruction (WMD) and other emergencies and disasters. This compendium used existing information on 21 special teams described in the Hazardous Materials Response Special Teams, Capabilities and Contact Handbook 2002 (updated in 2005) published by the United States Coast Guard (<http://www.uscg.mil/hq/g-m/2005SpecialTeamsHandbook.pdf>). This compendium expanded and updated the existing information and included an additional 63 Federal agency, and 7 State of California and Local agency special teams and assets. In addition to the 91 special teams and assets, an additional 55 Federal teams and assets were listed, but not described, in this compendium. These Federal Teams' missions are briefly described in Appendix 2 – Inventory of Federal Response Teams, Catastrophic Incident Supplement (2006), **National Response Plan** and the DHS/EPR/FEMA Emergency Teams Handbook. Final sections of this compendium list emergency and non-emergency contact information for each agency team and asset. These agency contacts assisted in editing and updating the information in the compendium.

This guide provides valuable information to emergency responders from all jurisdictions including federal, state, tribal and local agencies and non-governmental organizations. This information should be useful to response personnel that participate in multi-agency/multi-jurisdictional response, incident command system/unified command, national, regional and local area contingency planning, training exercises, national security special events (NSSE) and other emergency preparedness and response activities. It is another tool that can be used by agency personnel to become familiar with other agency's capabilities and assets and gain a better understanding of what they can bring to the response. This compendium will be placed in the Region IX Mainland and Oceania Regional Contingency Plans.

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) describes the National Response System (NRS) and Special Forces that are an integral part of the NRS. These Special Forces are available to support a Federal On-Scene Coordinator (FOSC) during environmental emergencies. The U.S. EPA and U.S. Coast Guard have pre-designated FOSCs for emergency response to oil discharges and hazardous substance releases in the inland and marine zones, respectively. Two other Federal agencies, DOE and DOD, have FOSCs for emergency response to releases of hazardous substances that occur on their facilities or vessels in accordance with the NCP. The special teams listed in the compendium include those mandated as Special Forces under the NCP as well as other significant Federal agency teams and assets. Some of these may be useful resources to the FOSC, the Incident Commander, a Unified Command, an Area Command, an Emergency Operations Center (EOC) or a Joint Field Office (JFO). A team listed below with an asterisk is a member of the Special Forces under the NCP.

Using off-site coordination and support mechanisms of the NRS, the FOSC should be able to access many of the teams or assets through the Regional Response Team (RRT) and its member agencies. The RRT membership is comprised of 16 Federal agencies including EPA, DHS (USCG, FEMA), DOD, DOE, DOJ and HHS. The Federal agency member on the RRT (or NRT) such as the DOE representative should be able to contact the appropriate Department official who can authorize deployment of a special team or asset. For example, an RRT representative may contact the Lawrence

Livermore National Laboratory (LLNL) to request response assistance from DOE NARAC or DHS IMAAC to model an airborne release. In this case, the NARAC/IMAAC Response Manager at LLNL would work directly with the FOSC to develop a scope of work, plan the logistics and execute an interagency agreement for cost reimbursement. The DOD has developed a more formal procedure by which a Federal agency will request the assistance of a DOD Special Team. This procedure is described in this compendium. However, for certain types of DOD assets, Federal agencies can use existing relationships to obtain assistance from regional Base Commanders via the RRT.

When releases are serious enough to be considered "Nationally Significant Incidents," the [National Response Framework](#) (NRF) is activated, and works in conjunction with the NRS and NCP. The NRF is the federal government's comprehensive, all-hazard approach to crisis management, and provides a mechanism for coordinating federal assistance to state governments and localities [<http://www.epa.gov/OEM/>]. The Incident Annexes to the NRF describe the concept of operations to address specific contingency or hazard situations or an element of an incident requiring specialized application of the Framework. [Reference accessed April 2010: <http://www.fema.gov/emergency/nrf/incidentannexes.htm>]

The following Incident Annexes have been updated and supersede the 12/04 versions:

- [Biological Incident \(Current as of 8/08\)](#)
- [Catastrophic Incident \(Current as of 11/08\)](#)
- [Food and Agriculture Incident \(Current as of 8/08\)](#)
- [Mass Evacuation \(Current as of 6/08\)](#)
- [Nuclear/Radiological Incident \(Current as of 6/08\)](#)

At this time, the following Incident Annexes published with the National Response Plan remain in effect:

- [Incident Annex Introduction](#)
- [Cyber Incident](#)
- [Terrorism Incident Law Enforcement and Investigation](#)

Note: The Oil and Hazardous Materials Incident Annex has been superseded by the [ESF #10 - Oil and Hazardous Materials Response Annex](#).

It is possible to have multiple incident annexes activated for a given hazard situation. For example, a World Trade Center (WTC)-like incident would likely invoke multiple incident annexes including the Terrorism Incident Law Enforcement and Investigation, Catastrophic Incident and Oil & Hazardous Material Incident Annexes. In all circumstances, a Federal agency would use the appropriate Incident Annex (s) to determine the unique aspects of the response action, agency responsibilities for the type of incident, organizational structure, notification, activation and coordination processes that may apply to their Agency, special team(s) and assets. A key responsibility of the IC/UC is the proper delineation of specific response functions needed to mitigate the incident and the blending of Federal, State and local agency teams, assets and capabilities into a single coordinated effort.

2 Federal Special Team or Asset

2.1 Federal On-Scene Coordinator (FOSC)

The FOSC is a Federal official pre-designated by EPA for inland areas and waters and by the Coast Guard for coastal areas and the Great Lakes. The U.S. inland/coastal boundaries are specified by a Regional Contingency Plan which is developed by a multi-agency Regional Response Team (RRT). The FOSC directs Federal response to environmental emergencies, and coordinates all other efforts at the scene of a discharge of oil into navigable waters of the United States, of releases of hazardous substances, and releases of pollutants or contaminants that present an imminent and substantial threat

to public health, welfare or the environment. The FOSC derives his/her authorities to respond to releases of chemicals into the environment from CERCLA (or Superfund), and discharges of oil from the Clean Water Act as amended by the Oil Pollution Act of 1990 (OPA 90). The FOSC performs his/her duties pursuant to the emergency response mechanisms set forth in the National Oil and Hazardous Substances Pollution Contingency Plan's (NCP). A key component of the NCP is the National Response System (NRS) which provides a framework for coordination among Federal, State and Local responders and responsible parties. The FOSC is the cornerstone of the NRS and all Federal resources are made available to support the FOSC in the containment, removal and disposal of oil discharges and releases of hazardous substances during an incident. The FOSC has access to unique resources including those described in the Special Forces section of the NCP.

There are approximately 250 EPA FOSCs in the 10 EPA Regions and 26 locations. The USCG has 46 Marine Safety Offices (MSOs), spread among the nine USCG Districts, each of which is headed by a Captain of the Port (COTP), who also serves as the FOSC. Two other Federal agencies, DOE and DOD, have FOSCs for emergency response to releases of hazardous substances that occur on their facilities or vessels in accordance with the NCP. Under President Executive Order for CERCLA, Federal agencies that administer government lands (i.e., BLM, BIA, NPS, USFS) are provided OSC authority for non-emergency removal actions such as the cleanup of hazardous waste sites on their lands. Under the direction of the FOSC, the EPA has provided cleanup assistance to other Federal agencies on a cost reimbursable basis.

The EPA's emergency response team is a unique combination of Federal and private contractor emergency response personnel. The make-up of the team depends on the situation and the needs of the IC/UC. The EPA emergency response team is led by the FOSC and may be comprised of a Superfund Technical Assistance and Response Team (START) and an Emergency Response and Rapid Services (ERRS) cleanup contractor. The EPA FOSC may expand his/her staff by calling upon a USCG Strike Team and/or EPA's Environmental Response Team (ERT) to provide additional support, resources and expertise. There are many more resources that are available to the FOSC, including the collective resources and expertise of 16 Federal agencies on the RRT, to assist in the assessment, containment, cleanup, disposal and restoration phases of an emergency response operation. In an ICS structure, EPA may combine their resources to form Task Forces in the Operations Section to accomplish tactical assignments and objectives. A FOSC is an Incident Commander in the IC/UC in situations where the FOSC has statutory and jurisdictional authorities for the incident under CERCLA or OPA and the NCP. The FOSC is trained in all facets of oil and hazardous materials response operations, environmental cleanup operations, counter-terrorism and WMD incident response operations. **The FOSC has received training in coordinating and assisting in federal response to Incidents of National Significance under the National Response Plan (NRP).** The FOSC has received advanced training in the National Incident Management System (NIMS) Incident Command System (ICS). Many EPA FOSCs are members of their regional Incident Management Teams and have received command/general staff and position-specific training.

DHS funds and oversees the BioWatch program which is an early-warning system designed to detect the release of biological agents in the air through a comprehensive protocol of air sampling and laboratory analysis. DHS directed EPA to manage the BioWatch program due to their air sampling expertise and existing national air monitoring network and air grant mechanisms. EPA's Air Program and the FOSCs coordinate the regional BioWatch systems which involve sampling, lab analysis and response to positive biological agent detection. The BioWatch systems provide coverage for up to 80% of the population in select cities. The BioWatch program involves awarding and managing cooperative agreements with State and local air monitoring districts to collect and analyze filter samples. Local BioWatch Advisory Committees (BACs) are responsible for coordinating all aspects of BioWatch including sampling, packaging, transportation, analytical, post-detection sampling, confirmation, evidence collection, notification and emergency response. BAC members include the

EPA FOSC, FBI WMD Coordinator, State and local public health agencies, State Office of Emergency Services and County Hazardous Materials Unit. The CDC is responsible for the National Laboratory Response Network which was developed to increase local health laboratory capacity to respond to bioterrorism events. Laboratories on this network are used to analyze BioWatch filter samples.

During an Incident of National Significance (INS) under the NRP involving oil or hazardous substances, the FOSC will carry out his/her normal duties under the NCP and will coordinate with NRP mechanisms as described in two NRP annexes: ESF #10 - Oil and Hazardous Materials Response Annex (if DHS activates ESF #10 under the Stafford Act or Federal-to-Federal support provisions of the NRP), or the Oil and Hazardous Materials Incident Annex (if EPA/USCG respond using CERCLA/CWA/OPA funds). In some cases, the FOSC may initiate a response to a DHS-declared INS under the Oil and Hazardous Materials Incident Annex and transition to ESF #10 if it takes some time for DHS to activate the ESF. The Annexes describe how the NCP structures work with NRP coordinating structures during an INS. In a WMD incident, a critical ESF #10 mission assignment may be the decontamination of equipment, buildings, critical infrastructure, and other areas. Decontamination requirements following a catastrophic biological, chemical or radiological attack in an urban area would quickly outstrip State and Local capabilities.

The EPA FOSC coordinated the Federal response to the Capitol Hill Anthrax Site on October 15, 2001. The response involved sampling 26 buildings, decontaminating seven buildings contaminated with military-grade anthrax spores, treatment and disposal of over 300,000 pounds of contaminated waste materials, and confirmation sampling to clear the buildings for re-entry. EPA, with the help of other agencies, overcame the new challenges, developed and implemented a successful decontamination plan that consisted of using chlorine dioxide gas to fumigate Senator Tom Daschle's suite and the HVAC system inside the Hart Senate Office Building. The cleanup lasted seven months. The response involved the coordination of over 50 agencies and organizations including FOSCs from 9 Regions, EPA ERT, FBI, FEMA, OSHA, U.S. Marine Corps (CBIRF), CDC, ATSDR, USCG (NSF), U.S. Capitol Police, 6-ERRS contractors, 4-START contractors, 5-Analytical Laboratories and numerous subcontractors.

The EPA FOSC has specially delegated procurement authority to issue emergency tasking orders for emergency response services related to the threat or actual release of hazardous substances in the amount not to exceed \$200,000 in any geographic location in the world. The statutory limits for removal actions are 12 months and \$2 million which may be exceeded under certain conditions. The EPA FOSC can be a valuable asset to the State and especially the local response community during an emergency or disaster. Among his/her other duties, the FOSC is responsible for regional and area emergency response planning and preparedness. The FOSC assists the RRT in the development of the Regional Contingency Plan, response policies and procedures. The FOSC directs the development of Area Contingency Plans by Area Committees, in coordination with the RRT, for response to oil and hazardous material spills, planning and delivery of multi-agency exercises and area response drills.

2.2 National Response Team (NRT)

As described in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), a major component of the National Response System (NRS) is the National Response Team (NRT). The NRT membership is comprised of representatives from 16 federal agencies including:

- Department of Agriculture (USDA)
- Department of Commerce (DOC)
- Department of Defense (DOD)

- Department of Energy (DOE)
- General Services Administration (GSA)
- Department of Health and Human Services (HHS)
- Department of Interior (DOI)
- Department of Justice (DOJ)
- Department of Labor (DOL)
- Nuclear Regulatory Commission (NRC)
- Department of State (DOS)
- Department of Transportation (DOT)
- Department of the Treasury
- Department of Homeland Security Federal Emergency Management Agency (DHS/FEMA)
- United States Coast Guard (DHS/USCG)
- United States Environmental Protection Agency (USEPA)

Each of the Federal Agencies has unique responsibilities, interests and expertise in various aspects of emergency response to pollution incidents. The USEPA serves as chairman and the USCG serves as vice-chairman of the NRT, except when activated for a specific incident. The NRT is primarily a national-level planning, policy, guidance and coordination body and does not respond directly to incidents. NRT assistance usually takes the form of technical advice, access to national pollution response assets, and coordination with other RRTs especially when the incident(s) impact crosses Federal Regional boundaries.

2.3 Regional Response Teams (RRT)

As described in the NCP, a major component of the National Response System (NRS) is the Regional Response Team (RRT). The RRT is a regional off-site advisory group for planning and preparedness activities before an incident occurs, as well as for coordination of assistance and advice to the FOSC during an emergency response. There are 13 RRTs, one for each of the ten Federal Regions, Alaska, the Caribbean and the Pacific Basin (Oceania). Each RRT has Federal and State representation. The EPA and USCG co-chair the RRTs. The members on the RRT are comprised of representatives from 16 federal agencies. The federal agencies are the same as those represented on the NRT including USDA, DOC, DOD, DOE, GSA, HHS, DOI, DOJ, DOL, NRC, DOS, DOT, DHS/FEMA, DHS/USCG and USEPA, except the RRT representatives are from the agency's regional offices. The Governor of each State within the region designates an RRT representative. The Standing RRT provides a forum for Federal and State agencies to collaborate on reviewing and updating the Regional Contingency Plan, and improving emergency communications, planning, coordination, training, exercises and related activities on a region-wide basis. An Incident-Specific RRT is formed from the Standing Team when the RRT is activated for a response, and consists of representatives of Local governments and the appropriate State and Federal agencies. When activated, the RRT may be requested to: provide federal and/or State agency resources and special or technical expertise; provide advice, as requested by the FOSC, recommending courses of action for consideration by the FOSC; advise the FOSC on the duration and extent of Federal response and recommend to the FOSC specific actions to respond to a discharge or release; request other Federal, State, or Local government or private agencies to provide resources under their existing authorities to respond or to monitor response operations; provide mediation to resolve disagreements between parties and help achieve consensus when requested by the FOSC; and monitor and evaluate reports from the FOSC.

2.4 National Response Center (NRC)

Created by the NCP, the National Response Center (NRC) is charged with receiving notifications of all chemical, radiological, oil, and biological releases, which are required by the Clean Water Act (CWA) (for oil discharges), CERCLA (Superfund) (for hazardous substance releases), and the Hazardous Materials Transportation Act (HMTA) (for hazardous materials releases). Additionally, suspected acts of terrorism and other disasters are reported to the NRC. Located in the Coast Guard Headquarters Command Center and operating 24/7, the NRC immediately relays Spill Reports to the cognizant, predesignated Federal On-Scene Coordinator (FOSC). The NRC will also send Spill Reports to other Federal and State agencies that maintain an MOA with the NRC and need to be informed about the incident including the Department of Homeland Security. The NRC operators are trained to gather vital incident information and spill data from the person reporting the incident. There are specific reporting requirements for oil spills, gas and liquid pipeline releases, transportation accidents, chemical releases (including radionuclides) exceeding reportable quantities and other releases (i.e., discharges from a hazardous waste treatment or storage facility, abandoned dump or waste site). The NRC maintains a conference bridge capability for the FOSC and other federal emergency responders who may need to communicate with each other on a moment's notice. The NRC can patch in multiple lines at a time for a conference call. The NRC is the communications center for the NRT. Reports of oil and chemical spills are made to the NRC at (800) 424-8802 or by filling out an incident report via the web-site, www.nrc.uscg.mil.

2.5 U.S. EPA

2.5.1 EPA Environmental Response Team (EPA ERT)

ERT was established in 1978 under the Clean Water Act and mandated as one of the Special Forces under the NCP. The ERT is comprised of a group of EPA technical professionals who provide EPA FOSCs, Regional and Headquarters offices with experienced technical and logistical assistance in responding to, characterizing, and cleaning up chemical, biological, radiological, or nuclear (CBRN) environmental sites during emergencies and non-emergencies. The ERT maintains a 24/7 readiness capability to provide expertise at the scene of an oil spill, toxic chemical release, terrorist attack and other disasters. The ERT can be activated by the FOSC from its offices in Edison, NJ, Cincinnati, OH, or Las Vegas, NV.

With its approximately 50 members of varying technical and scientific disciplines, the ERT provides a capable team to provide expertise in such areas including, but not limited to: rapid assessment techniques (stationary and mobile); clean-up and treatment technologies; air monitoring; field analytics and method development; eco-toxicity; radiation health physics, environmental sciences, ecological risk; specialized ambient and indoor air monitoring technologies; air plume modeling; counter-terrorism response; chemical and biological agents sampling; use of chlorine dioxide for anthrax cleanup; chemical treatment of hazardous materials; reactivity of highly hazardous and toxic materials; environmental assessments; cleanup of chemicals and hazardous waste; building decontamination; drum, tank and cylinder sampling and treatment; statistical sampling, analysis and models; field analytical instrumentation; radiological hazard assessment; health & safety protocols; development and maintenance of EPA's computer remote access and networking for emergency response websites; oil spill containment and countermeasures; ecological risk assessment; bioremediation; environmental contaminants fate and transport; environmental site remediation and restoration; water quality studies; and video documentation; and dive operations.

As part of the EPA HQ's Office of Solid Waste and Emergency Response, the ERT is routinely called upon by FOSCs and RPMs, who manage remediation of NPL Superfund Sites, to mobilize to remote areas across the country with little or no outside support. The Team can provide support to the ten EPA Regional Offices as well as other Federal and State agencies. The ERT can serve as the

Scientific Support Coordinator (SSC) with a similar role as the NOAA SSC, but in the inland zone. The ERT can also provide a channel to DOD experts through their Interagency Agreement (IAG) with Aberdeen Proving Grounds.

The ERT is usually dispatched to unusual and complex emergency incidents where it can provide the FOSC and RPM with experience and advice. During the past 30 years, the ERT has maximized its expertise by way of field experience in providing technical assistance to FOSCs at hazardous waste site removal actions and emergency responses in all ten EPA Regions including areas in the Pacific and Caribbean Islands and U.S. Territories. Additionally, the ERT has gained international experience by assisting other countries with assessment and cleanup of hazardous waste sites and addressing environmental contamination concerns. Consequently, the ERT personnel have been exposed to many different environmental situations and some of the worst spills and hazardous material incidents that have occurred in the United States and elsewhere. Another key function of the ERT is emergency responder training. The Environmental Response Training Program (ERTP) is one the best hazardous materials incident responder training programs in the nation and is taught to Federal, State and local agencies and private industry emergency response teams. The ERT manages the contract for the delivery of advanced NIMS ICS and position-specific training courses to EPA's FOSCs and regional Incident Management Teams.

The ERT may also activate EPA's Response Engineering and Analytical Contract (REAC) support activities performed by ERT. REAC provides contractors used by ERT to provide effective techniques and technologies for the assessment and remediation of hazardous waste sites and spills. REAC contractors can perform complex treatability studies for chemical and biological treatment systems, engineering/feasibility studies on various remediation technologies, evaluations of innovative commercially available technologies and the effectiveness of proposed engineering control measures to prevent off-site exposure to hazardous substances. The ERT can also support response operations by performing real time monitoring of ambient air at chemical spills and WMD incidents with the TAGA mobile lab to ensure safety of the public. REAC can provide analytical services including on-site and mobile laboratory capabilities for rapid analysis of complex waste mixtures and environmental samples.

The ERT can provide a self-contained mobile laboratory known as the TAGA or Trace Atmospheric Gas Analyzer. The TAGA is capable of real-time sampling and analysis in the low parts per billion level of outdoor air or emissions from various environmental sources and concerns such as uncontrolled releases from chemical spills or fires. The TAGA unit can also carry air sampling equipment such as SUMMA canisters, Bucket air samplers, Tedlar bags and resin beds for sampling and capture of emissions from various environmental sources for purposes of on-board or fixed laboratory analysis. The TAGA is currently equipped with several gas chromatographs to aid in identification and confirmation of analysis and can be equipped with other instruments which may be available such as portable or field units for GC/MS for organic compounds or X-Ray Fluorescence for inorganic metals. The TAGAs responded to both the World Trade Center (WTC) disaster and the anthrax found in the Hart Senate Office Building. During fumigation of the Hart Building, the TAGA was used to monitor chlorine dioxide in the ambient air near residences adjacent to the building. The low detection limits for chlorine dioxide (900 ppq by vol.) in real time was more than sufficient to meet the action limits imposed by Washington DC, which was 25 ppb for 15 minutes at a location.

2.5.2 EPA Radiological Emergency Response Team (RERT)

The RERT, based in EPA's Office of Radiation and Indoor Air (ORIA) and Regional offices, responds to emergencies involving releases of radioactive materials. RERT is listed as a Special Force under the NCP. Working closely with EPA's Superfund Program and FOSCs as well as Federal, State and local agencies, the RERT responds to emergencies that can range from accidents at

nuclear power plants, to transportation accidents involving shipments of radioactive materials, to deliberate acts of nuclear terrorism (e.g., dirty bombs). There are approximately 25 team members working primarily out of EPA's two national radiation laboratories. RERT assessment and response capabilities are located at ORIA's National Air and Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama, and its Radiation and Indoor Environments National Laboratory (R&IE) in Las Vegas, Nevada. Headquarters RERT members support field operations activities from the Agency's EOC. RERT Commanders will provide initial advice over the phone, and begin taking environmental measurements and providing additional guidance immediately upon arrival at the scene.

RERT capabilities include radiation monitoring, sampling, radionuclide analysis, radiation health physics, risk assessment, protective action guides, and decontamination. RERT has both laboratories and emergency management vehicles including a mobile command post, a mobile radiation laboratory, two mobile laboratories, two sample preparation laboratories and a van equipped to scan for gamma radiation. Samples requiring more extensive analysis can be sent back to NAREL and R&IE. RERT is also responsible for the deployment of RadNet at ORIA's two national laboratories. RadNet is a national network of monitoring stations that regularly collect air, precipitation, drinking water, and milk samples for analysis of radioactivity. RadNet also includes 40 radiation monitoring stations that can be deployed after a radiological incident has occurred to determine whether or not there are elevated radiation exposure readings in excess of normal background.

RERT members may be assigned to various support, coordination and response elements such as FRMAC or within the Incident Command Post or ICS. Under ICS/UC, RERT has capabilities to support both the planning and operations functions during a nuclear/radiological incident. Under the National Response Plan's Nuclear/Radiological Incident Annex, which supersedes the Federal Radiological Emergency Response Plan (FRERP), the RERT will provide technical support to the DHS and/or coordinating agency (e.g., DHS/USCG, EPA, NRC, DOD, DOE) that has responsibility for the incident. For example, the DHS/USCG is responsible for incidents involving foreign or unknown sources of radioactive material in certain areas of the coastal zone as well as the shipment of radioactive materials in certain areas of the coastal zone that are not licensed or owned by a Federal agency or Agreement State. EPA is the coordinating agency for all incidents involving unlicensed or unowned foreign (i.e., imported radioactively contaminated material, radioactive fallout), unknown (i.e., contaminated scrap metal, abandoned radioactive material), or unlicensed (i.e., radioisotopic thermoelectric generator or RTG and spacecraft reentry) radiological sources that have actual, potential, or perceived radiological consequences in the U.S. or its territories, possessions, or territorial waters. NRC is the coordinating agency for incidents involving nuclear facilities licensed by NRC. DOE is coordinating agency for incidents involving transportation of radioactive materials shipped by or for DOE and radiological terrorism incidents not in the jurisdiction of NRC or DOD (i.e., radiological dispersal device such as a dirty bomb). Additionally, DOE provides technical support to DHS and to the FBI, which has lead responsibility for coordinating law enforcement activities to detect, prevent, preempt, investigate, and disrupt terrorist attacks against the United States.

2.5.3 EPA Regional Incident Management Team (EPA IMT)

U.S. EPA has Regional Incident Management Teams (EPA IMTs) in each of the ten EPA Regions nationwide. The goal is to eventually have at least two Type II teams in each Region to sustain a 24-hour operational period. The mission of EPA's IMTs is to provide Regions with well-trained and qualified personnel to staff Incident Command System (ICS)-based incident management teams in accordance with the concepts and structure of the Department of Homeland Security National Incident Management System (NIMS). EPA IMTs provide regional support to the FOSC during responses to discharges of oil and releases of hazardous substances and pollutants and contaminants

that present an imminent and substantial endangerment to public health, welfare and/or the environment. EPA IMTs are not presently considered national assets as are the USFS “all hazard” National IMTs. EPA IMTs are not large incident management teams and are not structured to provide a full complement of leadership and administrative functions needed to manage large incidents and disasters. EPA IMTs are designed to “plug-in” to existing ICS/UC organizations and facilitate functions related to the assessment and cleanup of oil and hazardous material incidents, protection of public health, welfare and the environment. EPA IMTs can quickly integrate into an ICS and Unified Command structure at a national level incident or incident of national significance (INS).

EPA IMTs have the capability of establishing an ICS organization at the local or regional level pursuant to Federal statutory authorities in situations where the local or State responding agencies or the responsible party do not, or cannot, establish an effective incident management system. In an INS or disaster, it is EPA’s goal to have IMTs with the capability of supporting (e.g., provide backup to fill key ICS positions) a national level ICS organization during the initial emergency or crises management phase. EPA IMTs can assume a command role and manage the ICS organization when it transitions from the emergency phase to the environmental cleanup phase where EPA’s statutory authorities and lead role under the NCP are the focus of ongoing operations. The EPA IMTs have 5 Command Staff and 7 General Staff for a total of 12 positions. The Command Staff is comprised of an Incident Commander (FOSC), Deputy Incident Commander, Safety Officer, Information Officer and Liaison Officer. The General Staff is comprised of a Planning Section Chief, Situation Unit Leader, Resource Unit Leader, Environmental Unit Leader, Operations Section Chief, Logistics Section Chief, and Finance/Administration Section Chief. The Operations Section Chief can further expand the section into branches, groups, divisions and/or taskforces to support hazardous materials operations, implement protection and removal strategies and tactics, achieve incident objectives, and maintain a manageable span of control.

Each Regional IMT is supported by a Response Support Corps (RSC). The RSC is comprised of 70-80 EPA employees from other non-emergency programs (i.e., air, water, toxics, contracts, information technology, etc.). These employees have specialized office and field skills that can be used to support emergency response activities such as strategic sampling and analytical design, QA/QC, ecological and human risk assessment, toxicology, information and communication technology applications, GIS/GPS map-making and many others.

2.5.4 EPA Environmental Unit (EU)

Under certain circumstances, an Environmental Unit (EU) may need to be established within the General Staff of a National Incident Management System (NIMS) Incident Command System (ICS). According to the NIMS, the need to establish a distinct technical unit within the General Staff (e.g. Planning Section) is the requirement to coordinate and manage large-volumes of environmental sampling/analytical data from multiple sources in the context of certain complex incidents, particularly those involving biological, chemical, and radiation hazards. The EPA has developed an EU which can serve as a model for the organization and coordination of technical specialists from Federal, State and local agencies that have a common mandate to protect public health, welfare and the environment. The EU would facilitate interagency environmental data management, monitoring, sampling, analysis, and assessment. The EU would prepare environmental data for the Situation Unit and work in close coordination with other units and sections within the ICS structure to enable effective decision support to the IC/UC.

The EU guidance manual, developed by EPA, describes the functions of several technical teams and coordinators that can be formed on-scene, or through pre-planning activities, by employing technical specialists from various response agencies and organizations. The EU is led by an Environmental

Unit Leader (EUL). Several agencies have personnel that can fill the position of EUL including EPA, ERT and NOAA. The technical teams and coordinators include, but are not limited to: Data Interpretation Team; Quality Assurance Coordinator; Analytical Team consisting of an Analytical Coordinator, Sample/Monitoring Plan Coordinator, and Laboratory Coordinator; Ecological & Health Assessment Team consisting of Resources at Risk, Endangered Species, Historic & Cultural Resources, Risk Assessment/Toxicology, Health Assessment, and Risk Communication; Modeling Interpretation Team consisting of Air Modeling, Fate & Transport, Oil Trajectory and; Response & Cleanup Technologies Support Teams consisting of Transportation & Disposal, Decontamination, Removal & Remediation, WMD agents & Radiological & Other Specific Pollutant Expertise. Only those EU teams and coordinators that are needed to perform specific functions in support of the IC/UC would be established on an incident. Additionally, technical specialists or teams from the EU may be assigned to other parts of the ICS (i.e., Hazmat Group, Decon Group, etc.) to provide technical assistance on a temporary or permanent basis depending on what is determined to be the most efficient and effective use of these resources.

2.5.5 EPA Superfund Technical Assessment and Response Team (START)

The START contract provides technical support to EPA's site assessment activities and response, prevention and preparedness activities. In general, the support consists of gathering and analyzing technical information and monitoring data, preparing technical reports on oil and hazardous substance investigation and technical support for cleanup efforts. The START is a dedicated contractor group used by EPA to provide technical assistance to the FOSC and EPA's emergency response program. START personnel are trained in hazardous materials operations and they use the highest levels of personal protective equipment (Levels A/B/C PPE). START can provide a full range of technical and scientific expertise that are applied to field activities such as spill response and site assessments, sample collection, sample screening analysis, sample preparation, packaging and shipment, and environmental laboratory services.

START has a high level of experience in the use of air monitoring equipment, health & safety plan development, evaluation of cleanup and treatment technologies. START personnel have a wide range of scientific disciplines including chemistry, biology, geography, civil and environmental engineering, geology, hydrogeology, toxicology, industrial hygiene and others. EPA and START conduct joint training in counter-terrorism and WMD response operations and the operation of state-of-the-art equipment used for sampling, monitoring and detection of chemical, biological and radiological warfare agents. START may be tasked by the FOSC to develop and/or implement a site-specific health & safety plan, a site assessment work plan, a quality assurance sampling plan, data validation procedures, computer air dispersion modeling applications, hazard categorization (HAZCAT) procedures, responder training courses and other technical support. START was tasked by EPA to determine the extent and magnitude of anthrax contamination in the Capitol Hill Hart Building and offices of Senator Tom Daschle using various sampling methods, on-site screening analyses and shipment of samples to a certified laboratory for cleanup confirmation analysis.

2.5.6 EPA Emergency and Rapid Response Services (ERRS)

The ERRS contracts provide EPA with a robust hazardous waste cleanup, transportation and disposal capability in all ten EPA regions. The ERRS prime contractors and their team subcontractors provide emergency, time-critical removal, and quick remedial response cleanup services for hazardous substances, pollutants and contaminants (CERCLA), inland oil spills (OPA), and leaking underground storage tank incidents (UST) under the direction of the EPA FOSC. This nationwide network consists of regionally based ERRS zone contracts. These contracts may also be called upon to provide support in instances of natural disasters, such as hurricanes and floods, and terrorism, such

as the use of weapons of mass destruction (WMD), pursuant to the National Response Plan (NRP). Due to the broad range of cleanup services, the ERRS contractors do substantial subcontracting, particularly in the area of transportation and disposal of hazardous wastes. The ERRS contract is primarily tasked for the execution and management of emergency and time critical response actions with the contractors scope of work to include: control or mitigate releases or threats of release for oil, petroleum products, hazardous substances, pollutants or contaminants into the environment to include incidents involving threats of fire, explosion, terrorist acts, WMD, NBC, natural or man-made disasters and restoration of such incidents. Each warranted EPA FOSC named as an Ordering Officer in the contract has the ability to task the contractor to perform any or all tasks associated with possible response activities. ERRS managers are trained in the Incident Command System and can function within a multi-agency Unified Command Structure. ERRS can implement planning, logistics, conduct removal operations in Level A, B and C for tasks such as neutralization of chemical spills, excavation, physical stabilization, bioremediation of contaminated soils, characterization of hazardous wastes, containerization and DOT packaging of hazardous wastes for transportation, various on-site waste treatment and decontamination systems, heavy construction and demolition operations or other clean-up operations. Resources include personnel of various classifications such as Response Managers, Foreman, Safety Officers, Chemists, Equipment Operators, Clean-up Technicians and Project Administrative Specialists (to account for field costs daily). Equipment and materials may be shipped from field offices strategically located throughout the Region or rented from vendors near the incident site. Time Critical subcontracting services follow contract required FAR clauses and site costs are tracked daily via EPA's field cost accounting program. ERRS provided the labor, equipment and materials for the first ever used decontamination method to destroy anthrax organisms spread throughout large areas of the Capitol Hill Hart Building, offices of Senator Tom Daschle.

2.5.7 EPA Emergency Communications and Outreach Team (ECOT)

The ECOT is a support team for EPA's regional removal and emergency responses, specifically during national disasters and other significant response efforts, requiring public outreach for extended periods of time. ECOT is available 24/7 and can be activated by the FOSC to handle the media, public inquiries and community involvement issues at the scene of the incident. ECOT is comprised of community involvement coordinators and public affairs specialists from EPA regions and headquarters who have experience in emergency response situations. In a Unified Command structure, the ECOT team leader would work under the direction of the Command Staff's Information Officer. ECOT's capabilities include coordinating with multiple agencies in the writing of press releases, fact sheets, communication strategies, setting up and facilitating a Joint Information Center (JIC). The advantage of forming a JIC is its ability to consolidate and co-locate public affairs officials from multiple agencies and jurisdictions in the same location where they can perform critical emergency information, crisis communication and public affairs functions. The JIC allows multiple agencies and jurisdictions to "speak with a single voice" helping EPA and the Unified Command build trust and credibility in the community. The JIC concept is an important "public trust-building" tool because it ensures that professional Information Officers and Public Affairs staff are conveying the incident information to the public that accurately depicts the situation and the efforts of the various agencies working together to abate the emergency. The JIC provides a forum where all agencies and jurisdictions provide a unified message to the public concerning the various threats to the community and the actions taken to mitigate the threats to human health and the environment. ECOT staffed the DHS and the EPA Emergency Operations Center during the response to September 11, 2001 attacks on the World Trade Center and the Pentagon, provided community involvement and press support during the EPA response to the anthrax contamination on Capitol Hill in 2001 and 2002, and the response to Hurricane Isabel in 2003.

2.5.8 EPA Critical Incident Stress Management (CISM) Team

The mission of the Critical Incident Stress Management Team (CISM Team) is to provide support and assistance to FOSCs and other responders for stress experienced in performance of their jobs during a major emergency or disaster. The program is an organized approach to help emergency responders in the field prevent, reduce, and/or control potentially harmful stress symptoms caused by the nature of their jobs. The CISM Team offers a national network of trained peers and other EPA staff with whom FOSCs or others can talk on a confidential basis either in person or by telephone. Services provided to FOSCs include preparedness training, confidential peer support, on-going stress management education, critical incident stress management assistance at emergency/disaster sites, and special outreach for FOSC families and other special needs. Other agencies and organizations provide similar stress management assistance to their personnel including the military, fire and police departments, urban search & rescue, commercial airlines, Red Cross and other disaster workers.

2.5.9 EPA Ocean Survey Vessel Bold (OSV Bold)

The OSV Bold is the EPA's only ocean survey vessel. The ship's primary mission is monitoring and assessment of coastal waters, particularly with regard to waste disposal sites and ocean outfalls. Additionally, the ship is maintained in a state-of-readiness for emergency response missions. Previous ship missions assisted in the responses to the Delaware and Hurricane Katrina oil spills and locating cargo containers of arsenic trioxide off the coast of New Jersey. The OSV Bold is equipped and manned to conduct offshore data collection. The vessel was formerly the Navy T-AGOS 88. The ship was transferred to EPA in 2004 and it replaced OSV Peter W. Anderson which was sold in May 2005. The new ship was extensively modified and refitted in 2005 as an ocean survey vessel. The vessel was launched in 1989 and is 255 feet in length and 44 feet in width and has a ship crew of 19 and a scientific crew of 15. The OSV Bold has side scan sonar capability for bottom searches, a NITROX membrane system to produce enhanced oxygen breathing gas to support dive teams, and a variety of benthic and water column sampling equipment. The vessel supports small boat operations and ship assets include two 21' and one 17' rigid hull inflatable boats. The OSV Bold primarily operates in the Gulf of Mexico, Caribbean and the East Coast, but has the capacity to support missions on both coasts.

2.5.10 EPA National Homeland Security Research Center (NHSRC)

EPA's NHSRC is in the Agency's Office of Research and Development (ORD) and is headquartered in Cincinnati, Ohio. NHSRC is primarily a research and development organization with an emphasis on the protection of human health and the environment from adverse impacts resulting from a WMD incident. The major research topics are threat and consequence assessment, consequence management and decontamination, and water infrastructure protection. The NHSRC scientists and engineers are working to develop tools and information that will help detect the intentional introduction of chemical or biological contaminants in buildings or water systems, the containment of these contaminants, the decontamination of buildings and/or water systems, and disposal of material resulting from cleanups. The NHSRC has developed a new technology and evaluation program in an effort to provide reliable information regarding the performance of homeland security related technology. The NHSRC is developing emergency decontamination methods and technical resource documents to assist responders in the decontamination of buildings and structures contaminated with chemical or biological warfare agents.

The NHSRC has a team of experts from throughout EPA known as the Red Team. When activated, the Red Team will provide scientific guidance to EPA's Emergency Operations Center and/or incident command, as requested. Another asset of the NHSRC is The Registry of Homeland Security

Experts (ROHSE). The registry lists over 300 individuals within the ORD, their specific expertise and phone numbers. The Response Capability Enhancement (RCE) Team oversees the emergency response support activities (producing tools such as the ROHSE CD) and the laboratory response activities (such as standardized analytical methods for homeland security events, other sampling and lab response support). Other tools developed by NHSRC to support planning and response to homeland security emergencies include:

- Web-based Decision Support Tool for disposal of contaminated building and water system materials. This tool contains information needed to support decisions related to treatment and disposal options, selection of the appropriate disposal facility, packaging and storing cleanup residues, transporting materials, compliance with relevant permits, worker safety and protection of human health and the environment. It also has a calculator to estimate quantities and characteristics of wastes produced during facility decontamination processes allowing cost tradeoffs between decontamination and disposal to be evaluated early in the response.
- Emergency Consequence Assessment Tool (ECAT). ECAT is a software program used to support responder decision-making. It can quantify chemical and biological risks, provide health-based information and recommendations for PPE, SOPs, site controls, and decontamination procedures, provide target cleanup levels, and techniques for clearance sampling, remediation, and restoration;
- Chemical and Biological Helpline Database. This database contains sensitive information about CB agents, methods for laboratory analysis, contaminant detection, decontamination, detection equipment specifications, and instructions on advisories and other policies and procedure.
- Technology Testing and Evaluation Program (TTEP). This program continues EPA's Environmental Technology Verification's (ETV's) homeland security testing and verification of commercially available technologies in 2006, including detection, monitoring, treatment, decontamination and computer modeling technologies designed for protecting water supplies, decontaminating structures and the outdoor environment. Reports are available at www.epa.gov/nhsrc.

2.5.11 EPA Criminal Investigation Division (CID)

CID is in EPA's Office of Criminal Enforcement, Forensics and Training. CID investigates the most significant and egregious violators of environmental laws. CID refers those criminal cases which pose significant risks to human health and the environment to federal, state and local prosecutors offices. CID Special Agents are sworn federal law enforcement officers with full statutory law enforcement authorities. CID has Area Offices located in every EPA Region, as well as Field Offices and Resident Offices located throughout the country. CID participates nationwide in over 90 environmental and anti-terrorism task forces with federal, state, local law enforcement partners. CID Special Agents work within a structure of sophisticated environmental science and technology and a multitude of environmental laws protecting our air, water and land resources. CID Special Agents receive federal law enforcement and criminal investigator training at the Federal Law Enforcement Training Center (FLETC) located in Glynco, Georgia. They also receive additional specialized training throughout their career. CID Area Office or Field Office Special Agent-in-Charge may request assistance from the EPA Federal On-Scene Coordinator in criminal cases that involve unique health and safety hazards and/or potential exposures to extremely toxic chemicals, hazardous waste and/or unknown chemicals. During an incident of National Significance involving oil or hazardous material that is the result of a criminal act or results in a criminal act, but is not an act of terror, the Special Agent-in-Charge of the local CID Area Office or Field Office serves as the Senior Federal Law Enforcement Official in the Joint Field Office (JFO) Coordination Group.

2.5.12 EPA National Enforcement Investigations Center (NEIC)

The NEIC is in EPA's Office of Criminal Enforcement, Forensics and Training (OCEFT). The NEIC is an accredited environmental forensics center with expertise in 1) field operations, 2) computer forensics, 3) rapid information access, and 4) high-end analytical capabilities. The NEIC develops and implements innovative laboratory analytical, evidence collection and preservation techniques, practices, and procedures, devises specialized methods and/or technical field applications, and transfers these capabilities to State, Local, and Federal environmental enforcement and compliance assurance programs. EPA's CID Special Agents-In-Charge work in close collaboration with the NEIC laboratory to provide special scientific and forensics services to EPA Regions. NEIC maintains expertise in environmental sampling and analysis of industrial chemicals, and in collecting forensic evidence at environmental crime scenes. NEIC is the only national laboratory accredited by the National Forensic Science Technology Center (NFSTC) for its environmental measurement activities in field measurements/monitoring, field sampling and laboratory measurements. NEIC, located in Denver, Colorado, operates one of the best forensic laboratories in the United States. Additionally, NEIC can mobilize mobile monitoring resources and a field analytical team customized to meet specific environmental challenges. NEIC provides scientific support to the OCEFT Homeland Security Division, FBI, U.S. Secret Service, and other Federal agencies during National Special Security Events (NSSEs).

2.5.13 EPA National Counter-Terrorism Evidence Response Team (NCERT)

The mission of the EPA's Office of Criminal Enforcement, Forensics and Training (OCEFT), Homeland Security Program (HSP), is supporting the law enforcement, intelligence and emergency response communities in preparing for, preventing and responding to terrorist threats or attacks, as well as providing protective services to the EPA Administrator. NCERT is a specialized hot zone forensic evidence recovery team from OCEFT's HSP. NCERT, comprised of hazardous materials technician trained EPA special agents and scientists, provide expert criminal investigative and scientific support, including forensic evidence collection at crime scenes involving highly hazardous materials, in response to suspected terrorist incidents. NCERT may pre-deploy incident response teams at nationally recognized special events at the request of the U.S. Department of Homeland Security, the Federal Bureau of Investigation, or other lead agency for the event, as necessary. NCERT also provides training emphasizing forensic evidence collection techniques for crime scenes involving hazardous materials, drinking water and wastewater infrastructure protection. NCERT can be called upon to support the FBI in a response to a terrorist attack involving chemical or biological weapons of mass destruction. In the event of an NCERT deployment, the NCERT Agent-in-Charge acts as the Agency's on-scene Senior Federal Law Enforcement Official.

2.5.14 EPA Airborne Spectral Photometric Environmental Collection Technology (ASPECT) Aircraft

The Airborne Spectral Photometric Collection Technology, known as ASPECT, is a high-tech sensor package on board an Aerocommander 680 aircraft operated by EPA that allows for timely surveillance of gaseous chemical releases from a safe distance. The A-680 is a twin engine aircraft capable of cruising speeds of 190 knots and the ability to loiter over the incident collecting data for up to six hours. The aircraft is based at Midway Airport, near Waxahachie, Texas. The aircraft and its pilots are under contract with EPA to provide support to EPA and local responders in the case of an atmospheric release of chemicals. The FOSC can directly order the deployment of the system. ASPECT gives emergency first responders on the ground critical information regarding the size, shape, composition and concentration of gas plumes emanating from disaster incidents such as a derailed train, factory explosion or terrorist attack. The ASPECT was used to patrol the skies over

Salt Lake City during the 2002 Winter Olympics on lookout for potential terrorist attacks and flew over the debris field in the wake of the space shuttle Columbia disaster monitoring for extremely hazardous rocket fuels.

The ASPECT has two sensors mounted aboard the aircraft. The first sensor, called a Fourier Transform Infrared Spectrometer, detects and locates chemical vapors. It measures the location and concentration of the vapor plume. The second sensor, a high-resolution Infrared Line Scanner, records an image on the ground below and plume information. Information from both instruments is combined with high-resolution digital imagery and GPS information to create an accurate map of the land surface and the chemical vapor plume hazard. It can locate the main plume and geographic depressions where gas has collected and settled. The vapor plume map can be transmitted to emergency response commanders on the ground by fax, computer or other means. ASPECT can drop a working computer via parachute to emergency responders if necessary. These capabilities allow Incident Commanders to make better decisions regarding civilian evacuations, resource deployments, and health & safety of response crews.

2.5.15 EPA Diving Team

The U.S. EPA maintains a Diving Safety Management Program that establishes the organizational structure, managerial functions, technical framework and training, and safe diving protocols for EPA employees to conduct dive operations. The Diving Team is comprised of specially trained and certified divers to conduct a variety of underwater operations in support of the Superfund program. The current Chairman of the Diving Program is located in the Office of Water, Office of Wetlands, Oceans and Watersheds. The current Director of Special Operations is located in the Emergency Response Team (ERT) in Edison, New Jersey. The diving team assets are deployed through the Regional EPA Dive Units. All EPA divers are trained in variable volume dry suits, full face masks, polluted water diving concepts, diving accident management, oxygen administration and NITROX for extended bottom times and water depths.

The EPA Dive Program supports a wide range of EPA offices including Superfund Division, Office of Water Enforcement, Office of Research and Development (ORD), regional field activity, Criminal Investigations Division (CID) and Emergency Response. Many EPA dive activities are scientifically based monitoring and assessment, and hazardous water diving if a component of the operational aspects. Nationally, EPA Dive Units have a wide range of assets which include surface supplied operational capabilities, underwater and surface communications, remotely operated vehicles (ROVs), underwater photography and videotaping, sediment core samplers, water samplers, water quality measurements via Hydrolab, shellfish cages, and numerous small vessel support. Dive platforms can be equipped with live sonar and GPS to allow tracking of the diver and selection of targets to search. The EPA Dive Program supported the national emergency response for the space shuttle "Columbia" recovery operations in Texas. The diving team assisted in the search for submerged aircraft parts at the Toledo-Bend Reservoir at the end of the shuttle debris track in East Texas.

2.5.16 EPA Office of Emergency Management (OEM) National Decontamination Team (NDT)

The U.S. EPA Office of Emergency Management (OEM) National Decontamination Team (NDT) is a special scientific and operational support team for incidents of national significance and WMD events. The 15-person team is based in Cincinnati, Ohio, are scientists, engineers, health physicist and industrial hygienist with expertise in decontamination for CBR agents. They specialize in the decontamination of buildings, open spaces, transportation systems and water systems. The NDT can

provide guidance to responders on characterization sampling, efficacy of various chemical and biological treatment systems, decontamination and fumigation processes, verification of decontamination effectiveness, HVAC and sensitive equipment and provide advice on achievable cleanup target levels protective of public health. The NDT can assist with on-site treatment, transportation, and disposal of materials contaminated with biological, chemical and radioactive agents. The FOSC can request NDT assistance through the NRC.

When not responding, the NDT is active in planning, preparedness, research and development (R&D) activities including evaluating emerging decontamination technologies, developing sampling, analytical, and decontamination SOPs for WMD incidents, identifying treatment and disposal alternatives and coordinating with other R&D programs, International, Federal, State and Local governments, and participating on national level workgroups, training and exercises.

2.5.17 EPA Technical Support Centers (TSC)

U.S. EPA has a number of Technical Support Centers (TSCs), in the agency's national laboratories, which are operated by the Office of Research and Development (ORD). Figure X below shows the ORD's organization, while Figure Y shows a map of the ORD lab and office locations nationally. Each TSC is dedicated to serving the EPA Remedial Project Manager (RPM) working on the cleanup of a Superfund NPL Site or the Federal On-Scene Coordinator (FOSC) during a time-critical removal or emergency response action by supplying high-quality, quick-response technical support services when the scope of work is beyond that which is available to the Regions. These TSCs can be accessed directly or with the assistance of the ORD Superfund and Technology Liaison (STL) who is housed in each regional office. With few exceptions, for tasks less than \$50K in estimated cost, the TSCs provide assistance without any funding from the regions. The funding is pre-positioned each year by OSWER and ORD. For a list of the STLs and the TSCs, see the following webpage: <http://intranet.epa.gov/ospintra/scienceportal/htm/techsupport.htm#hstl> .

The National Exposure Research Laboratory's Environmental Sciences Division (NERL-ESD) in Las Vegas, Nevada, (formerly the Environmental Monitoring Systems Laboratory, EMSL-LV), has recently undergone some management changes. It is currently operated under the management of STL Felicia Barnett in Region 4, Atlanta. This has been the case since January 2008. This TSC is known as the Technical Support Center for Monitoring and Site Characterization. NERL can mobilize specialized teams of field scientists equipped with portable or deployable instruments to assist the Regions with the screening and site characterization work. The technical focus includes soil-gas measurements, special analytical services, GIS and data interpretation, site characterization technologies (e.g., field portable XRF), fingerprinting of chemical wastes, geophysics, quality assurance, geo-statistics, statistical design and analysis. NERL also participates in interagency workshops with DOE and DOD and together these organizations publish technical guidance documents.

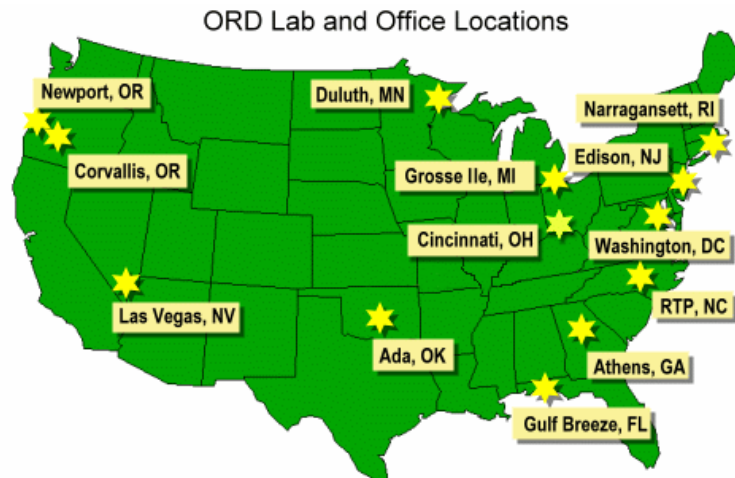


Figure 1. ORD Lab and Office Locations (From <http://www.epa.gov/ord/htm/map.htm>)

- Ada, Oklahoma
 - NRMRL, Subsurface Protection and Remediation Division
- Athens, Georgia
 - NERL, Ecosystems Research Division
- Cincinnati, Ohio
 - NSHSRC, National Homeland Security Research Center
 - NRMRL
 - Land Remediation and Pollution Control Division
 - Sustainable Technology Division
 - Technology Transfer and Support Division
 - Water Supply and Water Resources Division
 - NCEA
 - NERL
 - Ecological Exposure Research Division
 - Microbiological & Chemical Exposure Assessment Research Division
- Corvallis, Oregon
 - NHEERL, Western Ecology Division
- Duluth, Minnesota
 - NHEERL, Mid-Continent Ecology Division
- Edison, New Jersey
 - NRMRL, Urban Watershed Management Branch
- Grosse Ile, Michigan
 - NHEERL, Mid-continent Ecology Division
- Gulf Breeze, Florida
 - NHEERL, Gulf Ecology Division
- Las Vegas, Nevada
 - NERL, Environmental Sciences Division
- Narragansett, Rhode Island
 - NHEERL, Atlantic Ecology Division
- Newport, Oregon
 - NHEERL, Western Ecology Division
- Research Triangle Park, North Carolina Area
 - NCEA
 - NERL
 - NERL, Atmospheric Modeling Division
 - NHEERL, Environmental Carcinogenesis Division
 - NHEERL, Experimental Toxicology Division
 - NHEERL, Human Studies Division (Chapel Hill, NC)
 - NHEERL, Neurotoxicology Division
 - NHEERL, Reproductive Toxicology Division
 - NRMRL, Air Pollution Prevention and Control Division
 - NCCT, National Center for Computational Toxicology
- Washington, DC

- ORMA, Office of Resources Management and Administration
- NCEA, National Center for Environmental Assessment
- NCER, National Center for Environmental Research
- OSP, Office of Science Policy

Office of Research and Development Organization Chart

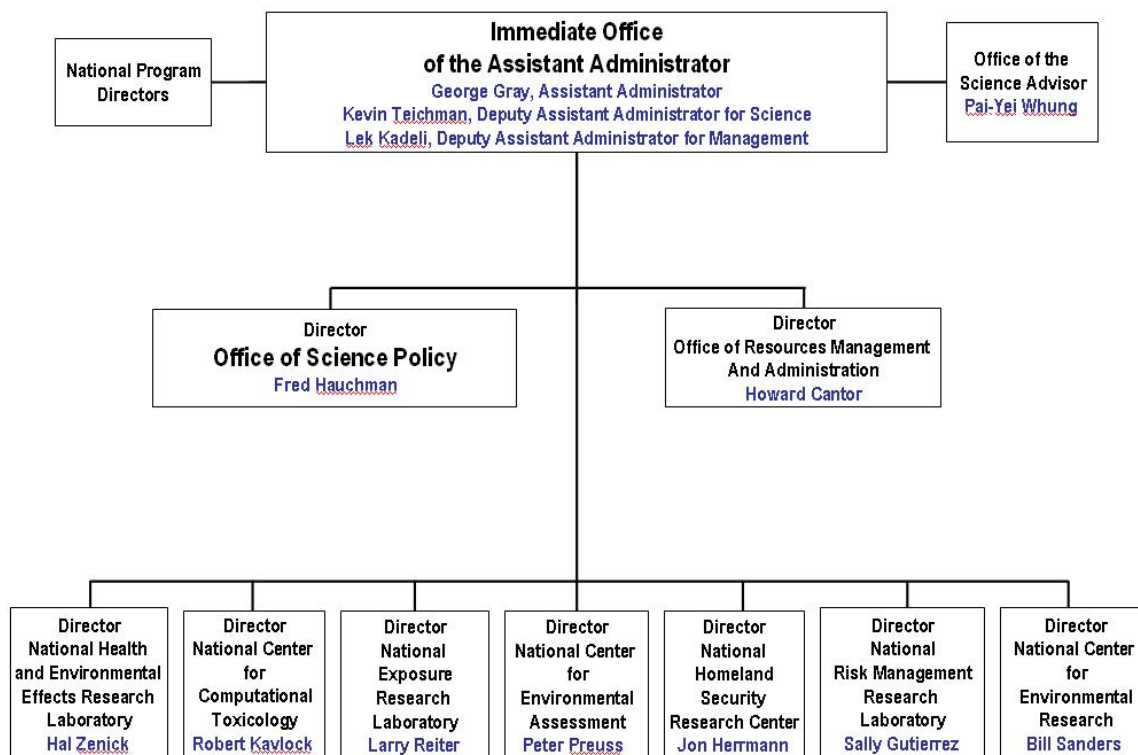


Figure 2. ORD Organization Chart

In an emergency, specialists at EPA's National Exposure Research Laboratory through its Environmental Sciences Division (previously known as the Environmental Photographic Interpretation Center or EPIC), with facilities in Las Vegas, NV and Reston, VA can assist in EPA's effort to contain or clean up these emergency conditions by providing aerial photography services to the EPA FOSC and emergency response teams. Emergency responses are tailored to the specific needs of each incident and aerial photographs can provide a quick overview of the existing situation. Support provided by the Laboratory, using nationwide commercial flying services and film processing facilities includes immediate acquisition, processing, and analysis of aerial photographs; telephone relay of critical information to the FOSC; and prompt preparations of annotated photographs and maps for the on-scene teams. Analysis of the aerial photographs provides information on conditions at the site such as the location of the discharge or release, vegetation damage, potential transport pathways for chemicals, possible locations for containment measures, and population distribution patterns in the vicinity of the release. It should be noted that funding for these remote sensing tasks are provided by the regions each year.

Aerial photographs also provide valuable information for safety planning, including population evacuation, re-occupancy, determining hazard control zones, and locating monitoring sites. Annotated overlays to the photographs can show this information in relation to nearby locations threatened by

the emergency, and they can aid in planning cleanup or hazard mitigation efforts. Follow-up aerial photographs can be used to judge the effectiveness of cleanup operations and the amount of damage to the environment. Aerial photographic analysis has been used at chemical factory fires and explosions, oil tanker spills and train derailments. Innovative uses of photo-interpretation techniques are being developed to improve monitoring of air, water, soil, food and other environmental pathways in order to assess the degree and extent of toxic chemical exposures to humans with possible application to emergency situations. Serious efforts are being made to link aerial photography capabilities in a systematic manner with the design of exposure monitoring networks.

Three of the other most widely used TSCs include the R.S. Kerr Environmental Research Lab (RSKERL), Ada, OK, National Air and Radiation Environmental Lab (NAREL), Montgomery, AL, and the National Risk Management Research Lab (NRMRL), Cincinnati, OH. The RSKERL conducts research and technical assistance on contaminant transport and fate in subsurface soils and groundwater; the NAREL conducts research, development and application of measurement and assessment methods for environmental radiation and mixed chemical and radioactive wastes and provides radiological assistance support to the RERT component of ORIA. The NRMRL, through the Land Remediation and Pollution Control Division, conducts research, development and demonstration projects on innovative treatment technologies and engineering approaches to management of wastes and contaminated media; the Microbial and Chemical Exposure Assessment Research Division, Cincinnati, OH conducts research to measure, characterize and predict human exposure to chemical and microbial hazards. It should be noted that the SITE (Superfund Innovative Technology Evaluation) program was discontinued in 2006, although results of previous technology evaluations are still available online (<http://www.epa.gov/ord/SITE/>).

Four other smaller TSCs that may be of less interest to emergency responders are the Superfund Sediments Resource Center, the Brownfields TSC, the Eco Risk Assessment TSC and the Human Health Risk Assessment TSC. Most of these can be accessed from the following webpage: <http://intranet.epa.gov/ospintra/scienceportal/htm/techsupport.htm#hstl>.

2.6 Department of Homeland Security (DHS) U.S. Coast Guard (USCG)

2.6.1 USCG National Strike Force (NSF)

The **National Strike Force (NSF)** is comprised of highly-trained, world-renowned U.S. Coast Guard professionals who maintain a high state of readiness and deploy with specialized equipment and incident management skills to oil discharges, hazardous substances releases, WMD incidents and other emergencies and disasters. The NSF is a Special Force under the NCP and functions as part of an effective National Response System (NRS). The NSF consists of the **National Strike Force Coordination Center (NSFCC)**, three NSF Strike Teams (**USCG NSF Atlantic, Gulf and Pacific Strike Teams**), and the NSF **Public Information Assistance Team (PIAT)**. The NSF is mandated to assist and support FOSCs in their response and preparedness activities as part of the NRS. The NSF is directed by the USCG FOSC in the Coastal Zone and directed by the EPA FOSC in the Inland Zone. This support is memorialized in regional Interagency Agreements between USCG and EPA. The NSF is comprised of three strike teams, including the Atlantic Strike Team in Fort Dix, New Jersey, Gulf Strike Team in Mobile, Alabama, and the Pacific Strike Team in Novato, California. In order to get NSF assistance, FOSCs may call their respective Strike Team directly for support and augmentation without having to go through the NSFCC.

The Strike Teams support many response functions at oil spills and hazardous material incidents. These functions include oil and hazardous material spill mitigation/source control up to the Hazardous Materials Specialist level, WMD incident mitigation, site safety oversight, vessel damage assessment, salvage assistance, communications, cost documentation, incident command system

support, and other functions. The Strike Teams are trained in Levels A/B/C personal protective equipment. The Strike Teams maintain large warehouse buildings for response equipment and their inventories include mobile command posts, response equipment trailers, communication kits, portable worker decontamination facilities, an assortment of boats, booms, pumps, skimmers, generators, lighting, air monitoring equipment, WMD sampling and detection kits, medical monitoring/EMT kits, and other miscellaneous pollution response equipment.

2.6.2 USCG National Strike Force Coordination Center (NSFCC)

The USCG NSFCC, located in Elizabeth City, North Carolina, coordinates the three Coast Guard Strike Teams (Atlantic, Gulf and Pacific). The three Strike Teams provide trained personnel and specialized equipment to assist the FOSC in training for spill response, stabilizing and containing a spill, and in monitoring the response actions of the responsible parties and/or contractors. The USCG or EPA FOSC may contact the Strike Team directly for assistance. The USCG Strike Teams are an integral part of EPA's emergency response program and assist the FOSC in managing responses to inland oil spills and hazardous material releases.

The NSFCC also supports the FOSC by providing technical assistance, equipment and other resources, coordinating use of private and public resources, reviewing Area Contingency Plans, including an evaluation of equipment readiness and coordination among responsible public agencies and private organizations. Additionally, the NSFCC assists the FOSC in locating spill response resources using NSFCC's national and international computerized inventory of spill response resources, coordinating and evaluating pollution response exercises, establishing and inspecting pre-positioned pollution response equipment.

2.6.3 USCG Public Information Assistance Team (PIAT)

The PIAT was established at Coast Guard Headquarters in 1978 as one of the Special Forces mandated by the NCP. Since merging with the NSF in 1991, PIAT members have been trained and qualified as emergency responders, which allow them full access to response activities at oil spills and hazardous material releases. As an element of the NSF, the PIAT is co-located with the National Strike Force Coordination Center (NSFCC) and is available to USCG and EPA FOSCs. The team is staffed by highly trained crisis communications professionals. Team members are trained in the role of Information Officer in an Incident Command System during major incidents involving significant media and public concerns. The PIAT assists in the scenario development of Coast Guard pollution response exercises and its team members instruct crisis communications' techniques and Joint Information Center (JIC) organization to Coast Guard, other Federal agencies, state agencies and Industry personnel. Team members are equipped with a response kit that includes all the equipment necessary to meet the public and media's information needs, including computers, graphics for presentations, digital and 35mm cameras and video equipment. PIAT worked with the NRT to develop a national level JIC organization and accompanying manual.

2.6.4 USCG District Response and Advisory Team (DRAT)

The Coast Guard District Response and Advisory Team (DRAT) is part of the District Response Group (DRG) and listed under Special Forces of the NCP. The DRG's primary function is to organize district resources and assets to support FOSCs during response to pollution incidents. DRG's are called upon to provide technical assistance, personnel, and equipment, including marine firefighting equipment and pre-positioned oil spill response equipment, and a DRAT. The DRAT is available to coordinate movement of USCG resources, provide technical support on wildlife recovery, response equipment and finance to the FOSC in the event that a spill exceeds local response

capabilities. Additionally, the DRAT maintains a remote sensing capability and can deploy personnel with expertise in the use of thermal and infrared sensing equipment.

2.6.5 USCG National Pollution Fund Center (NPFC)

The NPFC is a Special Force under the NCP. The NPFC is responsible for administering the Oil Spill Liability Trust Fund (OSLTF), managing the portion of Superfund that the Coast Guard uses, and overseeing the vessel financial responsibility provisions of the Oil Spill Pollution Act of 1990 (OPA 1990). The NPFC has a primary responsibility to provide funding for Federal removal actions in response to a discharge or a substantial threat of discharge of oil to navigable waters of the United States. USCG and EPA FOSCs have the authority to access the OSLTF for oil discharges in the coastal zone and the inland zone, respectively. The NPFC also provides funding to Natural Resource Trustee agencies such as Department of Interior's Fish & Wildlife Services for natural resource damage assessment (NRDA) and environmental restoration of areas damaged by the oil spill. The NPFC compensates claimants for OPA removal costs or damages, recovers OPA removal costs and damages from responsible parties and certifies financial responsibility for vessels. At the request of the FOSC, the NPFC can dispatch a team to augment the Incident Command System, Finance and Administration Section. The team can assist the FOSC during an oil spill incident by helping to secure assistance of other Federal, State and/or local agencies through Pollution Removal Funding Authorizations (PFRAs), perform cost tracking and documentation, process third party damage claims and other types of financial and administrative assistance.

2.6.6 USCG Salvage Engineering Response Team (USCG SERT)

The SERT was established by the USCG in order to provide immediate salvage engineering support in response to vessel casualties and emergencies. This includes independent technical evaluation of the situation and assistance in formulating practical and effective solutions. The SERT has expertise in evaluating vessel casualties, reviewing and developing salvage plans, and providing salvage technical assistance directly to the FOSC. SERT has access to vessel plans, salvage engineering analysis software, and knowledge of commercial vessel construction and stability. SERT is able to deploy and provide on-site assistance. The FOSC may request support directly from SERT, USCG HQ Command Center or the USCG Marine Safety Center (MSC).

2.6.7 USCG Marine Safety Laboratory (MSL)

The USCG Marine Safety Laboratory (MSL) in Groton, CT, was formerly named the Central Oil Identification Laboratory (COIL). MSL provides forensic oil analysis and expert testimony in support of enforcement efforts for USCG, EPA and other Federal agency oil pollution cases. The MSL is the Coast Guard's sole facility for performing fingerprint oil analysis. The MSL may provide an assessment of the conclusions in oil fingerprinting reports submitted by private laboratories. The MSL has been able to scientifically dispute a potentially responsible party (PRP) claims that they were not the source of the petroleum hydrocarbon pollution. MSL has highly qualified chemists that specialize in the multi-method approach to "fingerprinting" oils.

2.6.8 USCG Maritime Safety and Security Team (MSST)

The U.S. Coast Guard MSST unit is trained in anti-terrorism force protection and can respond to terrorism threats anywhere with the United States at a moment's notice. In Region IX, MSST-91105 is located on Coast Guard Island, Alameda, CA. The MSST is a small part of the Department of Homeland Defense. There are a number of units just like MSST 91105 located throughout the U.S.

working in conjunction with the FBI and other Federal and DOD agencies serving to protect against terrorism threats to the maritime community. MSST 91105 was commissioned in December 2003.

2.6.9 USCG Atlantic and Pacific Area Incident Management Assistance Team (IMAT)

The USCG Atlantic and Pacific Area IMATs provide highly trained and experienced cadre of rapidly deployable emergency response professionals equivalent to a nationally recognized Type 1 Incident Management Team. The IMAT supports the incident and/or event management needs of the Coast Guard (first) and Department of Homeland Security officials (as available) throughout the Pacific Area. The IMAT's preparedness program focuses on innovation of response management equipment, tools, processes and techniques to improve the effectiveness and efficiencies of the Incident Command System/Unified Command (ICS/UC) management structure. The IMAT maintains a high state of readiness including experience, training, support equipment, and personnel availability. The IMAT is a highly trained and experienced team comprising the core positions required to establish and maintain an ICS organization. Team members are selected from a wide range of San Francisco Bay area Coast Guard programs, and units. Some members are selected from State and local agencies making the IMAT a multi-agency organization. The PACAREA IMAT is comprised of two teams (Blue & Gold) each with 5 Command Staff and 16 General Staff for a total of 21 positions. The Command Staff is comprised of an Incident Commander (IMAT Team Leader), Safety Officer, Information Officer, Liaison Officer and Intelligence Officer. The General Staff is comprised of a Planning Section Chief, Situation Unit Leader, Geographic Information Specialist (GIS), Resources Unit Leader, Documentation Unit Leader, 2-Technical Specialists, Operations Section Chief, Deputy Operations Chief, Air Operations Branch Director, 2-Branch Directors/Division/Group Supervisors, Logistics Section Chief, Communications Unit Leader, Computer System Administrator and Finance/Administration Section Chief.

2.7 *Department of Commerce (DOC) National Oceanic and Atmospheric Administration (NOAA) Hazardous Materials Response Division (HAZMAT) and Scientific Support Coordinator (SSC)*

NOAA's Office of Response and Restoration (OR&R) is responsible for providing scientific support for oil and hazardous material spills. The OR&R Hazardous Materials Response Division (HAZMAT) provides 24-hour support to spill events. The Scientific Support Coordinator (SSC), in accordance with the NCP, provides the Federal On-Scene Coordinator (FOSC) scientific advice with regard to the best course of action during a spill response. The SSCs are skilled at building consensus on controversial scientific issues. The SSCs are effective in communicating complex scientific information to decision makers in non-technical jargon and serve as the point person for accessing information from other government agencies, academia and the private sector. NOAA Incident News is a pre-established website readily available to disseminate public information. NOAA has ships, aircraft and satellites capable of collecting a wide range of data on environmental parameters. The SSC can provide current and forecasted incident status information for the Situation Unit by way of overflight maps and spill trajectory analysis data, develop a prioritized list of the resources at risk, obtain frequent weather, tidal and current information. The SSC can assist the FOSC by obtaining consensus from Federal and State Natural Resource Trustee agencies regarding response options, protection of wildlife and other natural resources. The SSC will coordinate the assessment of the extent of environmental injury and recommend emergency restoration actions with the Natural Resource Damage Assessment (NRDA) Specialists.

The SSC is the point of contact for the NOAA Scientific Support Team. This multi-disciplinary team of HAZMAT scientists, that includes oceanographers, modelers, biologists, chemists and geologists,

is based in Seattle and supports the SSCs and NRDA Specialists. The SSC can provide expertise on such issues as dispersant use, alternative response technologies, response countermeasures, assessment of natural resource injury, and methods to reduce the impact of response operations on the environment. The SSC uses many high-tech tools to carry out functions such as computerized Environmental Sensitivity Index maps to identify vulnerable resources and habitats, trajectory forecasting tool (GNOME), oil weathering model (ADIOS) and chemical hazard tool (CAMEO). The Computer Aided Management of Emergency Operations (CAMEO) code was developed jointly by NOAA and USEPA. The NOAA SSC usually responds to marine incidents and supports the USCG FOSC. However, the NOAA SSC has supported the EPA FOSC for inland oil and chemical spills. The SSC normally carries out functions in the Planning Section. The SSC can be assigned the position of Environmental Unit Leader, providing critical information to the Situation Unit under a National Incident Management System (NIMS) Incident Command System (ICS).

2.8 Department of Justice (DOJ) Federal Bureau of Investigation (FBI)

2.8.1 FBI Hazardous Materials Response Unit (HMRU)

The FBI's Hazardous Materials Response Unit (HMRU) was established within the FBI Laboratory Division in 1996 in response to an expanding caseload of environmental crimes and the threat of terrorism. The HMRU responds to criminal acts and incidents involving the use of hazardous materials, and develops the FBI's technical proficiency and readiness for crime scene and evidence-related operations in cases involving chemical, biological and radiological agents and hazardous waste materials. The HMRU staff includes a wide-range of personnel including supervisory special agents, hazardous materials officers, specialists and scientists. There are currently 28 FBI field Hazardous Material Response Teams (HMRTs) with staff levels of eight to thirty-two per team and outfitted with appropriate equipment for the collection of evidence at a potential crime scene.

During calendar year 2004, HMRU was deployed on 117 missions including response to terrorism events. These responses have involved the threatened use of chemical, radiological and biological agents, including Ricin and Anthrax. The HMRU also provides response readiness at National Security Special Events (NSSE). The HMRU is capable of conducting confined space operations, trench and operations within collapsed structures and provides support for FBI Hostage Rescue Team and the FBI's Special Weapons and Tactics (SWAT) teams for WMD Tactical Operations. The HMRU interfaces with Federal, State and local laboratories, including the Laboratory Response Network (LRN) for assistance with analysis and data interpretation. Besides the HMRU, the FBI's Laboratory Division has several other units with capabilities that would support the FBI's On-Scene Commander during a WMD terrorist incident. The Evidence Response Team Unit coordinates and manages the FBI's Evidence Response Team program, which is designed to train and equip field personnel to conduct crime scene searches and collect evidence. The Chemistry/Toxicological Unit provides technical advice and scientific analysis.

In 1998, a \$20 million Strategic Information and Operations Center (SIOC) opened at FBI HQ to handle multiple crises simultaneously. The SIOC facility covers 40,000 square feet and is designed as a 24/7 Command post. It can accommodate up to 450 staff during major emergencies. All staff members in the SIOC are equipped with phone lines and computer terminals with access to the FBI Intelligence Information System and other high-tech information and communication systems for violent crimes and counterterrorism crises management.

2.8.2 FBI Critical Incident Response Group (CIRG)

The CIRG facilitates the FBI's rapid response to, and the management of, crises incidents.

The CIRG was established in 1994 to integrate tactical and investigative resources and expertise for critical incidents that necessitate an immediate response from law enforcement authorities. The CIRG is on-call 24/7 to respond to crisis incidents. The CIRG will deploy investigative specialists to respond to terrorist activities, hostage takings, child abductions and other high-risk repetitive violent crimes. Other major incidents include prison riots, bombings, air and train crashes, and natural disasters. Each of the three major areas of CIRG – the Operations Support Branch, the Tactical Support Branch, and the National Center for the Analysis of Violent Crime – furnishes distinctive operational assistance and training to FBI field offices as well as state, local and international law enforcement agencies. The CIRG provides comprehensive crisis management capability, as well as tactical resources including the Hostage Rescue Team, Hostage Negotiation Specialists, Aviation Specialists, and Criminal Investigators supported by a Profiling and Behavioral Analysis Unit (PBAU).

2.9 Occupational Safety and Health Administration (OSHA) Health Response Team (HRT)

The Department of Labor, OSHA Health Response Team (HRT) is a multidisciplinary team of engineers, chemists, health physicists and industrial hygienists whose main role is to support OSHA Area Offices and the OSHA National Office on technical matters in the field of occupational safety and health, including hazardous waste operations and emergency response (HAZWOPER). The OSHA health and safety standards for workers involved in “HAZWOPER” is found in 29 CFR 1910.120. The HRT, based in Salt Lake City, Utah, is capable of responding to most incidents including WMD events. The OSHA has representatives on the NRT and RRTs. Federal agencies can contact the RRT and request OSHA expertise through the technical support mechanism that is a critical component of the NCP’s National Response System. At the WTC disaster site, OSHA addressed worker health and safety issues, conducted air sampling at the work site, evaluated worker exposures, identified hazards, provided recommendations for improving worker health & safety, and distributed personnel protective equipment including respirators, hard hats, safety glasses, goggles and protective gloves.

The HRT is designed for and serves to conduct the following:

- Respond to occupationally related emergencies which may involve potentially catastrophic releases of hazardous materials;
- Provide technical expertise in recognizing and evaluating health and safety hazards associated with a wide range of complex industrial operations;
- Evaluate and recommend appropriate engineering controls, provide onsite technical expertise for complex, unusual, and high priority occupational hazard investigations;
- Work with the Directorates of Health and Safety Standards in developing new standards, and design and conduct studies to obtain data which the standards development organizations can use to form the basis for making decisions;
- Maintain current national and international safety and health awareness and technological advances involving industry practices and specific work processes to advise OSHA program offices of their potential impact on existing OSHA programs;
- Provide national technical experts for SARA hazardous waste site activities;
- Provide testimony as needed in contested cases, or for the standards setting process; and
- Coordinate OSHA’s Biological, Chemical, Radiological and Collapsed Structures Specialized Response Teams (SRTs).
- Occupational Safety and Health Administration (OSHA), Specialized Response Teams (SRTs)

In order to enhance their response capabilities for incidents involving WMD, OSHA is creating four Specialized Response Teams (SRTs) to support the IC/UC in the areas of responder safety and health. The chemical team (toxic industrial chemicals, materials, and weapons of mass destruction chemicals), the biological team, the radiological team, and the structural collapse team. OSHA's Health Response Team coordinates the SRTs. The SRTs consist of seven to eight experts that can deploy rapidly when an emergency occurs. The SRTs are comprised of certified industrial hygienists, professional engineers, occupational physicians, and specialized safety experts. Additionally, the SRTs are available to assist other Federal agencies in their preparedness activities. Requests for support should be made to OSHA's Specialized Response Team Coordinator, located at OSHA's Salt Lake Technical Center (SLTC) in Sandy, Utah or OSHA's Director, Directorate of Science, Technology, and Medicine located in OSHA's national office.

For an Incident of National Significance (INS), the Department of Labor/OSHA is the Primary Agency for the Worker Safety and Health Annex which addresses those functions critical to supporting and facilitating the protection of worker health for all emergency responders and response organizations during the incident. OSHA and Cooperating Agencies, such as EPA, CDC, NIOSH, ATSDR, NIH, U.S. Public Health Service and USAMRIID, stay current and involved in the cutting edge of medical and protective applications relative to chemical and biological terrorism response. The assets of OSHA and Cooperating Agencies include the following field-level support:

- Carrying out responder personal exposure monitoring, on a 24/7 basis, including task-specific exposure monitoring for chemical and biological contaminants and physical stressors;
- Providing responder medical surveillance and monitoring and, in conjunction with HHS, evaluating the need for epidemiological medical monitoring of responders;
- Providing psychological first aid throughout incident response and recovery activities;
- Identifying, in conjunction with HHS, appropriate immunization and prophylaxis for responders;
- Undertaking site-specific health and safety plan development and implementation.

2.10 National Interagency Fire Center (NIFC)

The National Interagency Fire Center (NIFC) in Boise, Idaho, the nation's support center for wildland firefighting, can provide expertise and assets to respond to a wide variety of emergencies. Seven federal and state agencies work together in NIFC to coordinate and support wildland fire and disaster operations: the DOI Bureau of Indian Affairs, Bureau of Land Management, Fish and Wildlife Service (FWS), National Park Service, and the Aviation Management Directorate of the National Business Center; the USDA Forest Service; the Department of Commerce National Weather Service; the National Association of State Foresters; and the U.S. Fire Administration. NIFC provides access to the firefighting supplies, equipment and personnel, including National Incident Management Teams (National IMTs) made up of personnel from the member agencies, to facilitate efficient and cost-effective firefighting or disaster management. Other support can include communications, field communications kits (a considerable cache of equipment), air tanker bases, food and shelter. Partnerships with state, local and rural agencies enhance these efforts. Other Federal agencies may request assistance from NIFC through the DOI or USDA representative to the RRT.

2.11 National Wildfire Coordinating Group (NWCG) National Incident Management Team (National IMT)

The National Wildfire Coordinating Group (NWCG) which is comprised of representatives of federal and state agencies provide a formalized system through which agreements may be reached on substantive national issues in fire management including Incident Command System (ICS) and

Incident Management Teams (IMT). NWCG is responsible for the development and implementation of National Interagency Incident Management System (NIIMS), and the standardization and mobilization of National Incident Management Teams (National IMTs). In 2004, the NIIMS was replaced with NIMS which was developed by the Department of Homeland Security (DHS) and was based on NIIMS concepts and processes. There are two types of National IMTs for major emergencies. Type 1 IMTs are on a national or geographic rotation. Type 2 IMTs are on a geographic or sub-geographic rotation and have fewer team members and positions.

Federal agency membership on the NWCG includes the Department of Agriculture (USFS), Department of Interior (BIA, NPS, USFWS and BLM), and Department of Homeland Security (U.S. Fire Admin.). State and Tribal organizations include the National Association of State Foresters and the Intertribal Timber Council. The composition of National IMTs is 57% U.S. Forest Service, 18% Department of Interior and 25% state, local government and private wildland fire services. The NWCG is also responsible for National IMT and ICS training and qualification programs, standardized contracts and developing a new model for managing complex incidents and new modules that allow for the expansion of personnel and equipment in an efficient and cost effective manner. The National IMTs are able to respond to a wide variety of national incidents. These incidents are usually complex wildfires, however, they have evolved into a more “all risk” incident management team with the capability to respond to floods, hurricanes, hazardous material incidents and other disasters. In 2005, a Type 1 IMT included 27 team members, plus an allowance for 6 trainees. In 2005, there were 16 Type 1 IMTs and 35 Type 2 IMTs. These positions included command and general staff positions, several unit leader positions and group/division supervisors.

The National IMTs are highly skilled teams that can be brought in to assist in the management of the incident and implement key emergency response functions including command, planning, operations, logistics, finance, safety, information, liaison and air operations to name a few. The team is organized to work together for the purpose of directing and/or facilitating the management and business processes of the Incident Command System (ICS) or associated Emergency Operations Center (EOC) during large and complex emergency incidents. Several National IMTs were brought into the Columbia Shuttle Recovery Incident to assist in organizing numerous governmental response agencies and provide an effective incident management system using the ICS doctrine. During a catastrophic incident, the USFS will activate and deploy National IMTs to the designated Federal Mobilization Center (FMC) in advance of a direct FEMA mission assignment. In this role, the National IMT will provide rapid logistics management support at the FMC. In 2005, USFS National IMTs were deployed to Florida and Georgia during hurricane Dennis and Louisiana, Mississippi and Texas during Hurricanes Katrina and Rita, to manage logistics and staging areas where hundreds of truckloads of essential supplies were staged for delivery to disaster victims.

2.12 Department of Defense (DoD)

2.12.1 DoD Office of the Assistant Secretary of Defense for Homeland Defense and America’s Security Affairs (OASD HD&ASA)

OASD (HD&ASA) is the Office of the Under Secretary of Defense for Policy. The Assistant Secretary of Defense for HD&ASA is DoD’s Crises Manager and is the senior advisor to the Secretary of Defense (SD) for Homeland Defense (HD) and Defense Support of Civil Authorities (DSCA). DSCA is defined as DoD support provided to, during, and in the aftermath of domestic emergencies (i.e., terrorist attacks, major disasters, designated law enforcement and other activities). This support may be provided by federal military forces, DoD civilian and DoD contractor personnel. In general, DOD assets are requested if local, State, tribal and other Federal assets are not available or are fully committed. The DOD provides DSCA in response to requests for assistance (RFAs) from other U.S. Government Departments or Agencies, or in some cases, local, State, tribal and other

Federal assets are not available or are fully committed. With the exception of immediate response and support provided under mutual aid agreements, the DoD does not provide first responder support.

2.12.2 DoD Joint Director of Military Support (JDOMS)

Effective 25 March 2003, the Action Agency for Defense Support of Civil Authorities (DSCA) was transferred from the Department of the Army Director of Military Support (DOMS) to the Joint Staff. The DOMS functions were assumed by a new Division, Joint Director of Military Support (JDOMS), within the Joint Staff, J-3 Directorate. The Executive Agent for DSCA was transferred from the Secretary of the Army to the Assistant Secretary of Defense for Homeland Security (ASD (HD)). JDOMS is located in the Pentagon, Washington DC. The JDOMS serves as the Action Agent for DSCA operations and plans. JDOMS is responsible for: (1) evaluating RFAs from civilian agencies for impact on military readiness, (2) coordinating with the Military Department to source DoD assets to meet RFA requirements and, (3) once support is approved by the SD, release the appropriate executive order designating the supported command (e.g., NORTHCOM) and establishes necessary supporting DoD agencies for the DoD mission assignment issued by the Lead Federal Agency (LFA). For example, the LFA for natural disasters is normally DHS/EPR/FEMA.

2.12.3 DoD United States Commands

Each Command designates DoD installations to be used as logistical staging areas for in close proximity to the operational area to provide interagency logistical support to responding Federal departments and agencies. Defense support will generally be short-term to assist civilian agencies with establishing essential safety and security. DoD resources are only used when response or recovery requirements are beyond the capabilities of civil authorities as determined by FEMA or another lead or primary Federal agency.

Categories of Capabilities:

- a) Transportation (personnel and equipment) – air, ground and maritime transport
- b) Rapid needs and damage assessment – Rotary and fixed wing aircraft, satellites
- c) Patient Movement – rotary and fixed wing transports
- d) Communications
- e) Emergency route clearance and debris removal
- f) Defense Coordinating Officer (DCO)/Defense Coordinating Element (DCE) at the JFO
- g) Preparation of temporary housing
- h) Military installations for Mobilization Centers and Operational Staging Areas
- i) Fuel distribution points
- j) Temporary medical treatment facilities
- k) Explosives or ordnance render safe and disposal (EOD Attachments)
- l) Chemical and biological agent stabilization, transportation and disposal (Army TEU)

Requests for Assistance:

The Lead Federal Agency (LFA) drafts an RFA letter to the Executive Secretary of DoD. The letter is on agency letterhead and addressed to:

Executive Secretary of Department of Defense
1030 Defense, Pentagon
Washington, DC 20310-1030

The letter is closed with the Agency Representative's signature.

The LFA faxes a signed copy of the RFA to the DoD Executive Secretary and an 'advanced copy' to OASD (HD&ASA) and JDOMS.

DOD Executive Secretary Fax No: 703-692-7152

Voice No: 703-692-7125

OASD (HD&ASA) Fax No: 703-697-5991

Voice No: 703-697-5664

JDOMS Fax No: 703-697-3147

Voice No: 703-697-9400

Call the voice line to confirm that the recipient has received the RFA.

In most instances, the DoD provides DSCA in response to RFAs from a primary agency. DSCA normally is provided when local, State, and Federal resources are fully committed or when a capability unique to DoD is required. DoD typically provides DSCA on a cost reimbursable basis as required by law. Upon receipt of an RFA, DoD uses the following criteria to evaluate the RFA for supportability:

- Legality (compliance with laws)
- Lethality (potential use of lethal force by or against DoD forces)
- Risk (safety of DoD forces)
- Cost (who pays, effect on DoD budget)
- Appropriateness (whether the requested mission is in the interest of the DoD to conduct)
- Readiness (effect on DoD's ability to perform its primary national defense mission)

Once approved, the DoD will provide the assets to fulfill the request in the required location at the agreed upon time.

Request for Assistance Situations:

A) Prior to a Presidential Declaration of a Disaster and/or Emergency: During the immediate aftermath of an incident that may ultimately qualify for assistance under the Stafford Act, the Governor of the State in which an incident occurred may request the President to perform emergency work that is essential for the preservation of life and property. The President may direct the emergency work for a period not to exceed ten (10) days.

B) After a Presidential Declaration of a Disaster and/or Emergency: Once the President issues a major disaster and/or emergency declaration, the DoD is in direct support of the Primary Federal Agency. To facilitate unity of effort and the effective employment of assets, requests for DoD assistance are only accepted from the Primary Agency. This is typically DHS/FEMA.

C) Non-Federally Declared Disaster: Within the DoD, local military commanders and responsible officials from DoD components and agencies are authorized by the SD to provide support to save lives, prevent human suffering, and mitigate great property damage. The following are examples of such support:

Mutual Aid Agreements for Fire Protection: In accordance with Title 42, Section 1856a, each agency head charged with the duty of providing fire protection for any property of the

U.S. may enter into agreements with local fire-fighting organizations to provide mutual aid in providing “fire protection.”

Immediate Response: Imminently serious conditions resulting from any civil emergency may require immediate action to save lives, prevent human suffering, or mitigate property damage. When such conditions exist and time does not permit approval from higher headquarters, local military commanders and responsible officials from DoD components and agencies are authorized to take necessary action to respond to requests from civil authorities. This response must be consistent with the Posse Comitatus Act (18 U.S.C. §1385), which generally prohibits Federal military personnel and units of the National Guard under Federal authority from acting in a law enforcement capacity (e.g., searches, seizures, arrests) within the U.S., except where expressly authorized by the Constitution or Congress.

Requesting Agency	Civilian Authorities
DoD Approval Authority	Local military commanders and responsible officials from DoD components and agencies
Request Process	Requests for assistance are made directly to local military commanders and responsible officials from DoD components and agencies. Building a professional relationship with local military base commanders and preplanning will facilitate DoD support.
Assets that may be provided	All assets with the exception of those with potential lethality under DoD control
Additional Assistance	The DoD representatives to the National Response Team (NRT) and Regional Response Team (RRT) are available to assist the FOSC in obtaining DoD support during an oil or hazardous substances emergency

Additional DoD Support:

Defense Coordinating Officer (DCO): The DoD has appointed ten DCOs and assigned them to each of the 10 FEMA regions. If requested and approved, the DCO serves as DoD’s single point of contact at the Joint Field Office (JFO) during **activation of the NRP for Incidents of National Significance (INS)**. With few exceptions, requests for DSCA originating at the JFO are coordinated with and processed through the DCO. The DCO may have a Defense Coordinating Element (DCE) consisting of a staff and military liaison officers to facilitate coordination and support. Specific responsibilities of the DCO include processing requirements for DoD support, forwarding mission assignments to the appropriate DoD organizations through designated channels, and assigning military liaisons, as appropriate, to activated ESFs.

Joint Task Force (JTF): Based on the magnitude, type of incident and anticipated level of resource involvement, the combatant commander may utilize a JTF to command Federal military forces in support of the incident response. If a JTF is established, consistent with DoD operational requirements, its command and control element will be collocated with the Principle Federal Official (PFO) at the JFO to ensure coordination and unity of effort.

Emergency Preparedness Liaison Officer (EPLO): EPLOs are Federal, senior military Reserve officers from the Army, Air Force, Navy and Marines, whose full-time DoD duty is

to represent their respective Services in planning for and executing DSCA. EPLOs are assigned to each State and territories' Joint Force Headquarters – State or State Emergency Operations Centers, the 10 FEMA Regional Response Coordination Centers, national headquarters of key federal agencies, the Joint Staff and the Office of the Secretary of Defense. The EPLOs are specifically trained in disaster preparedness and DSCA matters. The EPLOs have comprehensive knowledge of military facilities and capabilities within their assigned areas. The EPLOs serve as service representatives and advisors to the DCOs as members of the DCEs.

2.12.4 U.S. Northern Command (USNORTHCOM)

U.S. Northern Command (USNORTHCOM) was established on Oct. 1, 2002 to provide Homeland Defense (HD) efforts and Defense Support of Civil Authorities (DSCA) within their area of responsibility. USNORTHCOM consolidates, under a single Unified Command, existing missions that were previously executed by other DoD organizations. This provides a unity of command for HD and DSCA. All Services and the U.S. Coast Guard are represented at USNORTHCOM headquarters located at Peterson AFB, Colorado Springs, CO. The commander of USNORTHCOM also commands the North American Aerospace Defense Command (NORAD). USNORTHCOM areas of operations include air, land and sea approaches and encompasses the entire North American continent and the surrounding water out to approximately 500 nautical miles. The command employs forces whenever necessary to execute missions against external threats as ordered by the President.

When directed by the President or Secretary of Defense, USNORTHCOM provides DSCA in response to disasters and emergencies (wildland fires, hurricanes, floods and earthquakes), consequence management assistance following an act of terrorism involving the use of chemical, biological, radiological, nuclear or high yield explosive device.

2.12.5 U.S. Pacific Command (USPACOM)

USPACOM is located at Camp H.M. Smith, Hawaii. USPACOM works closely with USNORTHCOM to establish procedures and delineate responsibilities between the two commands for homeland defense and civil support duties. Under USPACOM, the commander U.S. Army Pacific is also the commander of Joint Task Force-Homeland Defense (JTF-HD). Task Force Hawaii and Task Force Guam are subcomponents of JTF-HD. U.S. Army Pacific headquarters is located at Fort Shafter, Hawaii. The USPACOM Homeland Defense Area of Responsibility (AOR) includes the State of Hawaii and the following Compact States: Territories of Guam and American Samoa, the Commonwealth of the Northern Mariana Island, the Republic of Palau, and the following possessions: Wake Island, Midway Islands, Johnston Island, Baker Island, Howland Island, Palmyra Atoll, Kingman Reef, and associated territorial waters. Civil Support is a key element of the overall HD effort. A large part of this effort is working towards well-established relationships with civil authorities and participating in mutually beneficial pre-disaster planning, training and exercises with these authorities. A model cooperative effort exists with the FBI's JTTF in Hawaii.

The Strategic Concept Plan for HD addresses a full-spectrum of civil support responses from terrorist acts involving CBRNE to natural disasters such as typhoons, floods and tsunamis. USPACOM's Biological Warfare Countermeasures Initiative (BWCI) was established in 2003, leading DOD efforts to incorporate BW mitigating measures into deliberate plans and domestic interagency efforts. They are partnered with the DTRA and DHS in this initiative. USPACOM can provide consequence management support to FEMA following a terrorist attack and relief efforts following a natural disaster. Some of their major assets are Sea Stallion and Seahawk helicopters, high-speed and swift water vessels that can help in day and night time search and rescue missions and damage assessments,

hospital ships for medical care, marine vessels that can be loaded with disaster response equipment and relief supplies and transport emergency personnel to affected areas, vessels and crews that can support underwater survey and salvage operations, and communications equipment for relaying critical information to state and federal emergency operations centers and incident management teams.

2.12.6 U.S. Joint Task Force-Civil Support (JTF-CS)

The Joint Task Force Civil Support (JTF-CS) began operations on Oct. 1, 1999 under the Joint Forces Command (JFCOM). JTF-CS is a subordinate unit of NORTHCOM. JTF-CS is the only military organization dedicated solely to planning and integrating DoD forces for CBRNE consequence management support to civil authorities. Its mission is to save lives, prevent injury and provide temporary critical life support during CBRNE situations in the U.S. or its territories and possessions. When requested for assistance or issued a mission assignment, JTF-CS establishes coordination with local and state forces, and command and control of DoD forces providing Defense Support of Civil Authorities (DSCA). The JTF-CS mission assignment is generated by the designated Lead Federal Agency (LFA), most likely the DHS/EPR/FEMA, after the President issues a Presidential Disaster Declaration. JTF-CS is a standing joint task force comprised of active, reserve and Guard members from the Army, Navy, Air Force, Marines and Coast Guard, as well as civilian personnel and private contractors. JTF-CS is commanded by a federalized National Guard General Officer.

JTF-CS's mission is to act as the command and control element for all DoD assets deployed in support of federal agencies following CBRNE incidents. JTF-CS is always in support of the LFA such as the DHS/FEMA. Their primary capabilities are medical, decontamination and logistics support. JTF-CS has three distinct task forces in support of its mission: Task Force Medical, Task Force Response and Task Force Support. When activated, Task Force Response will deploy and set up tent cities, provide security for DoD installations and other manpower needs JTF-CS has. They also have a CBRNE reconnaissance team if the need arises. The team would be responsible for surveying and delineating areas that had been affected by warfare agents. Task Force Medical is responsible for making sure any civilian requests for medical support can be filled, including evacuations, augmenting local hospitals, providing surgical assets, dealing with medical logistics, treating patients and helping with evacuations. Task Force Support's mission is twofold – supporting its fellow task forces and providing logistics support to JTF-CS. The task force can provide transportation, aviation, engineer, supply, laundry, shower and mortuary affairs assets in a CBRNE situation. They also have access to a naval mobile construction battalion. JTF-CS is an invaluable asset for multiple disasters. The JTF-CS and its subordinate task forces are flexible and adaptive, and are capable of integrating lessons learned immediately into their field operations.

JTF-CS plans and integrates DoD support to the LFA for domestic CBRNE consequence management operations following approval by SECDEF and directed by the commander of NORTHCOM. JTF-CS will generally initiate support only after civilian resources have been expended and a state or territorial governor requests federal assistance from the president. When directed they will command and control the military's personnel and its vast array of equipment. A major activity of JTF-CS is studying city and state emergency plans to evaluate the potential needs of these cities in order to support a LFA managing the consequences of a CBRNE attack. The current commander of the unit considers JTF-CS as a "reach back" force needed to support the teams working in the trenches. The Command Assessment Element (CAE) goes to the affected state and coordinates with the State Emergency Manager and the Adjutant General. Essentially, the CAE acts as a liaison team for NORTHCOM. Because the JTF-CS routinely reviews detailed city information for display on GIS software, and understands the dangers of WMD, the planning cell can quickly anticipate what kind of DoD support a city might request. By assessing the local area's emergency

operations plans, JTF-CS can better anticipate emergency response capability shortfalls as to how the city will respond to a CBRNE attack.

Upon arrival at the incident site, the task force headquarters, which is made up of 160 full and part-time military members and civilian employees, would exercise command and control over a vast array of trained and equipped military units that could provide a full spectrum of support to the local community. This support could include medical teams, logistical support, mortuary affairs teams, chemical and biological contamination detection units, and decontamination teams. Other JTF-CS tasks include incident management support, civilian disaster preparedness and displaced populace support, transportation, and air operations. These tasks allows JTF-CS to bring back on line water and power systems, emergency medical care, and temporary transportation fixes such as short term bridging that promote delivery of supplies and services. Their training in CBRNE, medical care, and ability to survive and operate in contaminated battlefield situations make them well suited as reconnaissance entry teams and backup rescue teams for operations conducted in the highest levels of personal protection within the exclusion (hot) zone. JTF-CS conducts several major exercises each year and is tasked with planning for a DoD response for NSSEs.

The operational focus of the JTF-CS is response to a WMD incident. It is designed to work with civilian officials, to reach out to civilian federal agencies charged with carrying out disaster and emergency response, to learn their needed support requirements and operational procedures, and develop working relationships with civilian responders. The JTF-CS concept was a substantial improvement over the previous method of using ad hoc joint task forces to oversee military support. Frequently, the joint task force commander and his staff lacked the experience in providing DSCA and were unfamiliar with the procedures and processes which were needed to effectively lead the military in a domestic response effort.

2.12.7 U.S. Army 20th Support Command (CBRNE Command)

An Army core competency is to support civil authorities. The Army supports border security missions, disaster and emergency response requirements by augmenting civil agencies when their requirements exceed their capabilities or resources. The DOD, and especially the Army, have gone through significant transformation to improve their competency to support civilian authorities during disasters and, in particular, acts of terrorism involving WMD. WMD incidents may involve the use of chemical, biological or radiological agents, nuclear devices and/or high-yield explosives (CBRNE). On Oct. 16, 2004, the 20th Support Command was officially activated as the CBRNE Command. This new, larger command structure was established by consolidating other CBRNE elements. The subordinate elements of the CBRNE Command are 22nd Chemical Battalion (formerly the Army Technical Escort Unit), the 52nd Ordnance Group (EOD), and the Army Reserve Unit – Consequence Management. The Chemical Biological Rapid Response Team (CBRRT) which still exists in terms of personnel and technical expertise but is structurally absorbed as part of the CBRNE Command. The focus of the CBRNE Command is the command and control of its disparate CBRNE response organizations. CBRNE Command integrates, coordinates, deploys, and provides trained and ready full-spectrum CBRNE and EOD response forces. The CBRNE Command maintains technical links with federal and state CBRNE/EOD assets, as well as R&D to assure Army response readiness.

The CBRNE Command provides a single-point of contact within the Army for the DOD to call when a coordinated response to the threat of or use of WMD is needed anywhere in the world. The mission is to allocate Army technical assets to support full spectrum CBRNE operations that detect, identify, assess, render-safe, dismantle, transfer, dispose of CBRNE incident devices, unexploded ordnance (UXO) and improvised explosive devices (IED). The CBRNE Command is responsible for managing DOD technical support to consequence management operations, providing CBRNE technical advice and subject matter experts (SME), mitigating hazards in U.S. chemical warfare

stockpiles, providing recovery and disposal of legacy chemical and biological munitions and materials from formerly used defense sites (FUDS), and conducting escort of CBRNE materials. The 20th Support Command activated with the following subordinate units: the 52nd Ordnance Group (EOD); the 3rd, 63rd, 79th and 184th Ordnance Battalions; the 22nd Chemical Battalion, and operational control of the Army Reserve Unit-Consequence Management.

The 20th Support Command provides assets to NORTHCOM to carry out DSCA. This support can be in the form of response assets such as Technical Escort teams or EOD teams or a Coordinating Element that provides technical advice and planning assistance to a Joint Task Force (i.e., JTF-CS). These teams are operationally connected to NORTHCOM until released. When a civil agency requests a capability, the Joint Field Office (JFO) determines that DOD is the best option. The Defense Coordinating Officer (DCO) forwards the capability request for assistance (RFA) to the JTF-CS. The JTF-CS in turn requests that capability through NORTHCOM to Joint Forces Command (JFCOM) for sourcing. Before any assets move, that RFA must be approved by the Secretary of Defense (SecDef). The DOD asset is managed by the LFA in the field. Once the Mission Assignment (MA) has been completed, the DOD asset reports back to the DCO and are either released or carry out another MA.

2.12.8 U.S. Army Research Development and Engineering Command (RDECOM), formerly Soldier Biological Chemical Command (SBCCOM)

On October 9, 2003, SBCCOM was re-designated the Research Development and Engineering Command (RDECOM). SBCCOM elements were integrated into the new U.S. Army's Chemical Materials Agency (CMA), other CBRNE units including TEU, CBRRT, and Army Reserve Unit, and others. CMA was created to incorporate the Chemical Demilitarization Program and portions of the SBCCOM into one agency. CMA is now the world leader in programs to store, treat, and dispose of chemical weapons safely and effectively. Technologies developed by CMA may have applications in the field for the destruction or decontamination of chemical warfare agents following a terrorist attack. Although no longer manufactured, CMA has a large stockpile of DS2, a decontamination solution used by troops to decontaminate chemical agents. SBCCOM personnel have gained years of mission experience in CBRNE situations in performing comprehensive remediation of Rocky Mountain Arsenal, cleaning up decades of weapons and chemical production, management of a fast-paced DOD program for Assembled Chemical Weapons Assessment, researching and developing alternative solutions for destroying chemical weapons.

RDECOM's mission is to develop, acquire and maintain soldier support, nuclear, biological and chemical defense technology systems and services to ensure the decisive edge and maximum protection for the United States. RDECOM provides for the safe storage, treaty compliance and destruction of chemical material. RDECOM provides detection and monitoring capabilities for the battlefield. RDECOM maintains the Edgewood Chemical Biological Center and Chemical and Biological Defense Information Analysis Center (CBIAC) to assist military and civilian organizations in planning for and responding to a CBRNE event. They are recognized as the nation's experts for chemical and biological equipment and systems. RDECOM conducts research, concept exploration, demonstration, validation, engineering, manufacturing and development for production of chemical and biological defense systems.

The Chemical Biological Applications & Risk Reduction Business Unit (CBARR) of the RDECOM have highly skilled personnel that provide: military personal protective equipment (PPE) servicing, testing, repair and maintenance; Risk Management including hazard analysis, risk assessments, field-testing and inspection; Training including nuclear, biological and chemical agent recognition, decontamination methods, sample collection, detection methods, PPE selection and use and practical exercises; near real-time monitoring; on-site analysis; perimeter monitoring using Open-Path Fourier

Transform Infrared Spectroscopy to detect 250 compounds including chemical warfare agents; field operations including maintaining the Army's chemical stockpiles and demolition of former chemical/biological process facilities, site remediation and environmental investigation; and Live Agent Operation including chemical agent synthesis, purification, demilitarization program and support to law enforcement in chemical/biological screening.

2.12.9 U.S. Army Chemical, Biological, Rapid Response Team (CBRRT)

The CBRRT was established in 1997 with the mandate to organize and manage DOD chemical and biological defense support to civil authorities in response to a WMD incident. The Army's CBRRT mission is to deploy and establish a robust and integrated capability to coordinate and synchronize DOD's technical assistance (medical and non-medical) to support the LFA of a WMD incident or designated NSSE. CBRRT can provide technical advice and assessment support to the IC/UC on chemical and biological warfare agents. However, CBRRT personnel are not trained to make entry into the hot zone. The CBRRT can provide advanced communication assets, and a command team. The DOD is refining its chemical and biological rapid response team capable of assisting Federal, State and local officials in the detection, neutralization, containment, and disposal of WMD containing chemical, biological, or related materials. Within DOD, several organizations were to be integrated into the CBRRT. The proposed structure included: Army's Technical Escort Unit (TEU); the Army's 52nd Ordnance Group; the U.S. Army Medical Research Institute for Infectious Diseases (USAMRIID); the U.S. Army Medical Research Institute for Chemical Defense; the U.S. Army Material Command Treaty Lab; the U.S. Navy Medical Research Institute, the U.S. Navy Environmental and Preventive Medicine Unit, and the U.S. Naval Research Laboratory. Currently, the CBRRT exists in terms of personnel and technical expertise but is structurally being absorbed as part of the Army's 20th Support Command (CBRNE Command that was established post-911).

2.12.10 U.S. Army 22nd Chemical Battalion Technical Escort (TE), formerly Technical Escort Units (TEU)

Since its inception in 1943, the TEUs have provided the safe transport and escort of unconventional munitions and material – nuclear, biological and chemical. Its core capabilities involve chemical, biological and explosive ordinance disposal, reconnaissance, recovery, sampling, detection, monitoring, limited decontamination, DOT packaging, transportation, disposal and performing or recommending final disposition of weaponized and non-weaponized chemical and biological materials and hazards encountered. The TEU is the sole source of special containers used to transport chemical agents for disposal. The containers exceed DOT standards and are guaranteed sealed at 10 to the minus 10th power and explosion proof.

In the fall of 2004, the TEUs were discontinued and the **22nd Chemical Battalion (TE)** was activated under the higher headquarters 20th Support Command (SUPCOM) (CBRNE). Later, an additional unit, the 110th Chemical Battalion (TE) was activated at Fort Lewis, WA, under 20th SUPCOM (CBRNE). In September 2007, the 48th Chemical Brigade will be activated at Fort Hood, Texas, as part of 20th SUPCOM (CBRNE) to provide command and control for all chemical units in the active army.

Technical Escort (TE) units are battalion-level organizations that provide regional response capability to both homeland and combatant commanders. The 22nd Chemical Battalion is comprised of six companies located in four States. They maintain a 24 hour a day on-call emergency response capability to respond to a CBRNE incident. The TEU can be accessed through the Joint Director of Military Support (JDOMS). The battalion HQ, HHC, Alpha and Bravo companies are located at Aberdeen Proving Ground, Edgewood area, Maryland. Delta Company is located at Fort Belvoir,

Virginia. Charlie Company is located at Dugway Proving Ground, and Echo Company is at Pine Bluff Arsenal, Arkansas. TE units along with U.S. Army Corps of Engineers play a vital role in the remediation of Formerly Used Defense Sites (FUDS). The TEU has rapidly-deployable assessment capabilities for crisis response including explosive ordnance disposal (EOD) to disable and render safe unexploded ordnance (UXO) and improvised explosive devices (IED), contamination monitoring and detection of chemical agents, hazardous predictions and analysis of NBC releases, C/B and environmental sampling, limited analytical procedures, confined space entry, sample escort to military or commercial laboratory for confirmation analysis. Personnel protection equipment includes OSHA Level A, Hammer Suits, BDO and JSLIST (lined with active charcoal), supplied air and respirator. TEU was deployed in Afghanistan and Iraq where various containers were sampled inside Al Qaeda caves, laboratories and other sites and escorted to the U.S. for confirmation analysis.

TE units employ sophisticated systems, such as the Portable Isotopic Neutron Spectroscopy (PINS), a non-intrusive chemical assay that can identify the contents of munitions (i.e., mortar shells filled with mustard gas) and storage containers. It works by shooting a beam of neutrons. The neutrons bounce into the elements of the material inside the munitions and produce gamma rays. Each element has a particular gamma ray signature. Data collected from PINS can be passed to DOE's Idaho National Engineering and Environmental Laboratory (researchers who developed PINS technology) to review the information, photographs and X-rays to confirm the presence (or non-presence) of chemical agents. The information may be passed to the Army's Material Assessment Review Board, located at the Edgewood Area at Aberdeen Proving Ground, MD. The board is made up of experts in explosive ordnance and nuclear physicists who can provide additional confirmation analysis.

2.12.11 U.S. Army Explosive Ordnance Disposal Group (EOD)

The Army's and other military Services provide explosive ordnance disposal (EOD) bomb squad units to defeat or mitigate the hazards from conventional, nuclear, or chemical military munitions and WMD throughout CONUS as requested by local, State and Federal law-enforcement or military authorities. EOD teams are responsible for the identification, render safe, and disposal of hazardous unexploded conventional munitions, chemical munitions, and improvised explosive devices (IED). They also support the U.S. Secret Service and the State Department as part of protection details for the President of the United States, the Vice President, and dignitaries from foreign countries. The Army's EOD provide support to civil authorities for incidents involving military ordnance, weapons of mass destruction, transportation accidents involving DOD owned or DOD contractor owned munitions, or hazardous explosive items beyond the capability of the requesting civil authorities. EOD presents classes on ordnance recognition, bomb search, bomb threat and reporting procedures to military, civilian and Federal responders.

The 52nd Ordnance Group (EOD) and 71st Ordnance Group (EOD) provide the command and control headquarters for all Army explosive Ordnance disposal companies and battalions located in the CONUS, to include the U.S. Virgin Islands and Puerto Rico. Subordinate units maintain EOD Response Teams. While subordinate units are trained and equipped for combat operations, they may also support a variety of homeland missions, to include range surface clearance operations at active Army installations and support to DOD and other Federal agencies providing support to first responders. The EOD Response Teams can provide expert advice and assistance to the IC/UC and they have access to a vast knowledge base at the U.S. Army Chemical Biological Defense Command (CBDCOM) and the Medical Research and Materiel Command (MRMC). Subordinate units are not intended to operate as ordnance and explosives (OE) clearance or disposal contractors, to certify property clear of OE, or to serve as transportation or explosives supply assets to contractor operations. The 52nd and 71st Ordnance Groups (EOD) can be called upon for ordnance disposal (OD) and are the primary experts called upon by the FBI for access and device disablement operations involving WMD.

2.12.12 U.S. Army Corps of Engineers (USACE)

The USACE is one of the exceptions to the normal request for assistance process outlined previously for requesting DSCA. Under the NRF, the USACE is assigned as the Coordinator for ESF #3, “Public Works and Engineering” during disasters. Typical ESF #3 assistance provided by USACE includes the following:

- Needs Assessment: Participation with FEMA and other agencies in damage assessments;
- Temporary Power: Provision of emergency power to public facilities;
- Ice, Water, Temporary Housing, Temporary Roofing: Management and emergency contracting to support public health and safety;
- Debris Management: Emergency debris clearance, removal and disposal management of debris from public property;
- Emergency Infrastructure Repair: Repairs to damaged streets, bridges, ports, waterways, airfields, and other facilities necessary for emergency access to disaster victims;
- Critical Public Facility Restorations: Emergency restoration of critical public works including temporary restoration of water supplies and wastewater treatment systems;
- Demolition/Structural Stabilization: Emergency demolition or stabilization of damaged building structures, bridges, levees and other facilities;
- Technical Assistance: Technical assistance including inspection of private residential and commercial structures.

USACE has a number of teams and resources available to assist in the execution of ESF #3 missions including the following:

- Planning Response Teams (PRT): Each of the Corps’ 41 districts has established a PRT dedicated to one of the emergency response tasks listed above for which the Corps is responsible;
- Deployable Tactical Operating System (DTOS): The Corps’ DTOS includes 20 strategically-located, state-of-the-art, mobile command, control, and communications (C3) units which are self-sustaining, generator-powered vehicles and trailers;
- Pre-established Commercial Contracts: The Corps executes emergency contracts for mission support and pre-scripted mission assignments approved by DHS, but can be modified to fit the disaster situation;
- Cadre of Team Leaders, Assistant Team Leaders and Subject Matter Experts: The Corps has overhead teams that are trained and ready to deploy to help facilitate ESF #3 support to DHS/FEMA, and maintains ESF #3 Field and Mission Guides for each of the major ESF #3 missions.

The missions described above are assigned directly by FEMA and do not require DoD approval. Additionally, the USACE performs a number of disaster related response missions under the authority granted them by Public Law 84-99, Flood Control and Coastal Emergencies. Under this law, the Chief of Engineers is authorized to undertake activities including disaster preparedness, Advanced Measures, emergency operations, rehabilitation of flood control works, protection or repair of federally authorized protective works and provisions of emergency water due to drought or contaminated source.

2.12.13 U.S. Army Corps of Engineers (USACE) Rapid Response Program

The USACE Rapid Response Program, Center of Expertise, is based at Offutt AFB, just south of downtown Omaha, Nebraska. USACE Rapid Response Teams provide field-tested, time-sensitive environmental response services throughout the United States and in U.S. Territories abroad. Any

Federal agency may contract with a Rapid Response Team to mitigate environmental contamination concerns, including incidents from “weaponized” contamination. Previous work experience ranges from emergency response anthrax planning, assessment and decontamination, facility hardening initiatives, short-term and long-term actions for chemical, biological, and radioactive contamination, to design/build of temporary housing under hurricane response, groundwater recovery systems, landfill caps, and potable water supply systems. A Rapid Response Team consists of more than 30 Corps of Engineer professionals who have extensive planning and field experience (e.g., technical, construction, contracts) resulting from nation-wide time-sensitive actions and life-cycle management responsibilities. The USACE provides additional capacity and support to EPA by providing engineering and construction design and remediation of Superfund sites across the nation.

The Rapid Response Team can draw expertise from a large civilian and military workforce that specializes in engineering and environmental matters including biologists, engineers, geologists, hydrologists, natural resource managers, and other professionals that provide responsive engineering services to the nation. The efforts of the USACE include: planning, designing, building, and operating water resources and other civil works projects (navigation, flood control, environmental protection, disaster response, and more). The Rapid Response Team is available to respond to incidents of national significance and WMD events. One of its primary capabilities include large earth-moving construction projects. Team members consist of Registered Professional Engineers, Construction Site Managers, Chemists, Regulatory Specialists, Industrial Hygienists and Contract Administrators. The Corps uses pre-selected cleanup contractor teams to conduct response operations. These contractor teams have experienced Response Managers, Cleanup Technicians and Heavy-Equipment Operators.

2.12.14 U.S. Army Corps of Engineers, Kansas City District, Nation-wide Low Level Radioactive Waste Disposal (LLRWD) Program

The U.S. Army Corps of Engineers (USACE) maintains nationwide disposal contracts primarily for DOE Formerly Used Sites Remedial Action Program (FUSRAP), and DOE, Superfund and BRAC remediation projects. In 1997, the responsibility for cleaning up DOE radioactive waste sites was transferred from DOE to USACE. Federal and local agencies that have used USACE contracts include DoD, DoE, AFSC, EPA, and the City/County of Denver. USACE has Interagency Agreements (IAGs) with DOE, and several EPA regions to dispose of LLRW.

The USACE has three disposal contracts managed by the USACE Northwest Kansas City District (NWK) located in Kansas City, MO. The NWK contract with Envirocare of Utah is for low-level radioactive mine tailings waste, and for mixed waste (RCRA hazardous waste mixed with LLRW). The other two contracts are with U.S. Ecology in Idaho and Waste Control Specialists (WCS) in Texas. USACE provides additional capacity and support to EPA and other Federal agencies through its LLRWD program.

2.12.15 U.S. Army Field Support Command (AFSC), Safety /Radioactive Waste Directorate (AMSFS-SF)

The AFSC is the designated DoD Executive Agency for Low-Level Radioactive Waste (LLRW) Program and is the Army’s Program Manager for low level radioactive waste management. AMSFS-SF mission is to plan, direct and control the disposition of DoD (other than Nuclear Navy and special weapons materials) LLRW, naturally occurring and accelerator-produced radioactive material, and mixed waste disposal/disposition program for the DoD world-wide. This program initially began in 1992 as the Radioactive Waste Disposal Division under the Army Industrial Operations Command (IOC). The AFSC is located at the U.S. Army Garrison, Rock Island Arsenal, in Rock Island, Illinois.

The Safety/Radioactive Waste Directorate, with a staff of 20 employees, currently services 143 sites annually. The AFSC reduces LLRW disposal costs through volume reduction methods, negotiated contracts and efficiencies of scale. Additionally, the AFSC practices strict regulatory compliance. Examples of LLRW managed by AFSC are gauges, medical waste, night vision devices, chemical detection instruments, engine components, missile components, laboratory waste, compasses, contaminated soils, and smoke detectors. DoD LLRW represents 10% of the radioactive waste produced in the U.S.

The AFSC has Disposal Basic Ordering Agreements (BOAs) and Indefinite Delivery-Indefinite Quantity (IDIQ) contracts for DoD low-level radioactive services and disposal. Federal agencies such as EPA, FEMA, VA, NASA, DOA, DOE, USGS and DOJ have used AFSC to dispose of low level radioactive wastes. The AFSC has administrative and technical support fee schedules and can quickly negotiate an IAG with other Federal agencies for services. EPA and other Federal agencies have executed an IAG with AFSC for the disposal of LLRW. The AFSC can provide services either through in-house resources or through a wide range of contractors and contracting options. AFSC's services include, but are not limited to: characterization and verification (sampling, monitoring and surveying); decontamination and decommissioning of buildings, equipment, underground excavations and soils; risk assessments; transportation (inspections, packaging, labeling, manifesting and shipping); waste treatment (mixed waste, stabilization, incineration and encapsulation); processing and disposal. The AFSC uses Envirocare of Utah for disposal of low-level and mixed wastes, PermaFix Environmental Services for disposal of mixed waste, and U.S. Ecology for disposal of low level radioactive wastes, approved NORM and NARM materials.

2.12.16 U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID)

The USAMRIID, located at Fort Detrick, MD, serves as the lead DOD laboratory and research center for medical aspects of biological warfare defense. USAMRIID is an organization of the U.S. Army Medical Research and Materiel Command (USAMRMC). USAMRIID investigates infectious diseases that require special containment and provides a critical capability to infectious disease research as the only DoD laboratory equipped to safely study highly infectious viruses requiring maximum containment at Biosafety Level 4. The program also includes a deployable team for investigation and treatment during actual biological events. The USAMRIID is capable of deploying an Aeromedical Isolation Team consisting of physicians, nurses, medical assistants and laboratory technicians. These team members are specially trained to provide care for and transport of patients with diseases caused by either biological warfare agents or infectious diseases requiring high containment. The Institute also operates a reference laboratory for definitive identification of biological threat agents and diagnosis of the diseases they produce.

2.12.17 U.S. Army Medical Research Institute of Chemical Defense (USAMRICD)

USAMRICD is one of six medical research laboratories and institutes operated by USAMRMC and serves as the lead DOD laboratory and research center for medical aspects of chemical warfare defense. USAMRICD provides extensive, world-renowned research capabilities to support identification, development, and fielding of medical countermeasures against chemical and toxin agents. The Chemical Casualty Care Division (CCCD), located at Aberdeen Proving Ground, MD, is a division of USAMRICD with a primary role of implementing an education program for medical professionals and first responders in the management of chemical agent casualties. The CCCD also serves as advisors to 20th SUPCOM (CBRNE) and DEST providing casualty management training and expert consultation on-scene to the local IC and other military and civilian authorities in the event of a chemical warfare agent release.

2.12.18 U.S. Army Edgewood Chemical Biological Center (ECBC)

The Edgewood Chemical Biological Center (ECBC), located in Edgewood, MD, is the nation's principle research and development center for chemical and biological defense. ECBC develops technology in the areas of detection, protection, and decontamination and provides support over the entire lifecycle from basic research through technology development, engineering design, equipment evaluation, product support and field operations. Edgewood has developed many C/B technologies including chemical warfare agent vapor detection kits, biological agent sampling kits, field biological agent detection system, nerve agent detector, DS2 Decontaminating Agent, new decontamination systems for personnel and equipment, a Joint Service Sensitive Equipment Decontamination System, infrared remote sensing chemical agent detector, chemical detoxification of chemical warfare agents, neutralization-based technologies for the disposal of U.S. chemical weapons stockpile, multiple enzyme-based formulas that effectively decontaminate nerve agents and organophosphorous pesticides, Biological Attack Warning System for fixed installations and state-of-the-art protective mask technology. Edgewood works with exotic agents and lethal diseases in a Biosafety Level 3 facility and is constructing a new Advanced Chemistry Laboratory. In a terrorism incident, Edgewood can activate its EOC and provide information and guidance on chemical/biological defense issues.

2.12.19 Defense Threat Reduction Agency (DTRA)

The Defense Threat Reduction Agency (DTRA) can provide expert advice to the commander and support civil authorities with respect to a terrorist attack involving CBRNE including technical, scientific, and meteorological/hazard prediction support. The DTRA has the Consequence Management Advisory Team (CMAT). The CMAT is comprised of personnel knowledgeable in response procedures, requirements, hazard prediction modeling, secure communications, health physics, medical, public affairs, and the legal implications of a WMD incident. Capabilities include reach-back to sophisticated computer modeling and subject matter experts. The DTRA's WMD Command Operational Picture uses an IT application that provides the incident command with information on the dispersion of chemical agents, data on geographical plume information, analysis and links to other information portals. The DTRA operates the Defense Nuclear Weapons School at Kirkland AFB, Albuquerque, New Mexico.

2.12.20 U.S. Navy Supervisor of Salvage and Diving (SUPSALV)

The SUPSALV was added as a Special Team under the NCP for their extensive knowledge and experience in ocean engineering disciplines of marine salvage, pollution abatement, shipboard damage control, diving and diving system certification. SUPSALV consists of 10-12 military personnel, 30 civilian personnel and one Royal Navy Exchange Officer. SUPSALV has access to the U.S. Navy's extensive array of specialized equipment, personnel, containment, collection, and removal equipment specifically designed for salvage related and open sea pollution incidents. SUPSALV maintains an extensive inventory of oil pollution abatement equipment in warehouses on the East Coast (Williamsburg, VA) and West Coast (Port Hueneme, CA), Alaska, and Hawaii. Each warehouse is stockpiled with a large spill response resource inventory (SRRI) and most of it is containerized for immediate deployment by air or truck. The SRRI includes portable generators, compressors, light towers, pumps, mobile command vans and other hazard support systems. SUPSALV maintains on-call world-class response contractors for diving, marine salvage, towing pollution response and underwater search and recovery, with Navy-owned equipment. Other capabilities include cold water response capabilities, including inland and coastal waters, 20,000 feet of 6" floating hose for fuel transfer capability, access to International Bird Rescue Research Center (IBRRC) (wildlife rescue and rehabilitation center), joint salvage and pollution response management capability, in-house contractor supported deep & shallow ocean side-scan search & ROV operations.

2.12.21 U.S. Marine Corps, Chemical Biological Incident Response Force (CBIRF)

The CBIRF is an element of the 4th Marine Expeditionary Brigade (MEB), activated on April 4, 1996, at its home base in Camp Lejeune, NC. CBIRF is headquartered at Indian Head, MD. In response to PDD-39, the Marine Corps created CBIRF to counter chemical/biological terrorist threat. The force is a complete unit and contains up to 380 Marines and Sailors. Although CBIRF is primarily dedicated to the National Capitol Region, they are a national response asset that can be tasked by NORTHCOM for domestic consequence management operations to deal with a CBRN threat. The force is completely self-contained and self-sufficient, capable of deploying anywhere in the world on short notice. CBIRF is the only DOD unit that provides a major search, extraction, and decontamination capability. CBIRF can provide a number of significant capabilities to include coordinating initial relief efforts, security, detection, identification, expert medical advice and limited decontamination of personnel and equipment. The first CBIRF team to arrive on scene is the Recon and Rapid Intervention Team (RARIT). Its job is to make initial entry into the exclusion zone in Level "A" personal protective equipment (PPE) to identify unknown chemical/biological agent(s). The Casualty Search Team (CST) locates casualties and performs initial medical assessments and the Casualty Extract Team (CET) stabilizes and evacuates casualties to the decontamination area.

The CBIRF is comprised of five elements: reconnaissance, decontamination, medical, security and service support. The NBC recon element is responsible for detecting the location of an incident site, agent identification and sampling. The decon element utilizes marines in appropriate level of PPE, a decon tent, body wash and shower system. The medical element can provide triage support to casualties during and after decontamination, treatment for exposure to nerve, blister or blood agents, and treatment of shock/trauma. The medical staff is capable of administering antibiotics and antidotes, as well as treating burns and conventional injuries. Their inventory also includes two 997 High Mobility, Multi-Purpose Wheeled Vehicles (an ambulance with an over-pressure system) to protect personnel in contaminated areas. The element's medical officer and corpsman are trained by the U.S. Army Medical Research Institute of Chemical Defense (USAMRICD). The CBIRF uses standard and high-end NBC detection equipment including GC/MS and mobile laboratory. The unit also has two German-made XM-93 Fox vehicles which are NBC reconnaissance vehicles capable of detecting both vapor and liquid contamination. CBIRF's security element is a standing unit of 120 marines mostly well armed infantrymen that can be tasked to secure the contaminated area, provide security patrols and protect response personnel. The service support element consists of five sections: headquarters (command and control), motor transportation, engineers (water, utilities and heavy equipment), embarkation and supply (contracting and logistical support). CBIRF is routinely deploys for NSSE, prepared to provide agent detection and identification, casualty search and rescue, personnel decontamination, and emergency medical care to stabilize contaminated victims. CBIRF supported the Anthrax (2001) and Ricin (2004) decontamination operations of the U.S. Senate Office buildings on Capitol Hill.

2.13 U.S. National Guard Bureau

2.13.1 NGB Weapons of Mass Destruction Civil Support Team (WMD-CST)

The National Guard units play a prominent role in homeland security because of their ability to be employed in a federal or a non-federal status, under state law, to meet the needs of state and local authorities. See: <http://www.ng.mil/features/homelanddefense/cst/index.html>. The National Guard in State status is the primary military responder during most natural or manmade disasters and other emergencies. Within the National Guard are the WMD-CSTs. They were established by Congress in Oct. 1998. A WMD-CST is a small National Guard unit that has been specifically trained, equipped, and organized to support, local, state and federal agencies responding to an attack involving

CBRNE weapons. The National Guard Bureau (NGB) is the official channel of communication between states, territories, District of Columbia and NORTHCOM and PACOM providing real-time situational awareness, information sharing and support requirements at the local and regional levels. There are a total of 55 active CSTs in the nation, organized under the 10 FEMA Regions. Each CST has 22 full-time Army and Air Guardsmen with a wide range of technical disciplines and skill sets. The following 6 CSTs (two in California) are located within EPA Region IX: the 9th CST (WMD) in Los Alamitos, CA; the 91st CST (WMD) in Phoenix, AZ; the 92nd CST (WMD) in Las Vegas, NV; the 93rd CST (WMD) in Honolulu, HI; the 94th CST (WMD) in Juan Muna, Guam; and the 95th CST (WMD) in Hayward, CA.

The WMD-CST (formerly called Rapid Assessment and Initial Detection or RAID teams) is a federally funded National Guard unit established under PD-39. Due to the required level of training and expertise, and the requirement for rapid deployment, all members of the WMD-CST are full-time. The WMD-CST can bring an exceptional level of reconnaissance, advice and communication capability to the response. They can assist the local IC in contaminant identification, potential strategies and tactics used at CBRNE incidents and powerful communications equipment and operators. The WMD-CST, however, is not trained nor equipped for actual rescue and decontamination of victims. The mission of a WMD-CST is to augment State and local terrorism response capabilities in events known or suspected to involve WMD. Authority to deploy the team rests with the Governor, through the State Adjutant General. The WMD-CST deploys to an area of operations within the State to assess a suspected CBRNE event, advise civilian responders regarding appropriate actions, and assist in expediting the deployment of additional State and Federal assets to support the local response effort. The WMD-CST will integrate into the ICS/UC established by the local jurisdiction.

The CST combines the skills of six sections: Command, Operations/Administration, Survey, Medical, Communications, and Logistics/Decontamination. The WMD-CSTs train collectively for CBRNE scenarios, and routinely drill with State and local responders for a coordinated response effort. The CST provides rapid detection and analysis of chemical, biological and radiological agents. The teams are highly trained in CBRNE response and can provide advice on event mitigation, medical treatment, reach-back capabilities, follow-on resources and other response concerns of the IC/UC. The CST can utilize a wide range of low and high-tech detection, monitoring and sampling devices, including the latest military hardware and commercial equipment. The teams are qualified to utilize personnel protection equipment (PPE) A, B and C. Each team will be equipped with high-end detection, analytical, monitoring and PPE. The CST has computer modeling capabilities to compute downrange hazard projections and access response database systems, linked to a Unified Command Suite (UCS) communications van with satellite uplink, providing full secure and non-secure capability to coordinate with civil and military authorities. They also field an Analytical Laboratory System with a GC/MS with headspace sampler, Gamma Spectrometer for radioisotope identification, Polymerase Chain Reaction (PCR) analysis for DNA identification of biological organisms, Fourier Transform Infrared Spectrometer for quick analysis of chemical makeup of substances, HAZCAT and HEINZ 5-STEP kits for hazard categorization of unknown substances. The WMD-CST Communications Van is equipped with the following communications gear:

- KU-Band SATCOM –wide-bandwidth for data and voice reach back; secure capable
- IMMARSAT-B- portable data and voice SATCOM
- Motorola VHF/UHF AM/FM Transceiver – intra-team communications and responder communications
- Military VHF/UHF/UHF SATCOM Radios
- Multilane Scanner
- Team Radios – Motorola XTS-3000

- Cellular Telephone and LAN for Laptop Computers

2.13.2 NGB CBRNE Enhanced Response Force Package (CERFP)

The National Guard has implemented a new homeland-security initiative creating 12 CERFPs to respond to chemical, biological, radiological, nuclear or high yield explosives (CBRNE) terrorist incidents. In 2004, the National Guard stood up 12 CERFPs. Units were established in MA, NY, PA, WV, FL, IL, TX, MO, CO, HI, CA and WA. There are currently 17 validated CERFPs endorsed by the commander, U.S. Northern Command. The CERFPs are not “state” units per se, but regional assets geographically located to ensure the presence of a least one team to assist the local incident commander in each FEMA region. Unlike the WMD-CSTs, the CERFP is not a new unit; it is, rather, a modular unit made up from existing National Guard force structure. Most CERFP members are provided from existing units and are traditional combat troops with civilian jobs. Each CERFP consists of approximately 500 personnel drawn from both the Army and the Air National Guard who assist WMD-CSTs by locating and decontaminating victims. They are primarily trained and equipped to carry out mass casualty decontamination, enhanced medical-triage capabilities, specialized search-and-rescue missions and combat-security capabilities. Most CERFP team members are from civil support and/or patent decontamination teams, medical, engineer, or chemical units, and/or counter-drug aviation assets. The CERFPs are modeled after the Marine Corps’ Chemical/Biological Incident Response Force (CBIRF) and have essentially spread this capability throughout the U.S. Operationally, CERFPs are capable of searching an incident site, including heavily damaged buildings, and of rescuing casualties trapped in rubble, decontaminating them, and performing the medical triage and initial treatment needed to stabilize the casualties for transport to a medical facility.

California plans to augment the initial CERFP concept by creating additional teams, using \$2M in state funding to equip and maintain each team. California has created its own Military Assistance to Civil Authorities (MACA) Brigade to train and manage its CERFP teams. The training and certification for the original 12 teams was expected to be completed by FY2005. Like WMD-CSTs, the CERFP teams will remain under a military chain-of-command while providing direct support to civilian authorities. Colonel John Bernatz is the executive officer of the California MACA Brigade. Once mobilized, the CERFP command-and-control team and element commanders would coordinate with the incident commander and JTF [Joint Task Force] commander to determine how to most effectively employ the CERFP. The 4 elements are command and control element, search and extraction element assigned to an Army National Guard engineering company, decontamination element assigned to an Army National Guard chemical company and a medical element assigned to an Air National Guard medical group. The search and extraction element are trained and certified in accordance with NFPA standards for civilian urban search and rescue operations. The decontamination element conducts both ambulatory and non-ambulatory patient decontamination. Decontamination lines are set up at entry-control points, leading from the hot zone to the support zone through the contamination reduction zone. The medical element may work in coordination with the DMAT under the auspices of the NDMS providing a wide range of treatment including physical trauma injuries caused by blast effect and collapsing structures, stress-related issues, radiation exposure, and radiological, chemical, or biological contamination.

2.14 Department of Energy/National Nuclear Security Agency (DOE/NNSA) Office of Emergency Response

The DOE/NNSA was established by Congress in 2000 and is a semi-autonomous agency within the DOE responsible for enhancing national security through the military application of nuclear energy. NNSA maintains and enhances the safety, security, reliability and performance of the U.S. nuclear

weapons stockpile without nuclear testing; promotes international nuclear safety and nonproliferation; works to reduce global danger from nuclear and radiological weapons of mass destruction; provides the U.S. Navy with safe and effective nuclear propulsion; and responds to nuclear and radiological emergencies in the U.S. and abroad.

The mission of the DOE/NNSA Office of Emergency Response (OER) is to protect the public, environment, and the emergency responders from both terrorist and non-terrorist events by providing a responsive, flexible, efficient, and effective radiological emergency response framework and capability for the Nation by applying NNSA's unique technical expertise residing within the DOE Complex.

Following is the command structure for DOE/NNSA Office of Emergency Response:

Emergency Response Officer (ERO): The ERO is the Department's representative to respond and provide appropriate assistance for the coordination of DOE capabilities. The ERO is an on-call, 24/7 duty officer and can be contacted through the DOE/NNSA Emergency Operations Center for the coordination of any radiological/nuclear support request or assistance with respect to the NNSA radiological capabilities. The ERO's primary role is coordination and communication between the Interagency, deployed teams under the command of the SEO or team leader and the Headquarters' management and information infrastructure.

Nuclear Incident Team (NIT): The NIT is DOE Headquarters' 24 hour command, control, coordination, and intelligence operations team established during significant incidents involving nuclear/radiological threats or incidents. The NIT is the focal point for Headquarters' management and oversight of NNSA response elements, including coordination of interagency request, resolving operational issues, reach-back support to deployed teams, and working Interagency liaison requirements.

Senior Energy Official (SEO): The SEO is the DOE representative responsible for the coordination and employment of the emergency response assets at the scene of a nuclear/radiological event. The SEO is designated by OER Director and is granted full authority to deploy and coordinate with other governmental agencies as appropriate. The SEO formulates and presents recommendations/advice to the incident commander or supporting agencies as outlined in the National Response Framework and HQ. All deployable elements report to the SEO unless otherwise directed. During an incident, unity of command is achieved through the designated SEO, with authority delegated from the NNSA Administrator through the HQ Emergency Manager. Deployed emergency response assets work in support of, and under the direction of, the SEO. Where DOE is not the Principal or Coordinating Agency, the SEO will report to the lead agency official responsible for the federal response.

The DOE/NNSA has the world's leading scientists, engineers and technicians from over 50 years of managing the nation's nuclear weapons program. When the need arises, DOE is prepared to respond immediately to any type of radiological accident or incident anywhere in the world with the following seven radiological emergency response assets.

- **AMS (Aerial Measuring System)** detects, measures and tracks radioactive material at an emergency to determine contamination levels.
- **NARAC (National Atmospheric Release Advisory Center)** develops predictive plots generated by sophisticated computer models.

- **ARG (Accident Response Group)** is deployed to manage or support the successful resolution of a U.S. nuclear weapons accident anywhere in the world.
- **FRMAC (Federal Radiological Monitoring and Assessment Center)** coordinates Federal radiological monitoring and assessment activities with those of state and local agencies.
- **REAC/TS (Radiation Emergency Assistance Center/Training Site)** provides medical consultation for treatment of injuries from radiological exposure.
- **SRT (Search Response Team)** provides the nation's specialized technical expertise to the Federal response in resolving nuclear/radiological terrorist incidents.
- The **RAP (Radiological Assistance Program)** is usually the first NNSA responder for assessing the emergency situation and deciding what further steps should be taken to minimize the hazards of a radiological emergency.

2.14.1 DOE/NNSA Aerial Measuring System (AMS)

DOE/NNSA, which maintains fixed and rotary wing aircraft at its Nellis AFB, NV and Andrews AFB, MD, can monitor and map radiological materials deposited on the ground. Aircraft at both locations are on standby at all times. Flight times to an incident vary with distance, of course, and initial deployment of a fixed wing aircraft may be no more than four hours from notification. Aircraft can fly over an incident site and provide a map showing radiation levels to allow decision-makers a rapid assessment of the radiological situation. Requests for service can be obtained through DOE EOC in Washington.

2.14.2 DOE/NNSA National Atmospheric Release Advisory Center (NARAC)

The NARAC, located at Lawrence Livermore National Laboratory (LLNL), houses the premier capability in the U.S. for near real-time predictive modeling to assess events involving release of hazardous radiological materials into the atmosphere. These predictions are produced in time for local and federal leaders to determine the protective actions necessary to ensure the health and safety of people in affected areas. NARAC has a staff of physical scientists, computer scientists, engineers, and technicians that provide the tools and 24/7 services for planning, emergency response, and detailed hazard studies. A suite of NARAC software tools include simple stand-alone, local-scale plume modeling tools for end-user's computers, and Web- and Internet-based software to access advanced three-dimensional multi-scale modeling system. The computer-based system at NARAC will provide realistic plots or maps of potential radiation dose and exposure, and estimates of the paths of nuclear contaminants released into the atmosphere. NARAC is a key part of the DOE Consequence Management Home Team (CMHT) which supports the early phases of a FRMAC response. Through the DHS-led Interagency Modeling Atmospheric and Assessment Center (IMAAC), NARAC supports responses to major radiological, nuclear, chemical or biological hazardous releases involving federal coordination (see DHS IMAAC).

NARAC's goal is to provide information on the consequences of hazardous atmospheric releases that is sufficient and timely enough to guide critical emergency response and protective action decisions. In the early phase, i.e., the first minutes to hours, these decisions include:

- Determination of safe approaches to incident scene
- Incident command site selection
- Use of personal protective equipment (PPE)
- Evacuation and sheltering to avoid acute and chronic exposure health effects
- Establishing access control to hazard areas by responders and public
- Medical treatment and decontamination of the population
- Air and ground contamination monitoring and sampling planning.

In the intermediate phase (hours to days) and late phase (months to years) these decisions include:

- Restriction of access and relocation of the population to avoid chronic exposure effects
- Decontamination and restoration of contaminated areas
- Control of contaminated agricultural crops
- Medical care

2.14.3 DOE/NNSA Accident Response Group (ARG)

This specialized team responds to accidents and incidents involving nuclear weapons owned by the United States. In two instances, where a National Security Area (NSA) or National Defense Area (NDA) are established, ARG will work with the DOE or DOD weapon(s) owner to mitigate the effects of plutonium or uranium dispersal and recover classified and special nuclear materials. Once a NSA or NDA is set up, other responders may be prevented from entering due to the highly classified nature of components involved in the incident. ARG acts as a support group when the weapon is in DOD custody and takes the lead with DOD support when the weapon is in DOE custody. The deployed team brings both technical and outside organization liaison resources as well as making use of specialized technical expertise from the National Laboratories via secure remote communications.

2.14.4 DOE/NNSA Federal Radiological Monitoring and Assessment Center (FRMAC)

Under the Nuclear/Radiological Incident Annex of NRF the Federal Radiological Monitoring and Assessment Center (FRMAC) is responsible for coordinating all federal radiological monitoring and assessment activities. In the unlikely event of a major radiological incident, the full resources of the U.S. government could be brought to bear to support State and local government. The Federal government maintains an extensive response capability for radiological monitoring and assessment. The efforts of 17 Federal agencies are coordinated under the FRMAC to integrate the Federal response to a radiological emergency. The NRF assigns to DOE the responsibility to set up and initially manage a FRMAC. EPA coordinates with FRMAC through the Office of Air & Radiation, Office of Radiation & Indoor Air (ORIA), Radiation Protection Division, Center for Radiological Emergency Preparedness, Prevention and Response (see contacts list).

The FRMAC mission is to coordinate and manage all Federal radiological monitoring and assessment activities during major radiological emergencies within the United States in support of State, Tribal and local governments through the Coordinating Agency. The Coordinating Agency is that Federal agency which owns, has custody of, authorizes, regulates, or is otherwise deemed responsible for the radiological facility or activity involved in the incident. DOE may establish the FRMAC at or near an incident location to provide coordination with other Federal, State, Tribal and local agencies regarding the control and mitigation of radiological hazards as may impact the incident site. The FRMAC coordinates all federal off-site radiological monitoring and assessment activities for the initial phases of the response to a radiological emergency and is the focal point for the cataloging of all information related to site restoration operations.

DOE's/NNSA's contribution to the FRMAC is the Consequence Management Response Team (CMRT). The CMRT draws from the NNSA Emergency Response Assets and becomes the NNSA coordination element for the FRMAC. The FRMAC deploys as a phased response. The CMRT I is mobilized within 4 hours after activation; CMRT II deploys within 12 hours of activation, and additional personnel and equipment for CMRT III is underway within 24 hours of activation. The primary mission of the FRMAC/CMRT is to assist the states, local and tribal governments in the protection of public health and welfare with verified radiation measurements, interpretations of

radiation distribution based on EPA, FDA and Protection Action Guidelines (PAGs), and characterization of overall radiological conditions. FRMAC can provide field capabilities and equipment for the collection of samples (i.e., air, soil, water, plants, animal feed, dairy) and survey data to characterize radiological events.

The Senior Energy Official (SEO) has the responsibility for integrating FRMAC planning and operations into the locally established Incident Command System. The SEO will represent the FRMAC in the Unified Command and have the statutory authority and functional responsibilities to make decisions and mobilize resources on behalf of DOE/FRMAC. The SEO is appointed by National Nuclear Security Agency (NNSA). NNSA may appoint the DOE Radiological Assistance Program (RAP) Team Leader or FRMAC Director to represent DOE in the Unified Command until a SEO is designated. A DOE Senior Federal Official (SFO) would represent DOE in the Joint Field Office. Under the NRF, DOE is the Coordinating Agency for nuclear/radiological incidents of national requiring federal coordination.

The FRMAC ICS functions primarily fall under the Environmental Unit in the Planning Section. FRMAC tactical groups such as the Aerial Measuring System (AMS), monitoring, sampling and assessment teams fall under the Operations Section. During the first 72 hours, operations may be primarily involved with evacuations and other protective actions, medical treatment, triage, containment, security, investigations, sampling, monitoring and assessment activities. The Planning Section may be primarily involved with planning the assessment activities working closely with operations, developing monitoring, sampling and analysis plans, managing incoming data from the field and laboratories, evaluating the data to determine the radiation levels and potential health risks to the population, developing protective action strategies, mapping the radiation levels and fallout zones.

DOE/NNSA always establishes and directs the FRMAC in the emergency phase of response to a nuclear/radiological incident. For the intermediate and long-term cleanup and restoration phases of a radiological or nuclear incident, EPA takes over leadership of the FRMAC. Management of the FRMAC is transferred to EPA control by mutual agreement when the emergency conditions are stabilized and the activities transition into the remediation and recovery phases.

2.14.5 DOE/NNSA Radiological Assistance Center/Training Site (REAC/TS)

DOE maintains an internationally recognized medical advisory capability adjacent to the Oak Ridge National Laboratory in Oak Ridge, Tennessee capable of providing a broad range of medical advice and treatment options for victims of radiological contamination, dispersals and over-exposures. REAC/TS investigates worldwide radiation over-exposures for medical follow-up and morbidity. REAC/TS is one of the agencies in the U.S. with permission to use the radiation prophylactics Prussian Blue and DPTA.

Designated a WHO Collaborating Center in 1980, REAC/TS is recognized around the world for its expertise and is called upon to assist the global community in providing medical care to radiation accident victims, directly or indirectly as consultants.

2.14.6 DOE/NNSA Radiological Assistance Program (RAP)

The United States government, through the Department of Energy (DOE) and its predecessor agencies, has maintained a RAP since the late 1950s. RAP is designed to provide first-responder radiological assistance to protect the health and safety of the general public and the environment and to assist other federal agencies, as well as state, tribal, local, and private individuals in the detection,

identification and analysis, and response to events involving the use of radiological/nuclear material. To provide a timely response capability, RAP is implemented in nine regions across the country. This regional coordination is intended to foster a working relationship between DOE radiological response elements and those of state, local, and other federal agencies. Deployed RAP teams provide traditional field monitoring and assessment support as well as a search capability, which includes the maritime environment (in port and at anchor). RAP ensures a 24-hour response capability that can be deployed within 2 hours of the request for assistance. The response team(s) will be on the site of a radiological emergency within 6 hours of a request for assistance. The RAP response capability is self-sustained for the initial 24 hours of an emergency or until more permanent support is deployed to the emergency site.

2.14.7 DOE/NNSA Search Response Team (SRT)

The SRT is a national level, deployable search capability based out of the Remote Sensing Lab - Nevada (RSL-N) used to support regional assets in complex search operations utilizing both technical and operational expertise. The SRT includes full response capability for independent searches, apprentice searcher training, and aerial search operations. A Search Home Team, located at RSL-N will provide national home team support for any NNSA directed search operation. The team will provide scientific, technical, GIS, and logistics support as needed and provide a reachback capability in support of NNSA directed RAP, or SRT search response operations. It will serve also as the search information conduit to all DOE/NNSA command, control, and coordination elements.

The mission of the SRT is to search for, identify, assess, disable and dispose of any nuclear weapon directed against the United States for purposes of terrorism, coercion, or extortion. The SRT employs an interagency team, many of whom are scientists who help build America's nuclear arsenal. Personnel are primarily from federal agencies including DOE, DOD, DOJ (FBI). The DOE has an MOU with DOD and FBI for response to Improvised Nuclear Device Incidents. SRT has the capabilities to respond to accidents and significant incidents involving nuclear weapons or nuclear weapon materials, implement aerial measuring systems, and response to, and management of, radiological emergencies in support of Federal, State, tribal, and local government agencies. The NEST encompasses the following nuclear emergency response assets:

2.14.8 Joint Technical Operations Team (JTOT)

The JTOT provides advanced technical capabilities to Render Safe operations on Weapons of Mass Destruction. The JTOT activities consist of advanced technical operations to determine if the WMD is Safe-to-Move to a trans-load site for further analysis and ultimately make the WMD Safe-to-Ship to the Disposition Site. The JTOT deploys in three phases:

Phase I - Initial Render Safe Operations – JTOT Phase I team provides expert technical advice during the render safe operations. This team also provides the NNSA Home Team situational awareness and information of actions taken at the incident site supporting Render Safe Operations. The Home Team and Field Team work together to determine the best possible solution to the problem and provide that advice to the render safe team. Upon completion of the Render Safe Operation the team is tasked with making the WMD Safe-to-Move.

Phase II – Advanced Technical Operations – JTOT Phase II is a team of technical experts that ensures a rendered safe WMD is Safe-to-Ship. This team in conjunction with the NNSA Home Team gathers and analyzes additional information about the WMD that ensures a rendered safe WMD is Safe-to-Move to a final disposition location.

Home Team – provides the entire spectrum of NNSA weapons complex expertise. The Home Team provides the technical expertise to the deployable JTOT assets during Phase I, II and Disposition.

Disposition/Attribution: DOE is required to maintain the capability to handle the disposition of a damaged or recovered nuclear weapon, improvised nuclear device, or a radiological dispersion device. In order to defeat a potential threat, a safe location for staging and characterization of nuclear devices involved in emergency situations has been provided to minimize the risk to the public. G-Tunnel is an underground facility used to conduct immediate staging and advanced radiography and diagnostics of any nuclear devices involved in emergency situations. The purpose of attribution is to determine the source of the weapon.

Nuclear/Radiological Advisory Team (NRAT): The Nuclear/Radiological Advisory Team provides an emergency response capability, on-scene scientific and technical advice, and coordination for DOE follow-on support in the resolution of domestic and international nuclear incidents on behalf of the United States Government. This team of four RSL-Andrews scientists and technicians, plus the SEO, an Operations Advisor, and staff (one to four additional personnel), deploys at the request of specified federal agencies, provides advice, and may conduct limited search and diagnostic procedures.

Nuclear Triage System: The Nuclear Triage System focuses on quickly providing the on-scene commander with information with which to make sound and timely decisions. The isotopic identifier is used to collect the necessary information and transmit it to an on-call expert for analysis. A summary of the material identity and possible yield potential will be provided within the hour. In addition, advice on the hazards and recommended additional national response asset assistance is provided to the on-scene commander. Scientists at the Lawrence Livermore, Los Alamos and Sandia National Laboratories provide rapid expert analysis of radiation spectral data. They specialize in the interpretation of gamma-ray spectra from portable radioisotope identifiers to authorized First Responders, World-Wide on a 24/7 basis at no cost to the requesting agency.

2.15 Department of Homeland Security (DHS)

2.15.1 DHS FEMA Emergency Response Teams (ERT-A/ERT-N)

Following a Stafford Act disaster declaration, FEMA can deploy the ERT-A/ERT-N to coordinate damage assessment and select locations for field facilities within the impacted State. The ERT is comprised of DHS, FEMA and Federal Agency Emergency Support Function (ESF) personnel. The ERT includes an advance element, known as the ERT-A, that conducts assessments and initiates coordination with the State and initial deployment of Federal resources. Each DHS FEMA region maintains one or more ERT-A teams ready to deploy to incidents. The ERT-A team can assess the impact of the situation, collect damage information, gauge immediate Federal support requirements, and make preliminary arrangements to set up Federal field facilities. The ERT-A is activated by the FEMA Regional Director. The National Emergency Response Team (ERT-N) deploys for large-scale, high-impact events such as those where regional resources are overextended, or if an event poses potentially significant consequences. The ERT-N is deployed at the direction of the Under Secretary of DHS to high visibility or catastrophic incidents to coordinate the initial response. The ERT-A/ERT-N also coordinates and executes mission assignments for direct Federal assistance. Federal agencies and other appropriate entities provide resources to assist incident management efforts under DHS-issued mission assignments or their own authorities. A part of the ERT-A deploys to the State EOC to work directly with the State to obtain information on the impact of the incident and to identify specific requests for Federal incident management assistance. Other elements of the ERT-A deploy directly to or near the affected area to establish field communications and support activities

until the Joint Field Office (JFO) is established. There are three ERT-N teams and a fourth team that is on call year-around exclusively to manage incidents in the National Capital Region.

The ERT is the principle interagency group that staffs the JFO. When the JFO is established, the ERT and other FEMA teams (e.g., FIRST, RNA, DSAT, DEST) provide staffing and become part of the appropriate sections, branches, or units within the JFO. The JFO is organized under the Incident Command System (ICS) and may have a complete General Staff including an Operations Section, Planning Section, Logistics Section and Finance/Administration Section. The NRF's Emergency Support Function (ESF) resources are positioned in the different JFO/ICS sections. This is an effective mechanism because it groups federal capabilities and resources into ICS functions that are most likely needed during the incident or disaster (i.e., transportation, firefighting, hazardous materials, public health). The ERT Logistics Section is responsible for locating and establishing a JFO in the field. Resource support for setting up the JFO facilities is provided by the Supply Unit and Facilities Unit which is staffed by ESF #7 (GSA), ESF #5 (FEMA) and ESF #4 (DOA).

Based on the requirements of the incident, only those Federal Departments and Agencies that serve as ESF Coordinators that are needed or requested to support operations of the JFO are activated. For example, a large-scale natural disaster or significant terrorist incident may require the activation of all ESFs, while a localized flood or tornado might only require activation of a few ESFs.

Emergency Support Functions and ESF Coordinators:

- ESF #1 – Transportation (DOT)
- ESF #2 – Communications (DHS/National Communications System)
- ESF #3 – Public Works and Engineering (DoD/USACE)
- ESF #4 – Firefighting (DOA).
- ESF #5 – Emergency Management (DHS/FEMA)
- ESF #6 – Mass Care, Housing, and Human Services (DHS/FEMA)
- ESF #7 – Resource Support (GSA)
- ESF #8 – Public Health and Medical Services (DHHS)
- ESF #9 – Urban Search and Rescue (DHS/FEMA)
- ESF #10 – Oil and Hazardous Materials Response (EPA)
- ESF #11 – Agriculture and Natural Resources (DOA)
- ESF #12 – Energy (DOE)
- ESF #13 – Public Safety and Security (DOJ)
- ESF #14 – Long-Term Community Recovery (DHS/FEMA)
- ESF #15 – External Affairs (DHS)

2.15.2 DHS Interagency Modeling Atmospheric and Assessment Center (IMAAC)

IMAAC is led by DHS and supported by eight federal agency partners (DHS, NOAA DOC, DOD, DOE, EPA, NASA, NRC, and HHS). “The IMAAC provides a single point for the coordination and dissemination of Federal dispersion modeling and hazard prediction products that represent the Federal position during an incident” (NRF ESF #8, ESF #10, and Incident Annexes, 2008). The IMAAC is not intended to replace or supplant the atmospheric transport and dispersion modeling activities that are currently in place to meet agency-specific mission needs. The DOE/NSA NARAC is the primary provider to the IMAAC predictions of hazards associated with atmospheric releases.

During an incident, the Incident Commander, FOSC, CAR, FCO, or other federal, state, local or tribal emergency response officer may request IMAAC support by directly calling the 24/7 IMAAC

Operations emergency number at LLNL NARAC. IMAAC's goal is to provide a timely initial report within an hour and periodically refine computer modeling estimates including using field measurement data supplied from on-scene response agencies. IMAAC products can be used in the Planning Section to initially approach the incident, develop a monitoring plan, and assist in protective action recommendations. IMAAC distributes its products via a secure web site or via e-mail to agencies supporting the incident.

2.15.3 DHS FEMA Rapid Needs Assessment Team (RNA Team)

FEMA's Rapid Needs Assessment (RNA) Team provides a rapid assessment capability immediately following a major disaster or emergency. The RNA Team will collect and provide information to determine requirements for critical resources needed to support emergency response activities. The RNA Team is responsible for assessing both overall impact of a disaster event and determining Federal and/or State immediate response requirements. This FEMA led resource has the following minimum components: A Management Element (a State Team Leader and a FEMA representative); HazMat Specialist (ESF #10); Medical Specialist (ESF #8); Mass Care Specialist (ESF #6 and #11); Infrastructure Specialist (ESF #3); Fire/Urban Search & Rescue (ESF #4) and; Support Element (Telecommunications Specialists, Logistics Specialists and Operations Specialist).

2.15.4 DHS Deployable Situational Awareness Team (DSAT)

DHS has established a Deployable Situational Awareness Team (DSAT) to provide timely and accurate information to the Secretary and Departmental Leadership for actual or potential Incidents of National Significance. The DSAT capability is comprised of a Tier One national team consisting of six DHS/ICE special agents with high-capability communications equipment such as satellite and streaming video. These agents are supported by an additional 26 special agents, designated as Incident Response Coordinators, located in DHS/ICE field offices across the Nation. when directed by the Secretary. DSAT personnel are under the tasking authority of DHS Office of Operations and administrative control of DHS/ICE. The DSAT is an early entry capability and will report simultaneously to the National Operations Center (NOC) and the Primary Federal Official (PFO) to ensure that the Secretary and PFO have early situational awareness.

2.15.5 DHS FEMA Federal Incident Response Support Team (FIRST)

The FIRST is a quick and readily deployable resource to support Federal response to Incidents of National Significance. The FIRST is designed to deploy within 2 hours of notification and on-scene within 12 hours of notification. DHS/EPR/FEMA maintains and deploys the FIRST. The FIRST is a forward component of the ERT-A and provides on-scene support to the local Incident Commander, Unified Command or Area Command structure in order to facilitate an integrated inter-jurisdictional response. The FIRST provides technical assistance to assess the situation, identify the potential requirements for Federal support, provide protective action recommendations, identify critical unmet needs, coordinate response activities with other Federal responders, establish incident support facilities and bring other "value-added" resources in the earliest phase of a response operation. Upon the subsequent deployment of an ERT-A, the FIRST integrates into the Operations Section of the Incident Command System.

2.15.6 DHS FEMA National Urban Search and Rescue (US&R) Response System

The FEMA US&R system is a framework for structuring local emergency services personnel into integrated disaster response task forces. These task forces, replete with the necessary tools and equipment, and the requisite skills and techniques, can be deployed by FEMA for the rescue of

victims of structural collapse or National Security Special Events (NSSE's). FEMA performs this function under ESF #9-Urban Search and Rescue during Federally-declared disasters. Task Forces may be alerted or activated, when a disaster threatens or strikes a community. Each Task Force is charged with having all of its personnel, and 60,000 pounds of equipment, at the embarkment point within 6 hours of activation. The Task Force can be airborne and heading to its destination in a matter of hours. After 9-11, all Task Forces have been provided with extensive ground transportation assets such as trucks, trailers and a fleet of support vehicles, increasing ground transportation response zones to over 1,000 miles per Task Force.

Currently, there are 28 FEMA US&R Task Forces spread throughout the United States. They encompass local emergency services personnel from 19 states and each consist of 210 members. A Type I - Task Force Deployment is comprised of 70 specialists, and is divided into six major functional elements, including Search, Rescue, HAZMAT, Planning, Logistics, and Medical. Task Force members include structural engineers, and specialists in the areas of hazardous materials, heavy rigging, search (including highly trained search dogs), logistics, rescue and medicine. Other capabilities include communications, rope rigging, hauling, lifting and pulling equipment, shoring, cutting and drilling equipment. A Type III Modular, Hurricane Deployment, consists of 28 individuals utilized primarily for daylight search operations, but can be situational specific for other emergencies. A Type II WMD Deployment Model is currently being evaluated for offensive Hazardous Materials Response. After 9-11, the number of Hazardous Materials Specialists were increased from two to ten per Type I Deployment, and all members were trained to "Enhanced WMD Response".

All Task Forces are managed on-site by a US&R Incident Support Team (IST). There are three primary IST's rotated monthly for immediate 2 hour deployability. They are known as the Red, White and Blue Teams. The purpose of the IST is to prepare for, support, and rotate, or demobilize the Task Forces upon mission completion. They work under the direction of the ESF-9 Coordinating Official, and for the local Incident Commander at any event. They work with local government, to assist them with mission focus through the use of a MOA for specific specialized services. EPA Region IX has one Task Force in Phoenix, AZ and one in Clark County, NV. There are eight Task Forces in California (Los Angeles City, Los Angeles County, Menlo Park, Oakland, Orange County, Riverside, Sacramento and San Diego).

2.15.7 DHS EPR Domestic Emergency Support Team (DEST)

Under the Homeland Security Act of 2002, the DEST was transferred from the DOJ to DHS/EPR. The DEST is a stand-by interagency team of experts that can be quickly assembled in accordance with pre-event scenarios and led by the FBI to provide advice and guidance to the On-Scene Commander (Special-Agent-In-Charge) concerning Federal response capabilities for use in resolving a WMD incident or other significant domestic threat. Such DEST guidance could range from information management and communications support to instructions on how to best respond to a CBRNE release. As incident-specific teams whose members are chosen according to the nature of the incident, DEST has no permanent staff at the FBI or at any other federal agency. A DEST chooses among members of the HHS, EPA, DOD, and other agencies capable of addressing CBRNE incidents. The DEST can advise the FBI SAC on the Federal Government's capabilities in resolving a terrorist threat or incident and coordinate needed follow-up response assets from supporting Federal Agencies. Upon arrival at the JFO or incident location, the DEST works closely with the FBI SAC providing required technical assistance and recommended operational courses of action.

2.15.8 DHS FEMA Mobile Emergency Response Support (MERS) Detachments and Mobile Air Transportable Telecommunications System (MATTS)

The Mobile Emergency Response Support (MERS) detachments and Mobile Air Transportable Telecommunications System (MATTS) provides rapid multi-media communications, information processing, logistics, and operational support to Federal, State and local agencies during catastrophic emergencies and disasters for government response and recovery operations. There are five geographically dispersed MERS detachments and the MATTS located in Maynard, MA, (Regions I&II), Thomasville, GA. (Regions II & IV), Denton, TX, (Regions VI & VII), Bothell, WA., (Regions IX & X), and Denver, CO., (Regions V & VIII). The MERS detachments maintain a wide variety of equipment for communications, information processing, logistics, and operational support in self-contained and environmentally controlled vehicles. The units are mobile, air transportable and self-sufficient, capable of operating with detachment generators and fuel for many days.

The Mobile Emergency Operations Vehicle (MEOV) and the Multi-Radio Van (MRV) can be quickly set-up to provide operational and critical communications support in the early stages of a disaster response. These vehicles are transportable on either a C-5 or a C-17 cargo aircraft. MERS telecommunications provide a variety of communications transmission systems that can establish or reestablish communications connectivity with the public telecommunications system or Government telecommunications networks. These systems include satellite terminals that provide immediate single voice channel capabilities, high frequency (HF) which enables communication with Federal, State and local EOCs via the FEMA National Radio Network and FEMA Regional Radio Network, microwave line of sight (LOS) which provides a connection to the public network, other facilities or extended communications, and Very High Frequency (VHF) and Ultra High Frequency (UHF) which provides for local radio communications. These transmission systems are interconnected by fiber optic cables to voice and data switches, local area networks, computers and telephones. The MEOV is capable of providing 80 analog phone lines, wireless voice communications, operating remote internal communications inside another facility (i.e., Incident Command Post, EOC, etc.), providing satellite phones, satellite television and video telephone conferencing, providing HF/VHF/UHF radios with telephone interface. Preloaded deployment packages include a variety of 4-wheel drive vehicles and semi-trucks containing support equipment including INMARSAT and AMSC satellite terminal, cellular phones, laptop computers, VHF and HF radios and life support for up to 100 people for 10 days.

2.15.9 DHS EPR National Disaster Medical System (NDMS)

Under the Homeland Security Act of 2002, the Office of Emergency Preparedness (OEP), previously a part of HHS, was transferred to DHS/EPR. The DHS/EPR is now responsible for coordinating the federal government's emergency medical response to terrorist attacks and natural disasters. This responsibility includes managing the National Disaster Medical System (NDMS). The NDMS is a public/private partnership designed to supplement State and local medical resources during Federally-declared disasters or major emergencies. The Federal agencies involved in the partnership are HHS, FEMA, VA and DOD. The NDMS consists of 8,000 volunteer health professionals and support personnel from Federal, State and local governments and the private sector organized into a number of medical teams with unique emergency capabilities, including the following: Disaster Medical Assistance Team (DMAT) is a group of medical personnel who provide emergency medical care during a disaster; Disaster Mortuary Operational Response Team (DMORT) provide victim identification and mortuary services; Disaster Mortuary Operational Response Team for WMD (DMORT-WMD) provides for decontamination of remains; Federal Coordinating Center (FCC) recruits hospitals and maintains local non-Federal hospital participation in the NDMS; National Medical Response Team (NMRT) is a team equipped and trained to provide medical care to victims

of WMD; Crush Medical Assistance (CMA) is a team specialized in providing medical assistance to victims of crush injuries due to collapsed structures; National Pharmacy Response Team (NPRT); National Nurse Response Team (NNRT); Veterinary Medical Assistance Team (VMAT); and the WTC Responder Screening for Federal employees (CDC/NIOSH has similar program for civilian responders).

2.15.10 DHS EPR National Medical Response Team (NMRT)

The four 50-person National Medical Response Teams (NMRTs) are equipped and trained to perform the functions of a DMAT, but possess additional capabilities to respond to a CBRNE event, to include operating in Level “A” protective equipment. NMRTs are private practitioners who are organized into teams and Federalized for activation and deployment following a WMD event or when a credible threat of a terrorist attack exists. A NMRT may also be requested for a NSSE. The four 50-person national and geographically dispersed NMRTs for WMD are part of the National Disaster Medical System (NDMS).

2.15.11 DHS EPR Metropolitan Medical Response System (MMRS)

The MMRS program transitioned out of HHS to DHS in 2003. The purpose of the MMRS is to assist local jurisdictions in achieving the capabilities necessary to respond to a mass casualty event, caused by a WMD terrorist act, during the first hours crucial to lifesaving and population protection, until significant external assistance can arrive. The HHS is developing partnerships with local jurisdictions to develop enhanced MMRS as the primary local resource in responding to health and medical consequences of a CBRNE terrorist incident. The MMRS program assists highly populated jurisdictions in developing plans, conducting training and exercises, and acquiring pharmaceuticals and personal protective equipment. MMRS assets may be used to supplement/augment local response operations and support the IC/UC under immediate response procedures or as the result of a request for assistance from duly authorized state officials. MMRS funding is provided via a contract with the local jurisdiction. The MMRS contracts contain statements of work which require specified deliverables and deliverable time-lines. At the same time, HHS is improving the federal capability to rapidly augment state and local responses. The federal medical response component includes four national and geographically dispersed National Medical Response Teams (NMRTs) for WMD that are managed under the National Disaster Medical System (NDMS).

The MMRS capacity requirements include: Pharmaceuticals sufficient to provide care for at least 1,000 victims of a chemical incident and for 10,000 victims for the first 48 hours of response to a biological event; Biological agent response, determined by the specific agent (anthrax, botulism, hemorrhagic fever, plague, smallpox, tularemia) for up to 100 victims, from 100 to 10,000 victims, and more than 10,000 victims; and the local hospital and healthcare system plan must ensure surge capacity to accommodate 500 critically ill patients. To date, 55 MMRS jurisdictions have completed their baseline capability enhancement and an additional 25 are nearly complete. In EPA Region IX, there are MMRS jurisdictions in California, Arizona and Hawaii.

2.15.12 DHS EPR Nuclear Incident Response Team (NIRT)

Although the NIRT is organized, equipped and trained by DOE and EPA, it is under the operational control of DHS. The Homeland Security Act authorized the Secretary of DHS to direct the NIRTs to operate as a unit of DHS in an actual or threatened major disaster or emergency subject to the direction, authority, and control of the Secretary. The custodians of the NIRT are DHS, DOE and EPA. NIRT performs nuclear, radiological emergency support (including accident response, search response, advisory, and technical operations functions), radiation exposure, radiological assistance

and related functions. The DOE portion of NIRT is the Nuclear Weapons Incident Response program in the NNSA. This includes the Nuclear Emergency Support Team (NEST), the Radiological Assistance program (RAP) and other elements. The EPA portion of NIRT is the Radiological Emergency Response Team (RERT). EPA and DOE are still responsible for organizing, training, equipping, and utilizing their entities in the NIRT or exercising direction, authority.

2.15.13 DHS FEMA Disaster Medical Assistance Team (DMAT)

The Disaster Medical Assistance Team (DMAT) is a health and medical services response resource that may be activated regionally or nationally and rapidly to major disasters including incidents involving WMD. The DMAT is specially trained and equipped to assist in the provision of health and medical services for a C/B terrorist act. The DMAT provides primary and acute care, triage of mass casualties, initial resuscitation, stabilization, advanced life support, and preparation of sick and injured patients for evacuation. Each DMAT is a team of approximately 37 medical personnel consisting of physicians, nurses, paramedics, emergency medical technicians, and other medical specialists. During a disaster, several DMATs can be used to support hospitals with their emergency room operations. There are approximately 80 DMATs throughout the country.

2.16 Department of Health & Human Services (HHS)

2.16.1 HHS CDC National Center for Environmental Health (NCEH)

A principle mission of the NCEH is to work to prevent injuries and diseases resulting from natural or manmade technologic disasters, reducing environmental hazards and their adverse health effects on disaster victims and responders. To carry out this mission, the NCEH identifies potential health hazards, recommends and evaluates methods of preventing injuries, and studies the aftermath of disasters and other major emergencies to learn new ways of mitigating the effects of future disasters. The NCEH develops and applies advanced laboratory technology to improve 1) diagnosis of human exposure to toxic substances, 2) treatment of persons whose exposure results in adverse health effects, and 3) prevention of future adverse health effects. Epidemic Intelligence Service (EIS) Officers assigned to NCEH conduct epidemiologic investigations, laboratory studies, public health surveillance programs, and development of public health policies. Within CDC, the NCEH has primary responsibility for emergency response to natural or technologic disasters. The NCEH is responsible for 1) generating CDC's emergency response plans, 2) supporting a technical emergency response team, 3) assisting states to prepare their emergency plans, 4) participating with other federal and state agencies in disaster exercises, and 5) operating CDC's 24-hour emergency response system.

The Emergency and Environmental Health Services (EEHS) is a division of CDC's NCEH. The EEHS can respond to natural and international emergencies, and provide technical support for public health activities during environmental disasters, disease outbreak investigations, food safety, water and sanitation issues. The CDC's Environmental Health Laboratory (EHL) has developed the Rapid Toxic Screen (RTS) that is now capable of performing a series of tests that can identify up to 150 chemical agents in human blood or urine. In a chemical terrorism event, the RTS will help determine what chemical agents were used, who has been exposed and to what extent. Medical personnel in particular will use this information to help guide the treatment of affected persons. The EHL maintains a Laboratory Response Team that can respond 24/7 to a chemical terrorism or other emergency event anywhere in the country, within 2 hours. This team supports the collection of clinical samples in hospitals and trauma centers to help ensure that the proper testing can be done to assess people's exposure to chemical agents. The team helps state and/or local authorities to collect, package, and ship specimens to CDC. The Environmental Public Health Readiness Branch (EPHRB) serves as CDC's primary all-hazards response unit. The EPHRB assists state and local health

departments by enhancing their ability to prepare for and respond to public health emergencies or events.

The NCEH also provides public health oversight of the DOD during transportation, open-air testing, and destruction of U.S. chemical warfare agents. The NCEH has made major contributions to establishing airborne exposure limits for people in communities near chemical weapons, development of air monitoring systems and engineering controls and oversight inspections of DOD activities. The CDC's Chemical Weapons Elimination Team (CWET) is responsible for ensuring that the health and safety of workers and the general population are protected during the handling and destruction of the nation's chemical weapons.

2.16.2 HHS CDC Public Health Advisor (PHA)

In an emergency event, Public Health Advisors (PHAs) provide the primary administrative and operational support to the clinical and scientific staff deployed to respond to threats to public health. They also represent the CDC-deployed clinical and scientific staff as they interact with colleagues in the State or Local Health Departments on issues related to the technical aspect of the response. For example, their public health background allows them to understand the type of support that public health surveillance, or laboratory staff may need (with regard to staff, space, time, computer hardware and software support). PHA also can serve as a liaison to logistical and support staff to provide non-public health related services to the clinical and scientific staff deployed to the scene (e.g., travel arrangements, lodging and rental cars).

2.16.3 HHS Office of Public Health and Emergency Preparedness (OPHEP) Secretary's Emergency Response Team (SERT)

The SERT is deployed to the vicinity of an incident and directs and coordinates the activities of all HHS and all Emergency Support Function #8, Public Health and Medical Services' personnel deployed to the incident site(s). The SERT is the field component of HHS responsible for providing on-site information from all sources to the HHS Incident Management Team located in the Secretary's Operations Center (SOC) for passing to other operating divisions, agencies and departments. The SERT is located in the Office of Public Health and Emergency Preparedness (OPHEP). Other programs, centers and services, etc. under the direction of the Secretary of HHS with a role in supporting disaster and other emergency response operations are the Agency for Toxic Substances Disease Registry (ATSDR), Centers for Disease Control and Prevention (CDC), Indian Health Service (IHS), National Institutes of Health (NIH) and the Food and Drug Administration (FDA).

The SERT is capable of rapid deployment to assist State and local jurisdictions responding to public health and medical emergencies. The SERT works with State officials to closely monitor public health and medical services needs and quickly make assistance available as the state officials make requests. The SERT provides technical assistance to State and local health and medical responders, and coordinates activities between affected State(s) and the Secretary of HHS. For Incidents of National Significance that require a health and medical senior official, the SERT will serve this role in the Joint Field Office (JFO) Coordination Group.

The SERT has a core group of HHS personnel in each of the Region IX States (AZ, CA, NV, and HI) and U.S. Affiliated Pacific Islands (USAPI) who function as the advanced response element of the HHS SERT pending arrival of the National SERT cadre. This is known as the Region IX SERT-A (SERT-Advanced element). The HHS Regional Emergency Coordinator (REC) assumes the position of SERT lead. The SERT-A cadre fulfills Liaison Officer positions at the FEMA RRCC, FEMA

ERT-A and at key Emergency Management or Health Department EOCs. The RIX California-based SERT-A team's goal is to arrive at duty locations within the first 4 hours of activation and provide ESF 8 and HHS representation at the FEMA Region IX RRCC in Oakland. If the disaster is in California, SERT-A members may also be deployed to State EOC, Regional EOC, or the Department of Health EOC in Sacramento. Duration of the initial activation would most likely be 72 hours until they can be relieved by the National SERT and provide the necessary overlap with on-coming personnel to integrate them into the ESF 8 operations.

2.16.4 HHS CDC Incident Support Team (IST)

The mission of the IST is to provide 24-hour on-site field support (e.g., logistical, operational, and administrative support) to the CDC emergency responders while enhancing their ability to respond to domestic and international public health events. To accomplish the mission, the IST will be self-sufficient and be able to provide communications, coordination, and facilitation between CDC resources and international, Federal, State or local officials in their efforts to mitigate the public health aspects of an emergency. Their equipment and supply go-kits include satellite telephones, high-frequency radios, wireless laptops, and Global Positioning System (GPS) devices. The IST has subject matter experts (SMEs) in logistics, communications, information technology and contracting.

2.16.5 HHS CDC Division of Strategic National Stockpile Program (SNS)

The Centers for Disease Control and Prevention's (CDC) Division of Strategic National Stockpile (DSNS) is a national repository of antibiotics, chemical antidotes, antitoxins, vaccines, life support medications, IV administration, airway maintenance supplies, and medical/surgical supplies and equipment. It is designed to supplement and re-supply State and local public health agencies in the event of a national emergency anywhere and at anytime within the U.S. or its territories. A key to the effective use of this asset is ensuring capacity is developed at Federal, State and local levels to receive, stage, and dispense SNS assets.

The first line of support lies within the immediate response 12-hour Push Packages. The 12-hour Push Packages are pre-configured caches of pharmaceuticals, antidotes, and medical supplies designed to provide rapid delivery of a broad spectrum of assets in the early stages of an ill-defined threat. They are positioned in strategically located, secure warehouses, ready for immediate deployment to a designated site within 12 hours of the Federal decision to deploy. DSNS will also deploy its Technical Advisory Response Unit (TARU) to coordinate with State and local officials and ensure that the SNS assets are effectively received and distributed. The TARU is comprised of subject matter experts from CDC/DSNS. The U.S. Marshals Service accompanies each 12-hr Push Package and coordinates with local authorities regarding the security of these assets.

If the incident requires additional pharmaceuticals and/or medical supplies, follow-up Managed Inventory (MI) supplies will be shipped to begin arriving within 24-36 hours after federal release has been granted. If the agent is well-defined, MI can be tailored to provide pharmaceuticals, supplies, and/or products specific to the suspected or confirmed agent(s). Governors or their designated representatives may request SNS assets through the HHS Secretary's SOC or the CDC's Director's EOC.

2.16.6 HHS CDC Laboratory Responses Network (LRN)

The LRN mission is to maintain an integrated national and international network of laboratories that are fully equipped, employ advanced technologies and increase capacity to respond to biological or chemical terrorism, emerging infectious diseases, and other public health threats and emergencies.

To date, the CDC has enrolled over 140 laboratories and at least 10 international laboratories in the LRN. CDC established the LRN in accordance with PDD-39, which outlined national anti-terrorism policies and assigned specific missions to federal departments and agencies. Through a collaborative effort involving the FBI and Association of Public Health Laboratories, the LRN became operational in August 1999. The LRN is tasked with maintaining an integrated network of state and local public health, federal, military, and international laboratories that can respond to bioterrorism, chemical terrorism and other public health emergencies. The LRN is a unique asset and the linking of state and local public health laboratories, veterinary, military, and water-and food-testing laboratories is unprecedented. The LRN has improved the public health infrastructure by helping to boost capacity.

2.16.7 HHS Agency for Toxic Substances and Disease Registry (ATSDR) Emergency Response Teams

The ATSDR is an agency of the U.S. Department of Health and Human Services. The mission of ATSDR is to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances. ATSDR is directed by Congressional mandate to perform specific functions concerning the effect on public health of hazardous substances in the environment. Some of these functions include public health assessments of hazardous waste sites, health consultations concerning specific hazardous substances, publication of toxicological profiles on hazardous substances, health surveillance and registries, and response to emergency releases of hazardous substances. The ATSDR has easy access to other health and medical specialists within HHS. Some of the other HHS centers and programs that can provide technical assistance to ATSDR include the Center for Disease Control and Prevention (CDC), National Institute of Occupational Safety and Health (NIOSH), National Institutes of Health (NIH), Indian Health Service (HIS), Food and Drug Administration (FDA), Health Resources and Services Administration (HRSA), Substance Abuse and Mental Health Services Administration (SAMHSA), and Agency for Healthcare Research and Quality (AHRQ).

As a result of ATSDR's long-standing working relationship with EPA regional offices for Superfund work, the Agency is able to effectively facilitate communication among CDC, FDA, NIH, NIOSH and other Federal, State and local health agencies and EPA Federal On-Scene Coordinators, who are responsible for coordinating Federal response to hazardous substances emergencies. In order to improve coordination at Superfund Sites, ATSDR has placed its staff in, or in close proximity to, many EPA regional offices. ATSDR Emergency Response Teams are available 24/7, and are comprised of toxicologists, physicians, and other scientists available to assist during an emergency. Team members have special expertise in environmental health assessment, air monitoring, health risk communication, industrial hygiene and bio-terrorism. Most human health advice is provided by telephone to response professionals on the scene, but on-site assistance is available upon request of the FOSC.

A significant number of ATSDR staff members provided support to the EPA FOSC during responses to the New York City WTC, the Anthrax mailings to American Media Inc., Capitol Hill Hart Building and offices of Senator Tom Daschle. ATSDR assisted in environmental sampling, mapping sampling locations in anthrax-contaminated offices, developing screening guidelines for asbestos and other hazardous substances in dust deposited in Manhattan residences, answering questions from the news media, and speaking with residents and rescue workers and others to answer their health questions.

2.16.8 HHS U.S. Public Health Service (PHS) Commissioned Corps Readiness Force (CCRF)

In 2004, the CCRF was integrated into the new Office of Force Readiness and Deployment (OFRD). The OFRD is an asset located in the Office of the Surgeon General. The OFRD Officers are highly trained and mobile health professionals available for immediate deployment to disasters. The OFRD Officers are divided into two basic asset categories – clinical and public health. The clinical members include Dentists, Dieticians, EMTs, Forensic Dentists, Medical Records, Laboratory Technicians, Mental Health Providers, Radiologists, Special Care Nurses, Nurse Practitioners, Physician’s Assistants, Pharmacists, Physical Therapists, Primary Care Physicians and Veterinarians. The public health members include Communications Specialists, Disaster Engineers, Epidemiologists, Food Safety Specialists, Environmental Health Specialists, Hazardous Waste/Materials Specialists, Health Educators, Information Technology (IT) Officers, Liaison/SERT Member, Occupational Health/Industrial Hygienists, Safety Officers and SNS Liaison Officers. This federal health and medical resource has been deployed to assist hospitals and clinics most impacted by a disaster and assisted the American Red Cross in providing nursing and mental health services to people who had lost or had been evacuated from their homes. The OFRD Liaison Officer reports to the SERT Leader in the field. The OFRD members do not have an equipment cache. Besides local hospitals and clinics, OFRD members can augment existing DMATs, DMORTs, VMATs, and other organizations already equipped.

2.17 Additional Federal Special Teams

Listed in the 2004 National Response Plan Catastrophic Incident Supplement (NRP-CIS) and elsewhere:

- American Red Cross’s Critical Response Team (CRT)
- DHS/BTS/CBP’s Border Patrol Search, Trauma, and Rescue Team (BORSTAR)
- DHS/BTS/CBP’s Border Patrol Tactical Unit (BORTAC)
- DHS/BTS/CBP’s Laboratory and Scientific (LSS) Weapons of Mass Destruction (WMD) Response Teams
- DHS FEMA’s Disaster Response Team (DRT)
- DHS FEMA’s Medical Surgical Response Team (MSuRT)
- DHS FEMA’s Hurricane Liaison Team (HLT)
- DHS FEMA’s Mobilization Center Management Team (MCMT)
- DHS FEMA’s National Response Coordination Center (NRCC)
- DHS Bureau of Immigration and Customs Enforcement (ICE) Special Response Team (ICE SRT)
- DHS Bureau of Immigration and Customs Enforcement (ICE) Explosive Detection Dog (EDD) Teams
- DHS Bureau of Immigration and Customs Enforcement (ICE) Explosives Ordnance Division (EOD)
- DHS Science & Technology Directorate (S&T) Science and Technology Advisory and Response Teams (STARTs)
- DHS Transportation Security Agency (TSA) National Screening Force (NSF)
- DHS Transportation Security Agency (TSA) Explosives Detection Canine Teams (EDCTs)
- DHS, USCG, Marine Safety Center Salvage Team (MSCST)
- DOC, NOAA, Atmospheric Dispersion Team (ADT)
- DOC, NOAA, Navigation Response Teams (NRTs)
- DOC, NOAA, Law Enforcement Team (LET)
- DOC, NOAA, National Geodetic Survey (NGS) Field Operations Response Team (FORT)
- DOC, NOAA, NGS Remote Sensing Response Team (RSRT)
- DOC, NOAA, National Weather Service (NWS) Incident Meteorologist (IMET)

- DOC, NIST, National Construction Team (NCST)
- DOI, USGS, Earthquake Response Team (ERT)
- DOI, USGS, Volcano Disaster Action Team (VDAT)
- DOJ/ATF Special Response Teams (SRTs)
- DOJ/ATF National Response Team (NRT)
- DOS Emergency Medical Response Team (EMRT)
- DOS Political-Military Affairs Team (PMAT)
- DOT Evacuation Liaison Team (ELT)
- FERC, Liquefied Natural Gas (LNG) Emergency Response Team (LNG ERT)
- FERC, Pipeline Reconstruction Team (PRT)
- HHS, FDA, Food And Drug Administration (FDA) Rapid Response Team (FDA RRT)
- HHS, Chemical-Biological Rapid Deployment Team (CBRDT). This team was never developed beyond the written proposal.
- NRC, Regional Based Team (Base Team)
- NRC, Site Team
- NTSB, Safety Board “Go Team”
- NTSB, Transportation Disaster Assistance Team (TDAT)
- USDA, USFS, National Area Command Team (NACT)
- USDA, Animal and Plant Health Inspection Service (APHIS), Incident Complexity Analysis Team (ICAT)
- USDA, APHIS, Veterinary Diagnostic Teams (VDTs)
- USDA, APHIS, Animal Emergency Response Organization (AERO)
- USDA, APHIS, Incident Management Team (APHIS IMT)
- USDA, APHIS, National Animal Health Emergency Response Corps (NAHERC)
- VA, Medical Emergency Radiological Response Team (MERRT)
- Department of State (DOS), Political-Military Affairs Team (DOS/PMAT)
- Department of State (DOS), Emergency Medical Response Team (EMRT)
- DOD, U.S. Army Materials Command Treaty Laboratory (AMC Treaty Lab)
- DOD, U.S. Edgewood Research, Development and Engineering Center (ERDEC)
- DOD, U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM)
- DOD, U.S. Navy Bureau of Medicine and Surgery, Operational Medical Readiness (BUMED- M3F) U.S Navy Environmental Health Center (NEHC)
- U.S. Navy Environmental and Preventive Medical Units (NEPMU)
- U.S. Navy Medical Research Center, Biological Defense Research Directorate (NMRCBDRD)
- U.S. Navy and U.S. Air Force Meteorology and Oceanography (METOC)
- NASA Ames Research Center, Disaster Assistance and Rescue Team (DART), Structural Assessment Team (SAT)

3 California Special Teams

3.1 California Air Resources Board Emergency Response Team (CARB ERT)

Mission: The California Air Resource Board's Emergency Response Team (CARB ERT) provides air monitoring, meteorological and related support services in times of substantial air emission releases that might impair public health. The Board provides air quality support to local government jurisdictions, the **California Emergency Management Agency (Cal EMA), formerly the Governor's Office of Emergency Services (OES)**, and the California Environmental Protection Agency (Cal EPA). The CARB works closely with the USEPA, State and local agencies to implement measures

to reduce air emissions in areas that do not comply with the National Ambient Air Quality Standards (NAAQS). NAAQS apply to six criteria pollutants established under federal law (40 CFR 50), that may pose a risk to human health and the environment (Particulate Matter (PM₁₀/PM_{2.5}, Carbon Monoxide, Sulfur Dioxide, Nitrogen Dioxide, Ozone and Lead).

Role: During a major air release incident, the CARB ERT coordinates information, planning and response with Cal EPA, its boards, departments, and organizations, the Cal EMA and the USEPA. Planning and deployment activities are carried out in accordance with California's Standard Emergency Management System (SEMS) procedures. The CARB/ERT coordinates with Cal EPA's Office of Environmental Health Hazard Assessment (OEHHA) on determining the safe levels of air pollutants.

Capabilities: Local responders handle most emergency incidents without state intervention. During major air release incidents, the CARB is frequently requested by local responders through the OES for air sampling, monitoring, modeling or meteorological resources. The ARB's range of services includes technical incident photography, near incident meteorological monitoring to support NARAC modeling, meteorological forecasting, hand-held pollutant surveillance, and modeling and emissions assessment. Comprehensive community oriented air monitoring and data uplink is available using the Field Information Center (mobile command center). The CARB ERT on-site activities are coordinated with local or unified incident command.

During the 2007 wildland fires in Southern California, a coordinated air sampling effort was undertaken by agencies in order to measure the effect of emissions from the fires on overall air quality in the effected basins. The California Air Resources Board, South Coast AQMD, San Diego County APCD, Ventura County APCD, Mojave Desert AQMD, and the US EPA took samples of numerous Toxic Air Contaminates (TACs) and fine particle (PM) during the fire event.

Special Assets: The ARB Monitoring and Laboratory Division (MLD) has expertise in field monitoring and emergency response. The MLD staff designed and built:

- A rapid response trailer that focuses on criteria pollutant monitoring, but with the ability to take samples that are later analyzed by the ARB laboratory in Sacramento.
- A mobile laboratory equipped to analyze grab samples of air for gasses using a GC/MS.
- Portable particulate matter monitors (EBAM) that collect hourly average PM_{2.5} data and transmits the data to AIRNow⁽¹⁾.
- Hand held particulate matter monitors (MicroDust 2.5) suited for survey monitoring.
- Incident meteorological sensors that send near real time data to MesoWest⁽²⁾ where models that run on real time data can access it. This asset was constructed specifically to augment meteorological information for the NARAC model.
- A suite of Area RAE samplers whose network IDs (radio frequencies) have been coordinated with US EPA and local fire departments in the Sacramento area. This will allow all the agencies to work together and have their data all viewable on a single computer.
- A second suite of incident meteorological sensors are being acquired that will support on site and rapidly updated modeling using ADASHI⁽³⁾.
- A Field Information Center with the ability of running web based and stand-alone models, and act as a fully functional office away from home. It is intended to be used as an information center and a focal point for on-site discussions among staff from air and public health agencies.

⁽¹⁾ Air Now – The AIRNow website was developed by EPA, NOAA, NPS, tribal, state and local agencies to provide the public with easy access to national air quality information. The air quality indices reported are ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide,

and nitrogen dioxide. For these pollutants, EPA has established national air quality standards to protect public health. The website offers real-time forecasts air quality conditions in over 300 cities across the US with links to State and local air quality Web sites.

⁽²⁾ MesoWest - The primary goal of the MesoWest network/website is to improve timely access to automated observations for NWS forecasters at offices throughout the western U.S.. Automated surface observations available from 2800 environmental monitoring stations (mesonets) provide critical information to examine the evolution of high impact weather events. MesoWest augments the Automated Surface Observing System (ASOS) network maintained by NWS, FAA and DoD. MesoWest depends on a variety observation sources from federal, state and local agencies, and commercial firms. This increases the coverage of observations in remote locations and helps capture many of the local and mesoscale weather phenomena that impact the public.

⁽³⁾ ADASHI – This is an all-hazards software program for managing, communicating and responding to critical incidents. The system is formatted to NIMS concepts, plans and forms. The system rapidly compiles all relevant incident information into a common map-based Incident Action Plan for collaborative use by all agencies. It provides real-time, street-level visualization of the incident, including aerial dispersion of hazardous materials under current weather conditions. It displays unlimited combinations of maps, map views, and map layers to aid in the critical decision-making at the ICP. It is capable of tracking resources, assigning roles within organizational charts and synchronizing this information on incident maps.

3.2 California Environmental Protection Agency (Cal EPA), Department of Toxic Substances Control (DTSC), Emergency Response Program (ERP) and Environmental Chemistry Laboratory (ECL)

Mission: DTSC's ERP provides hazardous materials emergency removal/recovery support to Incident Commands and other federal, State, and local agencies on a state-wide basis. Requests for assistance are handled 24/7 by ERP's Emergency Response Duty Officers. The ECL provides laboratory services to DTSC's programs in the area of conducting analyses of hazardous materials/wastes associated with site cleanup, enforcement, and emergency response operations.

ERP Role: DTSC Emergency Response Duty Officers are responsible of managing requests from other agencies and programs for emergency removal support. The Duty Officers define the scope of the response action; authorize DTSC emergency response contractors to conduct the actions requested; define the amount of resources and funding to be allocated for the action; authorize the expenditures of State funds; provide direct oversight of contractor work while they carry out the response action or ensure that another agency oversees the work; coordinate emergency response activities with federal, State and local agencies; and review and approve invoices submitted by the contractors for all response work. DTSC has 5 emergency response contracts in place with contractor offices located in Chico, San Jose, Sacramento, Fresno, and Los Angeles to be able to provide response services anywhere in the State in a matter of a few hours.

ECL Role/Capabilities: The ECL is an analytical chemistry laboratory with facilities in Berkeley and Los Angeles. ECL provides DTSC with sample analytical capabilities that can identify and quantify concentrations of toxic chemicals in many different media including air, water, soil, sludge, hazardous waste streams, and biological and human tissues. ECL also provides DTSC with data validation, data interpretation, and review of sampling analysis plans and quality assurance program plans.

Specialized Assets: DTSC's mobile laboratory is also managed by ECL and provides advanced chemistry support for emergency response operations. The ECL Mobile Laboratory includes separate, self-contained areas for sample preparation and analysis of toxic chemicals. Two on-board gas chromatograph/mass spectrometers (GC/MS) are capable of detecting toxic chemicals in air, water, and soil. Additionally, there are a series of field-portable instruments for measuring volatile compounds, metals, and other chemicals, including an X-ray Fluorescence Spectrophotometer (XRF) for analyzing metals, Fourier Transform Infrared (FT-IR) Spectrometer and a Raman Spectroscopy System for analyzing organics. A satellite system installed in the mobile lab enables the analytical data generated on-site to be transmitted to DTSC's ECL or other state and federal fixed laboratories for data sharing and decision-making.

3.3 California Environmental Protection Agency (Cal EPA) Office of Environmental Health Hazard Assessment (OEHHA)

Mission: OEHHA will assist emergency responders in assessing health effects and characterizing risk to public health and the environment from toxic chemical releases.

Role: Generally, OEHHA supports larger scale chemical emergency responses. OEHHA will support emergency responders by providing Chemical Emergency Response Fact Sheets, preparing fact sheets that relate airborne levels of toxicants to categories of risk such as protective action level, life threatening effect level, and safe community re-entry level. OEHHA scientists may be contacted 24/7 to assist responding agencies.

Capabilities: OEHHA can provide the following assistance to emergency responders:

- Provide chemical risk characterization information such as information on public health risk and environmental threats of hazardous substances;
- Identify health risks including those that may cause discomfort, disability, or are life threatening;
- Assist responders in assessing potential exposures for decisions on sheltering-in-place, evacuation, and re-entry;
- Assist in environmental fate assessment, determining health and environmental consequences of breakdown products, reaction products, and inter-media
- transfers;
- Coordinates with other health agencies to provide timely and accurate health effects information;
- Provides health information to incident command, and as appropriate, news media and release public health statements and advisories;
- Provides consultation on environmental sampling and residual risks associated with remediation;
- Supports local health agencies following chemical releases by providing toxicological information;
- Provides follow-up reports to document its actions and relevant health or environmental effects associated with any chemical emergency to which it responds.

3.4 California Office of Emergency Management Agency (Cal EMA)

Mission: Cal EMA is responsible for coordinating the mitigation, preparedness, response, and recovery activities related to disasters in California. Cal EMA operates the central notification and reporting system for the State of California, through the State Warning Center, to facilitate coordination of response resources ordered through the Standardized Emergency Management

System (SEMS). Cal EMA is delegated substantial emergency duties under the California Emergency Services Act. Cal EMA coordinates mutual aid within the state and operates regional and state emergency operations centers.

Role: For overall emergency management, Cal EMA provides the following:

- Operations of the State Warning System which can notify key federal, state and local agencies of emergencies occurring within their jurisdictions;
- Issuance of mission assignments to state agencies for necessary response resources;
- Work with affected areas in response and recovery efforts;
- Assistance to local jurisdictions in preparing consolidated, multi-hazard emergency plans;
- Preparation and response to radiological incidents and nuclear plant accidents;
- Development of the California State Emergency Plan that addresses state's response to natural and human-caused disasters, and technological incidents;
- Maintenance of the Statewide Fire and Rescue Mutual Aid System and the California Law Enforcement Mutual Aid System;
- Coordination of FIREScope, a cooperative effort involving development and promotion of ICS, MACS, and related activities;
- Development and maintenance of the California Hazardous Materials Incident Tool Kit (March 19, 2007) which includes the roles and responsibilities of state, local, federal, private and volunteer organizations, command authority and jurisdiction of several state agencies.

Capabilities: Cal EMA is authorized to deploy State emergency response agencies and resources to any major emergency or disaster. Additionally, Cal EMA can activate and staff a State Operations Center (SOC) and Regional Emergency Operations Centers (REOC) to support major response and recovery operations and coordinate Statewide Mutual Aid Radio Communication Systems.

3.5 California Department of Public Health (CDPH) Division of Environmental and Occupational Disease Control (DEODC)

Mission: CDPH has responsibility for the protection of public health from the effects of hazardous and radioactive materials. The CDPH/DEODC is responsible for providing medical and toxicological assistance to emergency responders during significant hazardous material releases that cause deaths or serious injuries, require evacuation or shelter-in-place, involve dissemination of medical/health information to the community or issuance of public health advisories.

Role: CDPH/DEODC responds to requests for assistance from local, state, or federal agencies for worker or community protection measures or the activation of the Railroad Accident Prevention and Immediate Deployment (RAPID) Plan. In a RAPID activation, DEODC provides technical assistance to the Environmental Fate Group and the Human Health Effects Group of the Technical Specialists Unit in the Planning Section. DEODC has the lead responsibility for medical/toxicological assessments of occupational exposures for first responders and provides medical and toxicological consultation to local and other state agencies for exposures experienced by the community. The DEODC Environmental Health Laboratory provides technical assistance and consultation regarding sampling and analysis of environmental and biological samples.

Capabilities: DEODC programs provide technical advice and assistance, including assessment of human exposure, epidemiological and toxicological investigations, and risk communication activities. DEODC can collect environmental, exposure, and health effects data in order to assess exposures, document notable health effects, and determine necessary protective public health measures for affected populations. Various departmental programs maintain equipment for radiological monitoring, personal air monitoring, environmental and product sampling, and remote plume

monitoring. CDPH laboratories are available for sample analysis of materials including air, water, food, and fiber for radiological or other hazardous materials contamination. CDPH does not have HAZWOPER-trained personnel that can enter into hot zones or contaminated areas.

4 Local Agency Assets

4.1 Public and Environmental Health Agencies

Mission: Local health agencies are responsible for protecting the public and environmental health and often coordinate emergency medical services.

Role: Each county board of supervisors appoints a health officer who is delegated the responsibility for enforcement of public health laws and regulations. A county health officer has authority within their jurisdictions to take any preventive measure which may be necessary to protect and preserve the public from any health hazard during any state of emergency or local emergency (H&SC 458 & 505) and is an important resource to the Incident Commander.

Capabilities: As normally designated by ordinance adopted by the governing body of the jurisdiction, the local health officer is granted authority to declare hazardous material incidents “health emergencies” in any area within their jurisdictions if there is an immediate threat to human health (H&SC 471). The term “health emergency” is narrowly defined in H&SC 101080 as a spill or release of hazardous waste or medical waste that is determined by the director or local health officer to be an immediate threat to public health, and the director or local health officer reasonably determines that the release or escape is an immediate threat to public health, the director may declare a health emergency and the local health officer may declare a county health emergency. Health emergencies have been interpreted to include emergencies with public health consequences such as air pollution from a hazardous or toxic air release, epidemic, plant or animal infestation or disease, earthquakes, flood, or other disaster. The county health officer enforces and oversees orders and ordinances of the board of supervisors pertaining to public health and sanitary matters, orders including quarantine and other regulations prescribed by the department, and statutes related to the public health. The local health officers are empowered to require knowledgeable private parties to provide information relating to the properties, reactions and identity of released materials during a “health emergency” (H&SC 472-474). The local health officer has the authority to order an evacuation if there is an immediate menace to the public health from a calamity such as a flood, storm, fire, earthquake, explosion, accident, avalanche or other disaster. Additionally, the local health officer may close the area where the menace exists for the duration by means of ropes, markers, or guards to any and all persons not authorized to enter or remain within the enclosed area. All environmental health and sanitation programs are put under the supervision and control of the health officer during a health emergency.

4.2 Air Pollution Control Districts (APCDs) and Air Quality Management Districts (AQMDs)

Mission: APCD’s (either individual counties or unified multi-counties) and regional Air Quality Management Districts (AQMD’s) are responsible for the local and/or regional control of air pollution, primarily from stationary and area sources.

Role: The Air Pollution Control Officer (APCO), as the executive head of an APCD or AQMD, can provide valuable expert advice regarding current and predicted patterns of airborne pollutants originating from a hazardous materials incident.

Capabilities: Some Districts may be able to provide laboratory and field support to help identify the substance involved in the incident and/or may be able to provide for the ambient monitoring of certain airborne pollutants, depending on the incident. Many APCD's/AQMD's, especially the larger Districts, have developed extensive experience in predicting dispersion patterns of airborne pollutants.

5 Contact Information

5.1 Federal Special Team and Asset Contacts

Special Team/Asset	Location	Emergencies	Inquiries	e-mail
FOSC (EPA)	San Francisco, CA EPA Region IX	NRC 800-424-8802 24-Hr Region IX 800-300-2193 Emergency Response Center (R9 EOC) 415-947-8188	Pete Guria, Chief Emergency Response Section 415-972-3043 Dan Shane, FOSC 415-972-3037	Guria.Peter@epa.gov Shane.Dan@epa.gov
NRT (EPA/USCG)	Washington DC	EPA HQ EOC 202-564-3850	Joe Laforanara 732-321-6740 Mark Mjones, Dir. National Planning & Preparedness Division Office of Emergency Management 202-564-1976	Laforanara.Joseph@epa.gov Mjones.Mark@epa.gov
RRT (EPA)	EPA Region IX	EPA HQ EOC 202-564-3850	Dan Meer EPA Co-Chair 415-972-3132 Bill Robberson 415-972-3072	Meer.Daniel@epa.gov Robberson.Bill@epa.gov
NRC (USCG)		Duty Officer 800-424-8802 202-267-2675 alt.	Jeff Brown 202-267-1295	JSBrown@comdt.uscg.mil
ERT (EPA)	Edison, NJ	Duty Officer 732-321-6660	Joe Laforanara, Dir. 732-321-6740 Dave Wright 732-321-6743	Laforanara.Joseph@epa.gov Wright.David@epa.gov
ERT (EPA)	Las Vegas, NV	Duty Officer 732-321-6660	Dennisses Valdes 702-784-8003 Joann Eskelsen 702-906-6916	Valdes.Dennisses@epa.gov Eskelsen.Joann@epa.gov
RERT (EPA)	Las Vegas, NV	EPA HQ EOC 202-564-3850 HQ-ORIA-RPD Center for Radiological Emergency Prepared. Prevention & Response (FRMAC Coordination)	Gregg Dempsey Team Commander 702-784-8232 cell: 702-494-7040 Roger Goodman 702-784-8242 Colby Stanton Center Director 202-343-9448	Dempsey.Gregg@epa.gov Goodman.Roger@epa.gov Stanton.Colby@epa.gov
EPA Region IX Radiation Team	San Francisco, CA	Call EPA FOSC	Mike Bandrowski 415-947-4194 Robert Terry 415-972-3071	Bandrowski.Mike@epa.gov Terry.Robert@epa.gov
IMT (EPA)	San Francisco, CA EPA Region IX	Call EPA FOSC	Pete Guria, Chief ERS 415-972-4043 Steve Calanog, IC 415-972-3075	Guria.Peter@epa.gov Calanog.Steve@epa.gov
START (EPA)	EPA Region IX	Call EPA FOSC	Call EPA FOSC	
ERRS (EPA)	EPA Region IX	Call EPA FOSC	Call EPA FOSC	
ECOT (EPA)	Arlington, VA	EPA HQ EOC 202-564-3850 Alternate 703-851-3873	Virginia Narsete 312-886-4359 Mark Macintyre, R10 206-553-7302	Narsete.Virginia@epa.gov Macintyre.Mark@epa.gov
CISM (EPA)	Washington DC	EPA HQ EOC 202-564-3850	Jan Shubert, Dir. 703-603-8737	Shubert.Jan@epa.gov McCormick.Karen@epa.gov

		Alternate 202-253-4177	Karen McCormick 214-789-2814	
OSV Bold (EPA)	Washington DC	513-569-7990 24-Hr	Kennard W. Potts EPA Vessel Manager 202-566-1267 cell: 202-302-3529	Potts.Kennard@epa.gov
NHSRC (EPA)	Cincinnati, Ohio	EPA HQ EOC 202-564-3850	Oba Vincent 513-569-7456 cell: 513-560-5051 Rob Rothman 513-569-7187 cell: 513-569-7990	Vincent.Oba@epa.gov Rothman.Rob@epa.gov
CID (EPA)	San Francisco, CA EPA Region IX	415-947-8713 24-Hr	Scot Adair, CID Special Agent In Charge 415-947-4549 Amy Adair, CID SAC 415-947-4565	Adair.Scot@epa.gov Adair.Amy@epa.gov
NEIC (EPA)	Denver, CO	Call FOSC or CID	Christopher Weis CTRT Coordinator 303-462-9009 cell: 303-598-9309 Dr. Matt Rees 303-598-9323	Weis.Chris@epa.gov Rees.Matt@epa.gov
NCERT (EPA)	Arlington, VA	EPA HQ EOC 202-564-3850	Steven Drielak, Dir. HSP OCEFT 202-564-0554 Kevin Guarino Associate Dir. 303-462-9375	Drielak.Steven@epa.gov Guarino.Kevin@epa.gov
NDT (EPA)	Cincinnati, OH	800-329-1841 24-hr	Steve Hawthorn 513-487-2420 Natalie Koch 513-487-2422 Jeanelle Martinez Toxicologist 513-487-2428	Hawthorn.Steve@epa.gov Koch.Natalie@epa.gov
ASPECT (EPA)	Waxahachie, TX	800-329-1841 24-hr Region 7 Spill Line 913-281-0991	Mark Thomas 816-718-4271 Tim Curry 816-718-4281	Thomas.Mark@epa.gov Curry.Timothy@epa.gov
Diving Team (EPA)	Washington DC	Kennard W. Potts Cell: 202-302-3529	Kennard W. Potts, Chairman, EPA Diving Safety Program 202-566-1267 Alan Humphrey, Dir. Special Operations 732-321-6748	Potts.Kennard@epa.gov Humphrey.Alan@epa.gov
DOD Liaison (EPA)		Call EPA FOSC	Jim Knoy Emergency Planning/ Response Manager 303-312-6071 cell: 303-886-1630	Knoy.Jim@epa.gov James.Knoy@northcom.mil
ORD Superfund and Technology Liaison (STL) to Region 9	San Francisco, CA	Call Harold Ball Chief, Technical Support Section 415-972-3054	Michael Gill Superfund Technical Liaison to ORD 415-972-3054	Gill.Michael@epa.gov Ball.Harold@epa.gov
TSC (EPA) Monitoring & Site Characterization	Las Vegas, NV NERL Environmental Sciences Division	Call Brian Schumacher 702-798-2242	Felicia Barnett 404-562-8659	Barnett.Felicia@epa.gov

TSC (EPA) Environmental Photo Interpretation Center (no longer official name; part of Environmental Sciences Division)	Las Vegas, NV NERL	Call EPA FOSC	Rose-Marie Moore 702-798-2329	Moore.Rose-Marie @epa.gov
TSC (EPA) Exposure Assessment & Modeling	Athens, GA NERL	Call EPA FOSC	Frank Stancil 706-546-3130	Stancil.Frank@epa.gov
TSC (EPA) Groundwater Fate & Transport	Ada, OK RSKERL	Call EPA FOSC	Dave Burden 580-436-8606	Burden.david@epa.gov
TSC (EPA) Engineering & Treatment	Cincinnati, OH NRMRL	Call EPA FOSC	David Reisman 513-569-7588	Reisman.David@epa.gov
TSC (EPA) Health Risk	Cincinnati, OH NRMRL	Call EPA FOSC	Harlal Choudhury 513-569-7536	Choudhury.Harlal@epa.gov
Compendium of Special Teams, Capabilities and Assets (2006)	San Francisco, CA		Daniel Shane U.S. EPA Region IX Emergency Response 415-972-3037	Shane.Dan@epa.gov
NSF (USCG)	Elizabeth City, NC	USCG HQ Crises Action Center 202-267-2100	LCDR Karen Quiachon 252-331-6000 x3005 CDR James Hanzalik 252-331-6000 x3009	Karen.W.Quiachon@uscg.mil Jhanzalik@nsfcc.uscg.mil
NSFCC (USCG)	Elizabeth City, NC	USCG HQ Crises Action Center 202-267-2100	CDR Meredith Austin 252-331-6000 x3010 Carol Gilbert 252-331-6000 x3008	MAustin@nsfcc.uscg.mil CGilbert@nsfcc.uscg.mil
Pacific Strike Team (USCG)	Novato, CA	USCG HQ Crises Action Center 202-267-2100 or Call the FOSC	CDR Anthony Lloyd Commanding Officer 415-883-3311 x210 Cell: 415-948-5389 LCDR Joseph Loring Executive Officer 415-883-3311 x211 Cell: 415-948-5728 LT. Kevin Sligh Operations Officer 415-883-3311 Cell: 415-720-4170	ALloyd@d11.uscg.mil JLoring@d11.uscg.mil Kmsligh@d11.uscg.mil
Atlantic Strike Team (USCG)	Fort Dix, NJ	USCG HQ Crises Action Center 202-267-2100 or Call the FOSC	609-724-0008	
Gulf Strike Team (USCG)	Mobile, AL	USCG HQ Crises Action Center 202-267-2100 or Call the FOSC	251-441-6601	
PIAT (USCG)	Elizabeth City, NC	USCG HQ Crises Action Center 202-267-2100	CWO Brandon Brewer 252-331-6000 x3028	BBrewer@nsfcc.uscg.mil
DRAT (USCG)	Alameda, CA	District 11 DRAT 510-437-3701 510-437-2794	LtJG Katelyn South 510-437-2954	KESouth@d11.uscg.mil
NPFC (USCG)	Arlington, VA	NPFC CDO 800-424-8802 or 800-759-7243 enter pin; 2073906 @skynet.com	Craig Bennett 202-493-6800 Allen R. Thuring 202-493-6801	CBennett@ballston.uscg.mil Athuring@ballston.uscg.mil

MSL (USCG)		PACAREA/D11 Command Center 510-437-3701	Marine Safety Lab 203-441-2645	
MSST (USCG)	Alameda, CA	PACAREA/D11 Command Center 510-437-3701		
IMAT (USCG)	PACAREA Coast Guard Island, Alameda, CA	PACAREA/D11 Command Center 510-437-3707	Frank Shelley 510-437-3677	Fshelley@d11.uscg.mil
Hazardous Materials Response Special Teams Handbook (USCG)	Washington, DC		LT Latarsha McQueen CGHQ (G-RPP-2) 202-267-0423 LCDR Anne Soracco (Odegaard) Office of Response (G-MOR-3) 202-267-2614	LMcqueen@comdt.uscg.mil AOdegaard@comdt.uscg.mil
NOAA HAZMAT	Seattle, WA	206-526-6317 24-Hr	CAPT Steve Thompson 415-561-6624 cell: 206-499-1118 Thomas Callahan 206-526-6326	Steven.A.Thompson@noaa.gov Thomas.Callahan@noaa.gov
NOAA SSC	Alameda, CA Coast Guard Island	206-526-4911 24-Hr	Jordan Stout Scientific Support Coordinator 510-437-5344 cell: 206-321-3320	Jordan.Stout@noaa.gov
CDC (HHS)		CDC Emergency Operations Center 770-488-7100	Phil Navin DEO Div. Director 404-639-3897 Martin Kalis Public Health Advisor EPH-RB 770-488-4568 cell: 404-518-3875	pfn0@cdc.gov izk6@cdc.gov
ATSDR (HHS)	Atlanta, GA	Duty Officer 404-498-0120 CDC 24-Hr 770-488-7100		
ATSDR (HHS)	San Francisco, CA EPA Region IX	CDC-Director's EOC 770-488-7100	CDR Susan Muza 415-947-4316 Libby Vianu 415-947-4319 Richard Nickle Emergency Response 770-488-3430 Cell: 770-488-3342	sum1@cdc.gov lj18@cdc.gov "Nickle, Richard (ATSDR/DTEM/PRMSB" <ran2@cdc.gov>
NIOSH	Atlanta, GA	CDC-Director's EOC 770-488-7100	John Decker Associate Director Emergency Prep. 404-498-2582 Cell: 678-249-4511	
SERT (HHS)	Washington, DC Office of Public Health Emergency Preparedness (OPHEP)	Secretary's Operations Center 202-619-7800	Capt. Christopher Jones, USPHS Regional Emergency Coordinator (REC) 415-437-8386 cell: 415-509-8386 pager: 415-453-0758	Christopher.jones@hhs.gov

PHS Commission Corps (HHS)		Secretary's Operations Center 202-619-7800	RADM John Babb 301-443-3114 CDR Angela Martinelli 301-443-3090	John.Babb@hhs.gov Angela.Marinelli@hhs.gov
IST (HHS)		CDC-Director's EOC 770-488-7100		
SNS (HHS)		CDC-Director's EOC 770-488-7100		
LRN (HHS)		CDC-Director's EOC 770-488-7100		
HMRU (FBI)	Washington, DC	SIOC FBI HQ 202-323-3300	John Fraga Unit Chief 703-632-7896 cell: 202-497-5070 Dr. Benjamin Garrett Senior Scientist 703-632-7929	fragajm@aol.com
WMD Coordinator (FBI)	Oakland, CA	415-553-7400 (24-Hr)	Dan Butler, SAC WMD Coordinator Oakland, CA 510-251-4076 Tim Lester, SA WMD Coordinator Sacramento, CA 916-481-9110	DButler@batwg.org TLester@leo.gov
WMD Coordinator (FBI)	Sacramento, CA	415-553-7400 (24-Hr)	Robert Born 916-481-9110 Tim Lester	RBorn@batwg.org TLester@batwg.org
WMD Coordinator (FBI)	San Francisco, CA	415-553-7400 (24-Hr)	Kevin Kelly 415-553-7400	KKevin@batwg.org
WMD Coordinator (FBI)	San Diego, CA	415-553-7400 (24-Hr)	Jeff Cassett 858-565-1255	JCassett@batwg.org
WMD Coordinator (FBI)	Los Angeles, CA	415-553-7400 (24-Hr)	Kristine Beardsley 310-477-6565	KBeardsley@batwg.org
WMD Coordinator	Las Vegas, NV	415-553-7400 (24-Hr)	Oswald Tinsley 702-385-1281 Timothy Malcolm	OTinsley@batwg.org TMalcolm@batwg.org
HRT/SRT (OSHA)	Salt Lake City, UT	800-321-6742 (24-Hr) Salt Lake Technical Center (SLTC) 801-233-4900	Bob Curtis 801-414-9371 Tom Czehowski 702-486-9044 702-496-0447 Jennifer Hute 415-975-4342 Cell: 415-307-8776	Curtis.Bob@dol.gov Czehowski.Tom@dol.gov Hute.Jennifer@dol.gov
NIFC	Boise, ID		Robert Stroud, BLM/NWCG 208-387-5422 Tory Henderson, USFS/NWCG 208-387-5348	THenderson@fs.fed.us
National IMT Type I & II (USFS)	Washington, DC	USFS Disaster and Emergency Operations 202-205-1500	John Schulte USFS Disaster & Emergence Ops. 505-842-3252 cell: 505-362-7014 Tim Murphy USFS/NWCG 406-829-7324 cell: 406-544-8466 Dale Dague USFS Office of Chief	Jschulte@fs.fed.us TimMurphy@fs.fed.us DDague@fs.fed.us

			202-205-1500	
National Area Command Team (USFS)	Boise, ID	USFS Disaster and Emergency Operations 202-205-1500		
Office of the Secretary of Defense (OSD)	Washington DC 2600 Defense Pentagon, Washington DC, 20301-2600 Rm 5D337		Richard M. Chavez Director, CBRN Preparedness & Response DOD Updates 703-697-5415	Richard.chavez@osd.smil.mil
Joint Forces Command (DOD)		Command Center 24-Hr 757-836-5586		
JDOMS (DOD)	National Military Command Center (NMCC) Pentagon	Duty Hours 703-697-9400 Non-Duty Hours 703-697-6340 or 703-693-8196	Col. Robin Gentry 703-695-8453 LTC Michael Avila 703-697-9408	Robin.Gentry@js.pentagon.mil Michael.Avila@js.pentagon.mil
USNORTHCOM (DOD)	Petersons AFB Colorado Springs, CO	Command Center 24-Hr 719-554-2361	Jim Knoy EPA Liaison 202-564-6375 Barbara Maco EPA Interagency Liaison 415-972-3794	knoy.jim@epa.gov james.knoy@northcom.mil Barbara.maco@northcom.mil
Defense Coordinating Officer (DOD/DSCA)	Defense Coordinating Element, Oakland, CA	Camp Parks 925-875-4480	Mark H. Armstrong Colonel, U.S. Army 510-627-7279 Cell: 210-483-3496	Mark.Armstrong@us.army.mil
USPACOM (DOD)	Fort Shafter, HI HQ, U.S. Army Pacific		LTC Bradley Higgins, Chief, JTF-HD 808-438-1153; J57 HD/CM/CT 808-477-0787 LTC Stanley Toy Chief, Operations and Aviation 808-438-9150	Higginsbv@shafter.army.mil
JTF-CS (DOD)	Fort Monroe Hampton, VA			
CST HQ (DOD)		National Guard Bureau Operations Center (Civil Support) 703-607-2253 or 703-607-9350	Maj. Stephen Davis 703-607-0011 LTC Kathryn McHenry 703-607-2089	Stephen.Davis@ngb.ang.af.mil
CST 9 th (DOD)	Los Alamitos, CA		Capt. Juan Mora Operations Officer 562-254-9022 David Baldovin 562-254-5017	Juan.Mora@ca.ngb.army.mil David.Baldovin@ca.ngb.army.mil
CST 91 st (DOD)	Phoenix, AZ		LtCol Mike Lynch 602-267-2953 Julie Stonerod 602-909-3012	Michael.Lynch@az.ngb.army.mil Julie.Stonerod@az.ngb.army.mil
CST 92 nd (DOD)	Las Vegas, NV		Major Scott Maylath 702-643-4249 cell: 702-241-3015 Major Edward Locke	Scott.Maylath@nv.ngb.army.mil Edward.Locke@nv.ngb.army.mil
CST 93 rd (DOD)	Honolulu, HI		LTC Courtney Vareslum 808-682-1750	

CST 94 th (DOD)	Juan Muna, Guam		LTC Diron Cruz POMSO 671-735-0433 671-777-5803 Maj. Nicanor Legaspi Commanding Officer 671-647-1972 Cell: 671-898-0847	Diron.Cruz@gu.ngb.army.mil Nicanor.legaspi@gu.ngb.army.mil
CST 95 th (DOD)	Hayward, CA		MAJ John Haramalis 510-264-5670 Jack Hansen Michael Sather Operations Officer 510-780-0683	John.Haramalis@ca.ngb.army.mil Jack.Hansen@ca.ngb.army.mil Michael.Sather@ca.ngb.army.mil
SUPSALV (DOD)	Washington DC Naval Sea Systems Command	202-781-3889 24-Hr	Capt Jim Wilkins 202-781-0731 Richard Buckingham 202-781-0465	James.r.Wilkins@navy. mil Richard.Buckingham@ navy.mil
SBCCOM (DOD) (RDECOM)	Aberdeen, MD	DOJ, Homeland Defense helpline 800-368-6498		
CBRRT (DOD)	Aberdeen, MD	Edgewood Operations Center 24-Hr 410-436-4484		
ECBC (DOD)	Aberdeen, MD		Edgewood Installation 410-671-2051	
TEU (DOD)	Aberdeen Proving Grounds, MD	Command Group 404-436-3044 Chemical-Biological Command Operations Center 410-436-2148/4482	LtCol Bill Schaff 410-436-6226 Administration 410-436-2086	William.Schaff@us.army.mil
EOD (DOD)	Army Operations Center, Pentagon	Army Operations Center (EOD) 202-528-8230 Naval Command Center (EOD) 202-692-0231 Air Force Operations Center (EOD) 202-697-6103		
USACE RR (DOD)	Offutt AFB, NE		Gregory Herring LG Chief, Program Office 402-293-2525 Cell: 402-968-6637 Mark Herse Operations Manager Rapid Response Prog. 402-293-2560 Cell: 402-598-0207 Tim Gouger 402-216-4252	Gregory.C.Herring@usace.army.mil Mark.r.Herse@usace.army.mil Timothy.p.Gouger@usace.army.mil
USACE Local Emergency Response	Los Angeles San Francisco Sacramento	Ed Andrews, Los Angeles, Cell: 213-280-8576 Megan Nagy, Chief Emerg. Operations Sacramento, 916-557-6911		

USACE LLRWD (DOD)	Kansas City, KS		Vincenzo Crifasi 816-983-3358	Vincenzo.A.Crifasi@usace.army.mil
AFSC LLRWD (DOD)	Rock Island, IL		Kelly Crooks 309-780-0338 Michael Styvaert 309-782-0880 Cell: 309-563-3890	Kelly.Crooks@us.army.mil Michael.Styvaert@us.army.mil
USAMRIID (DOD)	Aberdeen, MD	Emergency Response 888-872-7443		
USAMRICD (DOD)		Emergency Response 410-436-3628		
DTRA (DOD)	Fort Belvoir, VA	DTRA Operations Center 877-244-1187		
CBIRF (DOD)	Indian Head, MD	301-744-2038 24-Hr	LCDR Tauseef Badar 301-744-2051 LCDR Jason Spillman 301-744-2087	BadarTA@cbirf.usmc.mil SpillmanJ@cbirf.usmc.mil
DOE/NNSA AMS, ARG, RAP, NEST, NARAC, FRMAC, REAC/TS	Washington DC	DOE EOC 202-586-8100	Alan Remick 202-586-8312 Debbie Wilber 202-586-0592	Alan.Remick@NNSA.doe.gov Deborah.Wilber@NNSA.doe.gov
DOE/RAP	Livermore, CA	925-422-8951 DOE EOC 202-586-8100	Michael J. Cornell RAP Region 7 925-422-0138	Mike.Cornell@oak.doe.gov
DOE/LLNL	Livermore, CA		Ellen Raber CBRNE Countermeasure Programs 925-422-3985	Raber1@llnl.gov
DHS/FEMA Region IX	Oakland, CA		Fred Wehrenberg National Preparedness Division 510-627-7020 Cell: 510-316-7636	fred.wehrenberg@dhs.gov
ERT-A/ERT-N (DHS/FEMA)	Washington, DC	FEMA NRCC 202-646-2828 FEMA Ops Center 800-634-7084 DHS Ops Center 202-282-8147 DHS Command Center 202-282-8101		
ERT-A (DHS/FEMA)	Oakland, CA	510-627-7700 Duty Officer 24-Hr 510-627-7100	Nancy Ward Division Director Response & Recovery Division	Nancy.Ward@dhs.gov Robert.Fenton@dhs.gov

		Regional Office	510-627-7250 Bob Fenton Chief, Response Response & Recovery Division 510-627-7259 Cell:510-867-1615	
DHS/FEMA RRT Representative			Matt Bradley 510-627-7258	Matthew.Bradley@dhs.gov
FIRST (DHS/FEMA)		FEMA NRCC 202-646-2470		
DEST (DHS/FEMA)		202-646-3685		
NIRT (DHS/FEMA)				
IMAAC (DHS)	Lawrence Livermore National Laboratory (LLNL) Livermore, CA	IMAAC Operations 925-424-6465	Ronald Baskett NARAC-IMAAC Operations 925-423-6731 John S. Nasstrom Associate Program Leader 925-423-6738	imaac@llnl.gov rbaskett@llnl.gov jnasstrom@llnl.gov
US&R (DHS/FEMA)	Washington, DC	FEMA Command Center 800-634-7084 FEMA NRCC 202-646-2828	Mike Tamillow, Chief US&R Section 202-646-2549	Mike.Tamillow@dhs.gov
US&R (DHS/FEMA) CA-TF3	Menlo Park, CA		Chief Harold Schapelhoman 650-688-8400	harolds@menlofire.org
US&R (DHS/FEMA) CA-TF4	Oakland, CA		Dave Wheeler 510-693-3420	Dave.Wheeler@acgov.org
MERS/MATTS (DHS/FEMA)	Washington DC	NRCC 202-646-2828 MERS Operations Center 800-792-6196 MERS Operations Center (alternate no.) 425-487-4448	Eric Edwards 202-646-4343	
MERS/MATTS (DHS/FEMA)	Bothell, WA	NRCC 202-898-6100	MERS Operation Center 425-487-4448	
MERS/MATTS (DHS/FEMA)	San Francisco, CA		415-923-7100	
MMRS (DHS/FEMA)	Washington, DC	800-368-6498	Dennis Atwood DHS/ODP 202-786-9785	Dennis.Atwood@dhs.gov
NDMS/DMAT (DHS/FEMA)	Various locations	NRCC 202-646-2828 202-898-6100 RRCC 510-627-7700	Dr. Bill Piggott 510-627-7054	William.Piggott@dhs.gov

5.2 California State Agency Contacts

Special Team/Asset	Location	Emergencies	Inquiries	e-mail
CARB/ERT	Sacramento, CA	OES Warning Center (916) 845-8911 Emer. Response Coordinator 916-919-4017 24-Hr	Jeff Cook, ERT Coordinator 916-322-3726 Alvaro Alvarado, Health & Exposure Assessment 916-445-4843	jcook@arb.ca.gov aalvarad@arb.ca.gov
DTSC/ERP	Berkeley, CA	DTSC Duty Officer 24/7 Emergency 916-255-6504, Toxics Hotline 800-698-6942, OES Warning Center (800) 852-7550	Adam Palmer DTSC/ERP 916-255-6572 Bruce LaBelle ECL-Berkeley 510-540-3003 KC Ting Mobile Laboratory 510-540-3388	Apalmer@dtsc.ca.gov Blabelle@dtsc.ca.gov Kting@dtsc.ca.gov
CST 9 th (DOD)	Los Alamitos, CA	OES Warning Center (800) 852-7550	CMDR LTC Andy Flynn 562-795-2532 CPT Keith Haviland Operations 562-254-9022	Andrew.r.flynn@us.army.mil Keith.haviland@us.army.mil
CST 95 th (DOD)	Hayward, CA	OES Warning Center (800) 852-7550	CMDR LTC Gregory S. Potter 510-715-8312 MAJ Kathleen Fallis Operations 510-750-3139	Gregory.Potter1@us.army.mil Kathleen.Fallis@us.army.mil
OEHHA	Oakland, CA	Cal EMA Warning Center (800) 852-7550	Robert Blaisdell, PhD 510-622-3142	bblaisdell@oehha.ca.gov
Cal EMA (formerly OES)	Sacramento, CA	Cal EMA Warning Center (800) 852-7550 Trevor Anderson 916-594-5016 (pager)	Trevor Anderson 916-845-8788 Michael Warren 916-845-8772	Trevor.anderson@oes.ca.gov Michael.warren@oes.ca.gov
CDPH	Richmond, CA	Cal EMA Warning Center (800) 852-7550	Stephen Wall, Ph.D Environmental Health Laboratory 510-620-2818	Swall@dhs.ca.gov

5.3 California Local and Regional Agency Contacts

Special Team/Asset	Location	Emergencies	Inquiries	e-mail
California Conference of Local Health Officers	Mariposa, CA		Charles Mosher M.D. MPH, Conference of Local Health Officers (CCHLO) and Air Pollution Control Officers (CAPCOA) 209-966-3689	health@mariposacounty.org
California Air	Auburn, CA		Tom Christofk	tchristo@placer.ca.gov

Pollution Control Officers Association			Placer County Air Pollution Control Officer 530-745-2321	
City of Sacramento Fire Department	Sacramento, CA		Ed Vasques Assistant Fire Chief 916-264-7552	Evasques@sfd.cityofsacramento.org

5.4 California Conference of Local Health Officers General Phone Numbers

(February 15, 2007)

County	General Number	After Hours
Alameda	510-267-8000	925-422-7595
Alpine	530-694-2146	530-694-2146
Amador	209-223-6407	209-223-6407, 209-223-6500 (Sheriff)
Berkeley	510-981-5300	510-981-5911 (Berkeley PD, ask for health officer)
Butte		530-538-7581
Calaveras	530-538-7581	209-754-6500 (Sheriff)
Colusa	209-754-6460	530-458-0200 (OES)
Contra Costa	530-458-0380	925-646-2441
Del Norte	925-313-6712	707-464-3191
El Dorado	707-464-3191 or 707-464-7227	866-598-9821
Fresno	530-621-6100	559-488-3111 (Sheriff)
Glenn	559-445-3202 or 559-445-3200	530-934-6434 (Sheriff)
Humboldt	530-934-6588	707-445-7251 (Sheriff)
Imperial	707-445-6200	760-339-6312 (Sheriff)
Inyo	760-482-4438	760-878-0383 (Sheriff)
Kern	760-873-7868	661-861-3110
Kings	661-868-0502	559-584-9276 (County dispatch)
Lake	559-584-1401 (ask for "Nurse of the Day")	707-263-8656
Lassen	707-263-1090	530-257-6121(Dispatch)
Long Beach	530-251-8183 or 530-310-2720	562-435-6711 (Dispatch)
Los Angeles	562-570-4000	213-974-1234
Madera	213-240-8117	559-675-7769 (Sheriff)
Marin	559-675-7893 or 800-427-6897	415-499-7237 (or -38 or-35) request Health Officer
Mariposa	415-499-6841	209-966-3615 (Sheriff)
Mendocino	209-966-3689	707-463-4086 (Dispatch)
Merced	707-472-2600	209-381-1020
Modoc	209-381-1214	530-233-4416 (Sheriff)
Mono	530-233-6311	760-932-7549 (Dispatch)
Monterey	760-924-1830	831-755-5100
Napa	831-755-4500	707-265-3131
Nevada	707-253-4566	530-265-7880 (Sheriff)
Orange	530-265-1450	714-628-7008 (Sheriff)
Pasadena	714-834-8180	626-744-6043
Placer	626-744-6089	530-886-5375 (Sheriff Dispatch)
Plumas	530-889-7141	530-283-6330
	530-283-6330	

5.5 California Air Pollution Control District (APCD) & Air Quality Management District (AQMD) contacts

Last Name	District	Address	City	State	Zip Code	Telephone	Fax	E-Mail
Harris	Amador County APCD	665 New York Ranch Road #4	Jackson	CA	95642-2310	209-257-0112	209-257-0116	jharris@amadorapcd.org
Banks	Antelope Valley AQMD	43301 Division St, Ste 206	Lancaster	CA	93539-4409	661-723-8070	661-723-3450	bbanks@AVAQMD.ca.gov
Broadbent	Bay Area AQMD	939 Ellis Street	San Francisco	CA	94109-7714	415-749-5052	415-928-8560	Jbroadbent@baaqmd.gov
Wagoner	Butte County AQMD	2525 Dominic Drive, Suite J	Chico	CA	95928-7184	530-891-2882	530-891-2878	jwagoner@bcaqmd.org
Grewal	Calaveras County APCD	891 Mountain Ranch Rd	San Andreas	CA	95249-9709	209-754-6588	209-754-6521	lgrewal@co.calaveras.ca.us
Zeldin	CAPCOA	980 Ninth St, 16th Floor	Sacramento	CA	95814	916-449-9603	916-449-9604	melz@capcoa.org
Krug	Colusa County APCD	100 Sunrise Blvd. #F	Colusa	CA	95932-3246	530-458-0590	530-458-5000	hak@countyofcolusa.org
McTaggart	El Dorado County AQMD	2850 Fairlane Ct. Bldg C	Placerville	CA	95667-4100	530-621-5306	530-279-2774	mmctaggart@co.el-dorado.ca.us
Valler	Feather River AQMD	938 14th Street	Marysville	CA	95901-4149	530-634-7659	530-634-7660	apco@fraqmd.org
Black	Glenn County APCD	P.O. Box 351	Willows	CA	95988-0351	530-934-6500	530-934-6503	mblack@countyofglenn.net
Schade	Great Basin Unified APCD	157 Short Street	Bishop	CA	93514-3537	760-872-8211	760-872-6109	tedschade@yahoo.com
Poiriez	Imperial County APCD	150 South 9th Street	El Centro	CA	92243-2801	760-482-4606	760-353-9904	bradpoiriez@imperialcounty.net
Jones	Kern County APCD	2700 "M" Street, Suite 302	Bakersfield	CA	93301-2370	661-862-8642	661-862-5251	Jonesda@co.kern.ca.us
Reynolds	Lake County AQMD	885 Lakeport Blvd	Lakeport	CA	95453-5405	707-263-7000	707-263-0421	bobr@lcaqmd.net
Donnelly	Lassen County APCD	175 Russell Avenue	Susanville	CA	96130-4215	530-251-8110	530-257-6515	jdonnelly@co.lassen.ca.us
Mosher	Mariposa County APCD	P.O. Box 5	Mariposa	CA	95338	209-966-3689	209-966-8248	air@mariposacounty.org
Brown	Mendocino County AQMD	306 E Gobi St	Ukiah	CA	95482-5511	707-463-4354	707-463-5707	mcaqmd@co.mendocino.ca.us
Moreo	Modoc County APCD	202 West 4th St.	Alturas	CA	96101-3915	530-233-6419	530-233-5542	apcd@modocounty.us
Heaston	Mojave Desert AQMD	14306 Park Avenue	Victorville	CA	92392-2383	760-245-1661	760-245-2699	eheaston@mdaqmd.ca.gov
	Monterey Bay Unified APCD	24580 Silver Cloud Ct	Monterey	CA	93940-6536	831-647-9411	831-647-8501	
Martin	North Coast Unified AQMD	2300 Myrtle Avenue	Eureka	CA	95501-3327	707-443-3093	707-443-3099	rmartin@ncuaqmd.org
Bennitt	Northern Sierra AQMD	P.O. Box 2509	Grass Valley	CA	95945	530-274-9360	530-274-7546	gretchen@myairdistrict.com
Lee	Northern Sonoma County APCD	150 Matheson St	Healdsburg	CA	95448-4908	707-433-5911	707-433-4823	nsc@sonic.net
Christofk	Placer County APCD	3091 County Center Dr. Suite 240	Auburn	CA	95603-2603	530-889-7134	530-889-7107	tchristo@placer.ca.gov
Greene	Sacramento Metro AQMD	777 12th St., 3rd Fl	Sacramento	CA	95814-1908	916-874-4800	916-874-4805	lgreene@airquality.org
Kard	San Diego County APCD	10124 Old Grove Rd	San Diego	CA	92131	858-586-2600	858-586-2701	Robert.Kard@sdcounty.ca.gov
Sadredin	San Joaquin Valley Unified APCD	1990 E. Gettysburg Ave	Fresno	CA	93726	559-230-6000	559-230-6061	seyed.sadredin@valleyair.org
Allen	San Luis Obispo County APCD	3433 Roberto Ct	San Luis Obispo	CA	93401-7126	805-781-5912	805-781-1002	lallen_apcd@co.slo.ca.us
Dressler	Santa Barbara County APCD	260 N San Antonio Rd., Ste A	Santa Barbara	CA	93110-1315	805-961-8800	805-961-8801	dresslert@sbcapcd.org
Mull	Shasta County AQMD	1855 Placer Street, Suite 200	Redding	CA	96001-1759	530-225-5674	530-225-5237	scdrm@snowcrest.net
Griffin	Siskiyou County	525 S. Foothill Dr	Yreka	CA	96097-	530-841-	530-842-	pgriffin@co.siskiyou.ca.us

	APCD				3036	4033	6690	
Wallerstein	South Coast AQMD	21865 East Copley Drive	Diamond Bar	CA	91765-4182	909-396-2100	909-396-3340	bwallerstein@aqmd.gov
Abbs	Tehama County APCD	P.O. Box 8069	Red Bluff	CA	96080-0038	530-527-3717	530-527-0959	aabbs@tehcoapcd.net
Helmar	Tuolumne County APCD	2 South Green Street	Sonora	CA	95370	209-533-5693	209-533-5520	vhelmar@co.tuolumne.ca.us
Villegas	Ventura County APCD	669 County Square Dr., 2nd FL	Ventura	CA	93003-5417	805-645-1440	805-645-1444	mike@vcapcd.org
Ehrhardt	Yolo-Solano AQMD	1947 Galileo Court, Suite 103	Davis	CA	95618-4882	530-757-3673	530-757-3673	mehrhart@ysaqmd.org

Source: EPA's California Air Response Planning Alliance Website, July 29, 2008
http://www.epaosc.net/region_list.asp?region=9

5.6 DOT Emergency Response Guide Phone Numbers

DOT's Emergency Response Numbers for Chemical Hazard Information (2008 DOT Emergency Response Guide) for transportation incidents:

Provide as much information as possible such as:

- Identification number from the placard, orange panel, shipping paper or package (after UN/NA)
- Name of the material from the shipping document or package
- 3-digit guide number from the DOT ERG
- Name of the carrier (trucking company or railroad) and vehicle number
- If no placards or shipping document is available, provide construction, fittings and purpose (refer to rail car or road trailer chart in DOT guidebook)

CHEMTREC: 1-800-424-9300

CHEMTEL, INC: 1-888-255-3924

INFOTRAC: 1-800-535-5053

3E COMPANY: 1-800-451-8346

MILITARY SHIPMENTS:

Explosives/ammunition incidents: 1-703-697-0218

All other dangerous goods incidents: 1-800-851-8061

NATIONWIDE POISON CONTROL CENTER: 1-800-222-1222

Completion Date: 07/17/06
Update: 10/22/08