

**OHIO EMERGENCY OPERATIONS PLAN
EMERGENCY SUPPORT FUNCTION #10
HAZARDOUS MATERIALS/WEAPONS OF MASS DESTRUCTION**

Primary Agency: Ohio Environmental Protection Agency (Ohio EPA)

Support Agencies: Ohio Department of Health (ODH)
Ohio Department of Commerce, Division of State Fire Marshal (SFM)
Ohio Emergency Management Agency (Ohio EMA)
Adjutant General's Department, Ohio National Guard (ONG)
Ohio Bureau of Workers' Compensation (BWC), Division of Safety and Hygiene, OSHA On-Site Consultation Program
Ohio Department of Agriculture (ODA)
Public Utilities Commission of Ohio (PUCO)
Ohio State Highway Patrol (OSHP)
Ohio Department of Transportation (ODOT)
Ohio Department of Natural Resources (ODNR)

I. INTRODUCTION

A. Purpose

1. Emergency Support Function #10 (ESF-10), Hazardous Materials/Weapons of Mass Destruction (WMD), describes the organization, responsibilities, and resources to provide a coordinated state response to supplement local resources for an actual or potential release. This includes the inadvertent release of a hazardous material, as well as the intentional dissemination of a chemical, biological, radiological, nuclear, flammable/explosive substance (WMD).
2. ESF-10 addresses the following during hazardous materials/WMD incidents:
 - a. Providing resource support to local jurisdictions as requested.
 - b. Coordination of state-level and non-governmental organizations in support of local response.
 - c. Coordination with federal agencies through the National Response Framework (NRF), including the NRF ESF-10: Oil and Hazardous Materials Response Annex, and the National Oil and Hazardous Substance Pollution Contingency Plan (NCP, 40 Code of Federal Regulations Part 300).
 - d. Providing protective action recommendations to local jurisdictions.
 - e. Assessment of the health effects of a hazardous material/WMD release.

- f. Sampling of air, water, soil, and other materials to test for contamination.
- g. Assistance in recovery and mitigation.

B. Scope

1. The scope of ESF-10 is determined by the scale of the incident and local requests. ESF-10 tasks can range from prevention or detection of a release or spill, resource assistance to local jurisdictions, coordination of state and federal operations, to the final site restoration and community recovery. State and federal agencies respond as resource providers and act in coordination and advisory roles.
2. Three different agencies have a responsibility to respond to hazardous materials incidents, and missions are assigned to lead agencies depending on the materials involved:
 - a. Chemical – Ohio EPA
 - b. Biological – ODH, Bureau of Infectious Diseases
 - c. Radiological/Nuclear – ODH, Bureau of Radiation Protection
 - d. Explosion/Fire – SFM
3. For detailed information on specific state agency functions consult that agency's SOPs. Consult individual Local Emergency Planning Committees (LEPCs) chemical emergency response and preparedness plans for detailed information on local level response and support during hazardous materials incidents.
4. For accidents or incidents at commercial nuclear power plants follow Tab B, the [State of Ohio Plan for Response to Emergencies at Commercial Nuclear Power Plants](#) (REP Plan).
5. In the case of terrorism or suspected terrorism, ESF-10 response will be coordinated with the law enforcement aspects of the [Terrorism Incident Annex](#).

C. Federal Laws Regulating Hazardous Materials and Emergency Planning and Response

1. Federal laws such as the Comprehensive Emergency Response Compensation Liability Act (CERCLA), Emergency Planning and Community Right-to-Know Act (EPCRA), Resource Conservation & Recovery Act (RCRA), Superfund Amendments & Reauthorization Act (SARA), Clean Air Act (CAA), Clean Water Act (CWA), Oil Pollution Act (OPA) and Occupational Safety & Health Administration (OSHA) policies outline emergency planning and response requirements.

2. Ultimately, it is the owner/operator's legal responsibility for the minimization of risk to the public and environment, and for the cleanup of an incident, including restoration of the area. The owner/operator is required to clean up the spill if capable, or hire a contractor to conduct the work. If the owner/operator is not capable, willing, financially able, or cannot be located to take care of the problem, Ohio EPA may hire a contractor to perform the cleanup and disposal operations.
3. If the situation is beyond local and state agency capabilities, federal agencies may assist in cleanup operations. If the release meets the Reportable Quantity (RQ) under CERCLA or OPA-90, EPA (inland) or USCG (coastal zone, navigable waters) will act as the Federal On-Scene Coordinator (FOSC) and work with other federal, state and local response stakeholders to monitor and direct pollution recovery operations. These two agencies may be acting under their normal organizational funding, or may be acting under a Mission Assignment developed by FEMA if there is a Stafford Act declaration.

D. State Emergency Response Commission (SERC) Requirements

1. Local Requirements

- a. Ohio Revised Code (ORC) Chapter 3750 is the state implementation of SARA Title III.
- b. ORC Section 3750.04 requires counties, through LEPCs, to annually update and maintain an approved chemical emergency response plan. LEPC plans describe local capability to respond to a hazardous materials incident and addresses facilities containing Extremely Hazardous Substances (EHSs) within their jurisdiction.
- c. The SERC requires LEPCs to exercise this plan at least annually. Local hazardous materials exercise evaluations are conducted in accordance with SERC rules (OAC 3750-20-80), for more information refer to [*Ohio's Hazardous Materials Exercise Evaluation Manual \(HM-EEM\)*](#).

2. State Requirements

- a. ORC Section 3750.02 requires the State of Ohio to develop and annually review this state hazardous materials plan.
- b. At least annually, the SERC and the state agencies that are represented on it shall jointly exercise the state hazardous materials plan in conjunction with the exercise of a local emergency response plan by a local emergency planning committee under section 3750.04 of the Revised Code. After any such exercise, the commission shall review the state plan and make such revisions in it as the commission considers necessary or appropriate. State hazardous materials

exercise evaluations are conducted in accordance with the same SERC rules required by LEPCs.

- c. The State of Ohio is required to develop adequate plans and procedures for nuclear power plant emergency response and exercises in accordance with state and federal laws. Additional details can be found in Tab B of this plan.

II. SITUATION

- A. Hazardous materials or WMD incidents can occur at any time and without notice. Areas affected may be small and localized or large, affecting mass populations, environments and multiple properties. These incidents can occur by accident, by malicious intent, or concurrently with a natural disaster.
- B. Large quantities of hazardous materials are produced, transported, used, and stored in the State of Ohio:
 1. Considerable amounts of hazardous materials are transported through Ohio via interstate highways, railways, pipelines, by air, and by barges (Lake Erie and the Ohio River).
 2. Ohio EPA reports over 7,500 facilities with EHSs or hazardous chemicals.
 3. U.S. EPA reports 410 active and 1,203 archived Superfund sites.
 4. There are four nuclear facilities that could significantly impact Ohio: Perry Nuclear Power Plant in Lake County; Davis-Besse Nuclear Power Station in Ottawa County; Beaver Valley Power Station in Shippingport, PA (approximately four miles east of Columbiana County line in Ohio); and Fermi Nuclear Power Plant in Monroe, MI (several northwest Ohio counties are included in the 50 mile ingestion zone).
 5. Department of Energy (DOE) Portsmouth Facility (Pike County) processes large amounts of extremely hazardous materials and has some nuclear material.
 6. Ohio is impacted by high-level shipments of radioactive material via interstate highways and railways.
 7. Ohio EPA maintains lists of hundreds of commercial hazardous waste management facilities involved in the storage, treatment, and disposal of hazardous materials.
 8. ODNR and Ohio EPA maintain lists of injection wells used to dispose of hazardous materials.

9. ODH BRP issues and maintains a list of radioactive licensees, waste brokers, disposal services and facilities by county.

C. Assumptions

1. All primary, lead, and support agencies are familiar with this emergency support function, know how to activate it, have trained personnel in the types of response needed, and have the capability of protracted operations.

III. CONCEPT OF OPERATIONS

A. Overview

1. Should an incident reach proportions that overwhelm local/county response capabilities, certain procedures must be followed in requesting state assistance. Refer to *The State of Ohio Emergency Operations Plan, Procedures for Requesting State Disaster Assistance*.
2. Some state agencies may individually respond to smaller incidents that do not require the activation of the State Emergency Operations Center (SEOC) to address regulatory concerns. State response forces with legislative authority to respond can be activated at the request of local governments and can deploy pursuant to their statutory guidelines based on reports of releases received through state agency emergency response hotlines.
3. If there is a need coordinate multiple state agencies the SEOC will activate and operate according to the State EOP to coordinate state mission requests, resources, provide technical assistance, and if needed coordinate the request for federal assistance.
4. Ohio EPA is the primary agency assigned to coordinate the state hazardous materials response and recovery effort. Ohio EPA will staff the ESF-10 desk at the SEOC and coordinate with other local, state and federal response agencies to ensure assistance is provided to local agencies.
5. During an incident, lead agencies (depending on the material involved) will coordinate through the ESF-10 desk to accept missions and report on actions taken. Lead agencies still maintain their own authorities and are responsible for developing the appropriate tactics to accomplish the mission.
6. All of the agencies listed in this plan serve as support agencies in response to incidents, regardless of the hazardous material.
7. All primary, lead, and support agencies have developed and will follow their respective agencies' SOPs, guidance, current lists of personnel, telephone rosters, and equipment which will be available during an incident.

8. All responding state agencies work within the Unified Incident Command System at the scene and in the SEOC.
9. State agencies may have mutual aid and/or letters of agreement with other state, federal, and private organizations for additional equipment and personnel. If state agencies cannot process the request, the SEOC will route requests through ESF-7 for procurement or donations, and may utilize the Emergency Management Assistance Compact (EMAC) according to ORC Section 5502.40. If requests are still outstanding, a request for federal assistance will be made.

B. Relationships Between Levels of Government

1. County and Municipal

- a. County and municipal governments are responsible for the safety of persons and property in their respective jurisdictions. Local responders are always the initial responders to hazardous materials incidents. Roles and responsibilities of these forces are identified in county and local EOPs, SOPs, and facility plans.
- b. When municipal and county-level capabilities are not sufficient to address the incident, the chief executive or designee may declare an emergency for their affected jurisdiction.
- c. Local mutual aid requests can be activated, including the use of IMAC, at the request of the Incident Commander. Regional hazardous materials teams can be requested through the activation of the Ohio Fire Response Plan. Requests can be made directly from the Incident Commander, however if the County EOC is open the request should be directed through there.
- d. Requests for state assistance are made through the County EOC to Ohio EMA. One exception is the ONG 52nd Weapons of Mass Destruction Civil Support Team (WMD-CST) can be requested directly from the Incident Commander.

2. State

- a. County EMA Directors contact the SEOC Duty Officer to report incidents and request state assistance. Ohio EMA will direct all requests for resources to the appropriate state agency.
- b. State agencies are often notified and activated under their normal response capabilities and may already be on-scene. Further state response actions will be coordinated with and approved by the appropriate agencies before action is taken.
- c. The Ohio EMA Executive Director is responsible for coordinating all activities of all agencies for emergency management within the state, according to ORC Section

5502.22. If conditions warrant, Ohio EMA will activate the SEOC to provide state coordination of resources and facilitate state agency operations.

- d. Ohio may request assistance or mutual aid from a variety of regional and national response teams which can offer expertise, equipment, and staff during an incident that does not require a presidential declaration.
- e. Requests for federal technical or financial assistance from the U.S. EPA, USCG, or to activate the Regional Response Team (RRT) in accordance with the National Contingency Plan are made through the SEOC ESF-10 desk to OEPA's Division of Environmental Response and Revitalization (DERR).
- f. Requests for direct federal assistance, an Emergency or Major Presidential Disaster Declaration are processed at Ohio EMA for the Governor, who then makes the request to the President, pursuant to the Stafford Act.

3. Federal

- a. Under a presidential emergency or major disaster declaration, the NRF is followed and assistance can be provided through federal ESFs.
- b. Federal response actions, resources, and technical assistance include efforts to detect, identify, contain, cleanup, or dispose of released hazardous materials in support of and in coordination with state and local efforts.
- c. The NRF's Oil and Hazardous Materials Incident Annex addresses oil and hazardous materials pollution; "Spills of National Significance" that are conducted through concurrent implementation of the NRF and the NCP. If radiological materials are involved, the coordination will take place through the NRF ESF #10 and the Nuclear/Radiological Incident Annex.
- d. The federal agencies involved in a hazardous materials response make up the U.S. National Response Team (NRT), an organization of 15 federal departments and agencies responsible for coordinating emergency preparedness and response to oil and hazardous substance pollution incidents. The Environment Protection Agency (EPA) and the U.S. Coast Guard (USCG) serve as Chair and Vice Chair respectively. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the Code of Federal Regulations (40 CFR part 300) outline the role of the NRT and Regional Response Teams (RRTs). Depending on the type and size of the incident the agencies responding can include the following:
 - i. Environmental Protection Agency (USEPA)
 - ii. Department of Agriculture (USDA)
 - iii. Department of Defense (DOD)
 - iv. Department of Energy (DOE)
 - v. Department of Health and Human Services (HHS)

- vi. United States Coast Guard (USCG)
 - vii. Federal Emergency Management Agency (FEMA)
 - viii. Department of the Interior (DOI)
 - ix. Department of Justice (DOJ)
 - x. Department of Labor (DOL)
 - xi. Department of State (DOS)
 - xii. Department of Transportation (DOT)
 - xiii. General Services Administration (GSA)
 - xiv. United States Nuclear Regulatory Commission (U.S. NRC)
 - xv. National Oceanographic & Atmospheric Administration (NOAA)
- e. Federal and State ESFs will establish a direct liaison with each other and will jointly work at the SEOC, Joint Field Office (JFO) and/or at the site of the incident. U.S. EPA and USCG are the normal ESF-10 agencies present at a JFO. Radiological and DOD responses are normally led by U.S. NRC and DOD respectively.

C. Direction and Control

1. Field response direction and control is performed at the on-scene command post, established at the local level, and managed by the Incident Commander. ORC Section 3737.80 states:

“the chief of the fire department in whose jurisdiction the emergency situation is occurring or his designee is responsible for primary coordination of the on-scene activities of all agencies of the state, the United States government, and political subdivisions that are responding to the emergency situation until the chief relinquishes that responsibility to a representative of one of the responding public agencies and so notifies that representative.”
2. Other areas under direction and control of the Incident Commander include the staging area (local and state responder’s staging area for personnel and equipment) and field monitoring team sites.
3. The main objectives of all state agency responders deployed into the field (at the site or in the local EOC) are to act as liaisons to the local responders, provide technical assistance, regulatory advice, compliance assistance, facilitate and direct state and federal assistance resources, and make recommendations on how to mitigate the problem. State responders follow state agency SOPs and Response Action Checklists.

D. Local Notification and Response

1. When a hazardous materials incident occurs, local first responders will receive notification from dispatch and make the initial response to control the situation. Local entities have emergency response plans for dealing with hazardous materials releases and have the means for initial and, in many cases, complete response to hazardous materials incidents.

2. Responders will receive the best direction for response actions from the manufacturer, owner, or operator of the hazardous material. ChemTrec (1-800-424-9300) is also a good reference and is officially recognized by the USDOT as the central emergency information service for transportation of hazardous materials incidents. ChemTrec also notifies the responsible shippers to follow-up and notifies the National Response Center (NRC) of significant incidents.
3. The owner/operator is required to report a release of an extremely hazardous substance, a hazardous substance, or oil in an amount equal to or exceeding the reportable quantity, as required by ORC Section 3750.06 and ORC Chapter 3748 to several sources:
 - a. Local fire department
 - b. LEPC
 - c. Ohio EPA, 1-800-282-9378 (for any unauthorized release of pollutants, oil, chemical incidents, or other wastes)
 - d. ODH, 614-722-7221 (for radiological/biological incidents)
 - e. National Response Center, 1-800-424-8802 (federal requirement)
 - f. U.S. Nuclear Regulatory Commission, 301-816-5100 (for nuclear power plants)
4. Notifications to special facilities such as schools, day care centers, hospitals, nursing homes, etc. are the responsibility of local government.
5. Notifications to other agencies may be required depending on the hazard:
 - a. SFM, 1-800-589-2728
 - b. PUCO, 1-800-642-3443
6. It is the local jurisdiction's responsibility to keep the public advised of the situation. The majority of the public will listen and heed warnings and protective action instructions. County EOPs address emergency public information and warning and Emergency Alert Systems (EAS) in detail.
7. Meteorological information during a hazardous materials incident is crucial for determining response actions. Weather reports can be obtained by portable weather stations on site as well as reports from National Oceanographic & Atmospheric Administration (NOAA), NWS, National Warning System (NAWAS), Federal Aviation Administration (FAA), ODOT's contracted weather service, and Radio Amateur Civil Emergency Service (RACES) weather spotters.
8. Some hazardous materials incidents will be beyond the abilities and/or resources of local responders. Incident Commanders can request mutual aid through the County EOC which can activate to assist in acquiring and managing resources. Some jurisdictions have specific mutual aid agreements with other governmental, non-

governmental and/or private entities. The Intrastate Mutual Aid Compact (IMAC) can be used by any participating political subdivision according to ORC Section 5502.41.

9. The Incident Commander and/or the local EOC can request regional Hazardous Materials Teams by calling the Central Dispatch Center (1-888-822-4900) to activate the Ohio Fire Response Plan. When this plan is activated the SEOC is notified.
10. Any local requests for assistance from state agencies will be processed through the County EMA Director and forwarded to the SEOC.

E. Warning Systems and Emergency Public Notification

1. The initial warning of the public of an impending or actual hazardous materials emergency as well as the dissemination of additional information is the responsibility of local government. For information on state public information refer to the [Ohio Emergency Operations Plan, ESF-15 Emergency Public Information and External Affairs.](#)
2. The State of Ohio has the ability to disseminate warnings to the public and may serve as an alternate or as backup to county EAS. For detailed information on state warning systems consult the [Ohio Emergency Operations Plan, ESF-2 Communications, Tab A Warning Plan, State of Ohio EAS Plan,](#) or one of the twelve [Operational Area EAS Plans.](#)

F. Personal Protection of Citizens

1. Protection of citizens is the primary concern of first responders. The Incident Commander and local elected officials have the final authority and responsibility to implement evacuation decisions.
2. Refer to local EOPs, LEPC hazardous materials plans, and American Red Cross agreements for evacuation, medical support, and shelter information. These plans will take into account local factors such as notification, geography, transportation routes, and resources.
3. Some state agencies and non-governmental agencies may assist local jurisdictions in performing these duties; refer to the [Ohio EOP ESF Annexes](#) for more information.
4. Depending on the incident, sheltering in place and/or evacuation/relocation should be used. The decision will be based upon the specific material that has been released or spilled, its properties, toxicity, the arrival time of the plume, if applicable, and the time required for the endangered populations to evacuate the area.
5. Sheltering in place is often the best way to protect citizens in the area of a hazardous materials incident until the plume passes. If the wind speed causes the plume to move rapidly, nearby populations might not have time to evacuate. Citizens should seal/shut

off all outside air sources (doors, windows, HVAC, dryer vents, etc.) and listen to radio or TV for additional instructions.

6. Evacuation is appropriate if the incident appears to be of a long-term nature, if sheltering in place will not protect the citizens, and if it can be accomplished prior to the plume's arrival.
7. Relocation for a long period of time, or permanently, may be necessary if the incident contaminates the soil, water, food, homes, etc. in the area. Relocation would last until the area is decontaminated or becomes safe due to time delay and re-entry is allowed (see section III. Part O). There are several state and federal agencies that can assist in long-term relocation operations. Refer to the [*State of Ohio Disaster Housing Strategy*](#) for more information.

G. Containment

1. Local hazardous materials teams coordinate the initial containment or prevention of the spread of the released material. Containment methods are incident specific; refer to the standard operating procedures of the responding fire departments, hazardous materials teams, and the responding state agencies.
2. Ohio EPA and USCG (in their area of operation) can provide assistance to local responders regarding response and containment measures for release of pollutants, oil, chemical incidents, or other wastes.
3. ODH can provide assistance to local responders regarding response and containment measures for radiological/biological incidents.

H. Initial Notification of State Response Agencies

1. The initial reporting of an incident to state agencies is typically made by local responders, a private citizen, the owner/operator, etc. Notification can be received by several state agencies: Ohio EPA, ODH, SFM, OSHP, PUCO, or Ohio EMA.
2. The state agency receiving the first notification or discovering the incident will contact the agency having lead responsibility for response based on the type of hazardous material (see page 2). The Ohio EMA Duty Officer is the back-up notification point of contact.
3. Most incidents are resolved through the combination of local and mutual aid resources or with the assistance of the lead state agency.
4. If the response is beyond the capacity/capability of the lead agency, Ohio EMA shall be notified to coordinate assistance and resources from additional state agencies.

5. If two or more state agencies are involved, joint assessment of the problem and identification of the state actions required should be conducted. The SEOC may be activated to facilitate this state coordination. Notification of SEOC activation procedures is outlined in the *Ohio EOC Concept of Operations Plan*.

I. State Response Personnel Safety

1. Agencies that respond to hazardous materials incidents have SOPs in which responders are trained. These SOPs are kept on file at respective agency offices, and should be consulted for agency specific worker protection and guidelines. Response to incidents, methods of protection, and actions taken are dependent on the material involved and incident variables.
2. Hazardous materials SOPs should address the following topics: entering and leaving the scene, accounting for personnel, safety and health equipment, and decontamination.
3. Exposure limits are listed in SOPs for each local and state responding agency.
 - a. In cases where no established limit exists, the SEOC ESF-5 Information and Planning Section will consult with the manufacturer and other references to set limits for specific operations.
 - b. For radiological incidents, ODH sets exposure limits for radiation workers and the general population as authorized by ORC Section 3748.04.
 - c. For chemical incidents, Threshold Limit Values (TLV) and exposure limits have been established and set by several agencies.
 - d. Emergency Response Planning Guides (ERPG) estimate what physical reactions the public will have to chemical exposure. The scale ranges from ERPG1 (detectable, temporary mild effects) to ERPG3 (severe effects, not life threatening). The ERPG should serve as a planning tool and not a standard to protect the public, as there is no safety factor built in and it doesn't account for hypersensitive individuals.
 - e. Another listed limit that is important is the Immediately Dangerous to Life and Health (IDLH) limit value. IDLHs are listed in several documents: NIOSH pocket guide, USEPA chemical profiles, Material Safety Data Sheets (MSDS) available from industry, and the CAMEO database.

J. State Emergency Operations Center

1. If the Ohio EMA Director activates the SEOC, it will operate according to the [*EOP Base Plan*](#) to coordinate state resources, request federal assistance, and provide

technical assistance. The SEOC activation can range from activation of the ESF-5 Information and Planning Section only to a full activation of all state ESFs (CAS 1-3).

2. The SEOC may not activate if responders only require specialized assistance available through a federal agency. Prior to notifying any federal agency for radiological incidents, the ODH Bureau of Radiation Protection must be contacted.
3. When the SEOC is activated, the SEOC ESF-5 Information and Planning Section can activate Hazard Specific Experts as part of the Situation/Status Branch, or for nuclear power plant incidents activate the Radiological Assessment Branch, to use data from the field to provide technical analysis and assistance to local jurisdictions. Assessment experts can provide assistance when requested to:
 - a. Track meteorological conditions
 - b. Project hazardous materials concentrations using atmospheric dispersion/plume models (e.g. ALOHA, RASCAL, HOTSPOT)
 - c. Recommend protective actions (i.e. evacuations or shelter-in-place)
 - d. Project dose, dose rates, and exposure rates
 - e. Estimate off-site consequences
 - f. Project the environmental impact
 - g. Assess resources required from federal or private industry
 - h. Advise on various transportation closures (air, rail, water, road)
 - i. Evaluate, develop guidance, and provide technical review of remediation, disposal, recovery, and re-entry plans
4. The ESF-5 Information and Planning Section will provide protective action recommendations to the County EOC for Incident Command and local officials if needed. Communications may also be transmitted to the County EOC via the Executive Group, if activated. Local representatives have the final decision concerning safety within their jurisdiction and can modify or reject state recommendations during the evacuation phase.
5. State Agencies can issue advisories to the public to recommend actions to reduce the potential for harm. In some circumstances state agencies can also issue embargoes or orders under their agencies' authority to halt specific actions in the hazard area to prevent harm to the public. Embargoes must be followed and will be enforced.
6. The Ingestion Zone Re-entry and Return Advisory Group (IZRRAG) activates during nuclear power plant incidents to advise the Executive Group on matters relating to

control of deposited radioactive material. IZRRAG works with the ESF-5 Information and Planning Section to determine areas where the public may or may not reside and where food may or may not be harvested, ingested, or sold.

K. State Hazardous Materials Resources and Capabilities

1. Each state agency with legislative authority for hazardous materials maintains a list of resources available and SOPs for activation and deployment of personnel, equipment, and supplies for response operations at its own discretion. When the SEOC is activated, Ohio EMA is the state coordinating agency for mission requests from the County EOCs.
2. Many state agencies maintain lists of and agreements with contractors who have expertise in hazardous materials operations, personnel, specialized equipment, and laboratory services. These lists are kept on file in respective agency offices.
3. Additional experts and equipment can be accessed through organizations such as ChemTrec, the Ohio Chemistry Technology Council, the American Chemical Council, the Great Lakes Spills Cooperative, the Petroleum Council, the Conference of Radiation Control Program Directors, and the Centers for Disease Control and Prevention (CDC).
4. State Hazardous Materials Response Teams
 - a. Ohio EPA On-Scene Coordinators (OSCs) provide technical assistance to the local Incident Commander and oversight of cleanup activities which are the responsibility of the owner/operator. An OSC may also report to the county EOC to assist in the coordination of field activities. An OSC:
 - i. Investigates a release to determine the source and impacts
 - ii. Initiates, directs, or makes recommendations on spill containment
 - iii. Coordinates monitoring of contamination/pollution during an incident, including plume modeling
 - iv. Provides advice on acceptable cleanup levels based on potential health effects and environmental regulation
 - v. Provides guidance for disposal of hazardous materials
 - vi. Completes a detailed report on the investigation and response for the incident
 - b. Ohio EPA Evidence Response Team (ERT) provides support to lead agencies in the processing of a WMD crime scene to secure evidence and assess environmental impacts as a result of the incident. This includes entry into hazardous environments (hot zone) with the appropriate level of PPE.
 - c. Ohio EPA Radiation Assessment Team (RAT) provides sampling of soil, forage (ground cover), snow, drinking water, and surface water.

- d. ODH Bureau of Radiation Protection (BRP) has a 24 hour radiological emergency response capability and has incident response procedures for radiological incidents. BRP will respond to requests from local incident commanders to make recommendations for effective control of radiation and radioactive materials. The BRP maintains a dedicated incident response vehicle containing a variety of protective equipment, instrumentation, and equipment for the localization, identification, quantification, isolation, and recovery of radioactive sources and contaminants.
 - e. The ONG Homeland Response Force (HRF) responds to a CBRNE incident and supports local, state, and federal agencies by managing the consequences of an event by providing capabilities to conduct casualty search and extraction, medical triage, decontamination, and internal force protection in order to save lives, mitigate human suffering, and prepare for follow-on forces in support of Civil Authorities. A Governor's Declaration is needed to deploy State Active Duty or Title 32 Forces.
 - f. The ONG CBRNE Enhanced Response Force Package (CERFP) supports the Incident Commander by providing capabilities for search and rescue, decontamination, and medical triage/stabilization.
 - g. The ONG 52nd Weapons of Mass Destruction Civil Support Team (WMD-CST) can provide support to civil authorities through the Incident Commander at a CBRNE site when the incident is beyond the capabilities of the local response agencies and supporting hazardous materials tier teams through mutual aid. Support includes:
 - i. Presumptively identifying unknown CBRNE agents/substances
 - ii. Assessing current and projected consequences
 - iii. Advising on response measures
 - iv. Assisting with appropriate requests for state support
 - v. Providing communications assets
 - vi. Providing modeling assets
 - h. The SFM Forensic Lab and Fire and Explosion Investigation Bureau can provide on-site detection, identification, and collection of explosives and incendiary agents. This is achieved by the use of field portable explosive detectors and an explosive detection canine team. In addition, follow up forensic analysis can be conducted in a laboratory setting.
- L. Federal Hazardous Materials Response Teams
- 1. When state resources are exhausted the state can request personnel and equipment from federal agencies such as U.S. EPA, DOE, DOD, and the Region V RRT.

Depending on the request, some federal agencies do not need a Presidential Declaration and can provide direct federal assistance under their own authorities.

2. U.S. Environmental Protection Agency (U.S. EPA):
 - a. U.S. EPA Region V provides technical assistance and On-Scene Coordination including emergency response in the form of air and water quality monitoring, soil monitoring, site assessment, and drum over-packing. U.S. EPA will respond to most emergencies if requested by the state or a federal agency. Ohio EPA and U.S. EPA coordinate on any emergency response in Ohio.
 - i. Environmental Response Team (ERT) is a group of EPA technical experts who provide:
 - Around-the-clock assistance at the scene of hazardous substance releases
 - Expertise in such areas as treatment, biology, chemistry, hydrology, geology, and engineering
 - Support to the full range of emergency response actions, including unusual or complex emergency incidents
 - Special equipment and experienced responders and can provide the OSC or lead responder with experience and advice.
 - ii. Radiological Emergency Response Team (RERT) coordinates or assists federal, state, tribal, and local response efforts before, during, and following a radiological incident by providing support in various forms:
 - Technical advice and assistance to prevent or minimize threats to public health and the environment.
 - Advice on protective measures to ensure public health and safety.
 - Assessments of any release for dose and impact to public health and the environment.
 - Monitoring, sampling, laboratory analyses and data assessments to assess and characterize environmental impact. Staff from EPA's National Air and Radiation Environmental Laboratory and its Radiation and Indoor Environments National Laboratory provides monitoring and assessment services both at the labs and at the response site, if needed.
 - Technical advice and assistance for containment, cleanup, restoration, and recovery following a radiological incident.
 - iii. National Decontamination Team (NDT) – NDT provides scientific support and technical expertise for decontamination of buildings, building contents, public infrastructure, agriculture, and associated environmental media. Specialized resources include:
 - Expertise, such as biochemistry, microbiology and medicine, health physics, toxicology, HVAC engineering, and industrial hygiene

- Airborne Spectral Photometric Environmental Collection (ASPECT)
 - NDT Mobile Communications
 - Portable High Throughput Integrated Laboratory Identification (PHILIS)
 - Hazardous Environment Robotic Observer (HERO)
 - Radiation Task Force Leader (RTFL)
 - Decontamination Portfolio
 - Equipment Module
- iv. National Counter-Terrorism Evidence Response Team (NCTER) Composed of investigative and scientific personnel to provide investigative, scientific, and forensic technical advice, assistance, and other threat assessment in support of responders.
3. U.S. Coast Guard (USCG) – USCG responds to incidents on navigable waterways and can also respond to land-based spills in the coastal zone. Generally, the source of the spill and the physical location of the release determine whether the U.S. EPA or the USCG has the federal lead. USCG will have the lead in all releases originating from vessels.
- a. The USCG is a Federal OSC and can supply limited personnel and equipment for incidents within its boundaries involving port or vessel related losses. The USCG primary mission is to monitor and direct cleanup operations. The responsible party will normally fund response activities and personnel/contractors. OSCs can access funds from the Oil Spill Liability Trust Fund or CERCLA if the responsible party is not identified or is not responsive.
- b. The 9th USCG District offices are located in Cleveland, Ohio. USCG Marine Safety Units Toledo and Cleveland, under the direction of USCG Sectors Detroit and Buffalo respectively, respond to spills in navigable waterways within the Area of Responsibility (AOR), including streams/creeks that drain into navigable waterways that ultimately drain to Lake Erie. The USCG will also assist the U.S. EPA on inland responses if there is a potential for a release to a navigable waterway or if assistance is requested.
- c. The 8th USCG District operates in and can respond to hazardous materials incidents on in-land navigable waterways and the Ohio River within Ohio's borders.
- d. The 9th and 2nd Districts have agreements with the Ohio EPA covering the response to hazardous materials incidents on all Ohio waterways.
- e. USCG and EPA OSCs can request assistance from the USCG National Strike Force, Atlantic Strike Team, to provide personnel and specialized equipment for response to oil pollution and hazardous substance release incidents, including incident command/response management support.

4. U.S. Department of Energy (DOE) – DOE is the OSC at all DOE-owned facilities. The only remaining DOE facility in Ohio is the Portsmouth Gaseous Diffusion Plant. Detailed information on this site is contained in the DOE Annex (Tab A). DOE has the following resources available to respond, regardless of the location of the incident:
 - a. The National Nuclear Security Administration (NNSA) has scientists, engineers, and technicians with experience in managing the nation’s nuclear weapons program. DOE/NNSA responds immediately to any type of radiological accident or incident, anywhere in the world, with the following seven radiological emergency response assets:
 - i. Aerial Monitoring System (AMS) uses helicopter and fixed wing aircraft to detect, measure, track, and produce maps of radiation exposure and concentration of radioactive material at an emergency in support of ground monitoring teams.
 - ii. Atmospheric Release Advisory Capability (ARAC) develops timely, accurate, realistic, and predictive plots or maps generated by sophisticated computer models of potential radiation dose and exposure assessments and estimates of the path of nuclear contaminants released into the atmosphere.
 - iii. Accident Response Group (ARG) is deployed to manage or support the successful resolution of a U.S. nuclear weapons accident anywhere in the world.
 - iv. Federal Radiological Monitoring and Assessment Center (FRMAC) coordinates and manages all federal radiological monitoring and assessment activities during major radiological emergencies within the United States in support of state, local, and tribal governments through the Lead Federal Agency (LFA).
 - v. Nuclear Emergency Support Team (NEST) provides the nation’s specialized technical expertise to the federal response in resolving nuclear/radiological terrorist incidents. Technical support includes: search teams, bomb identification, diagnostic teams, disabling teams, public information, technical assistance, and accident assessment teams.
 - vi. Radiological Assistance Program (RAP) provides a flexible, around-the-clock response capability to federal agencies, state, tribal, and local governments, and to private businesses or individuals for incidents involving radioactive materials. RAP’s support ranges from giving technical information or advice over the phone to sending highly trained people and state-of-the-art equipment to the accident site to help identify and minimize any radiological hazards.
 - vii. Radiation Emergency Assistance Center/Training Site (REAC/TS) maintains an around-the-clock response center to provide treatment and medical consultation for injuries resulting from radiation exposure and contamination. REAC/TS can also provide direct support including deployable equipment and personnel trained and experienced in the treatment of radiation exposure to assist federal, state, tribal, and local organizations.

5. U.S. Department of Defense (DOD):

- a. When directed by the Secretary of Defense, United States Northern Command (USNORTHCOM) conducts CBRN response operations within the domestic portion of the USNORTHCOM area of responsibility to support civil authorities in response to CBRN incidents in order to save lives and minimize human suffering. National Guard and Title 10 responses are fully integrated through supporting plans and effective training, exercises, and coordination.
- b. Capabilities include search and extraction, decontamination, emergency medical care, medical evacuation and evacuation of contaminated areas to established shelters.
- c. DOD CBRN Response Enterprise Units
 - i. The Defense CBRN Response Force (DCRF) includes approximately 5,200 personnel sourced primarily from the active component. The DCRG responds in two separate force packages that are ready to deploy within 24 and 48 hours from notification respectively. The DCRF capabilities include:
 - CBRN incident assessment
 - Search and rescue (level 2 technician trained)
 - Decontamination of DOD personnel and equipment
 - Evacuee and casualty decontamination
 - First responder and emergency equipment decontamination
 - Emergency medical care
 - Level II medical care (patient triage, along with trauma and emergency medical care)
 - Patient holding, ground and rotary-wing air patient movement (MEDEVAC and CASEVAC)
 - Level III medical care (surgical and intensive care)
 - Force health protection measures
 - Military personnel and equipment operational security
 - Site accessibility horizontal engineering
 - Logistics
 - General purpose support to enhance lifesaving and reduce human suffering
 - Command and Control (C2) aviation lift
 - Mortuary affairs
 - Transportation
 - ii. Command and Control CBRN Response Elements Alpha and Bravo (C2CRE A and B) includes approximately 1,500 personnel each, sourced from the active and reserve components, and is prepared to deploy no later than 96 hours after notification. Dedicated C2CRE capabilities include:
 - CBRN assessment

- Search and rescue
 - Casualty decontamination
 - Emergency medical
 - Level II medical
 - Security
 - Engineering
 - Command and Control (C2)
 - Logistics
 - Transportation
- d. These forces can only be deployed under Title 10 Active Duty which requires a FEMA Presidential Declaration. Forces are requested via normal mission assignment requests from the State, through FEMA, to DOD USNORTHCOM and require approval from the Secretary of Defense.
6. Regional FBI Hazardous Material Response Teams (HMRT) are directed to respond to criminal and terrorist acts and incidents that involve hazardous materials. If the crime scene is part of an FBI investigation, the Hazardous Materials Response Team Unit (HMRTU) in Fredericksburg, VA will direct crime scene and evidence related operations through the local FBI Division and HMRT in coordination with Unified Command. The team provides on-scene hazardous materials crime scene direction, technical, safety, and scientific expertise.
7. Department of Homeland Security Interagency Modeling and Atmospheric Assessment Center (IMAAC) provides plume modeling products, analysis, and interpretation to emergency responders and decision makers at the local, state, and federal levels for real-world emergencies involving significant biological, chemical, radiological/nuclear, and natural atmospheric releases that exceed local response capabilities. IMAAC is located at the DOE National Atmospheric Release Advisory Center (NARAC) and coordinates modeling from seven federal departments and agencies (DOE, DOD, HHS, NOAA, EPA, NASA, and U.S. NRC). IMAAC experts can be activated from any level of government and is available 24/7 (Phone: 925-424-6465).
8. U.S. Department of Transportation operates the Railroad Safety Board and the National Transportation Safety Board; both investigate the causes of transportation accidents. The agency has no response role other than post-incident investigations.
9. Region V Regional Response Team (RRT) provides support during very large releases or during releases that cross state or international boundaries.
- a. The RRT is composed of federal agencies as well as a representative from each of the FEMA Region V States (Ohio EPA is the State of Ohio representative on the RRT).
 - b. The Region V RRT is co-chaired by the USCG Ninth District and US EPA Region V, either of which may provide a Federal On-Scene Coordinator (FOSC) to an incidents

- c. The RRT can provide a State OSC with assistance in the form of technical advice, equipment, personnel, funds, and coordination.
 - d. The RRT coordinates assistance and advice to the FOSC and/or the Remedial Project Manager during response actions.
 - e. For detailed information on the RRT, its member agencies, activation of the RRT, or Ohio's relationship and responsibilities refer to the *Regional Contingency Plan*, sections II (Notification & Reporting) and IV (Responsibilities).
10. U.S. National Response Team (NRT) is an organization of 15 federal departments and agencies responsible for coordinating emergency preparedness and response to oil and hazardous substance pollution incidents.
- a. The Environment Protection Agency (EPA) and the U.S. Coast Guard (USCG) serve as Chair and Vice Chair respectively.
 - b. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the Code of Federal Regulations (40 CFR part 300) outline the role of the NRT and Regional Response Teams (RRTs).
 - c. The response teams are also cited in various federal statutes, including Superfund Amendments and Reauthorization Act (SARA) – Title III and the Hazardous Materials Transportation Act [HMTA].

M. Monitoring, Sampling, and Assessment

1. Local responders and hazardous materials teams can be assisted by state agencies to detect and evaluate hazards and provide an incident assessment based on the potential health effects of the material. This information determines the response taken by the hazardous materials response teams.
2. The State's role in advising and assisting in monitoring, sampling, and assessment is to gather and furnish information for response assessment and material disposal to the facility, local, state, or federal responders. State personnel work in coordination with the SEOC ESF-5 Information and Planning Section to provide:
 - a. Hazardous materials response teams
 - b. Monitoring and sampling
 - c. Sample analysis evaluation
 - d. Dose/concentration exposure and rate projections

3. State Field Monitoring Teams or Radiation Monitoring Teams collect data to help define hazardous material movement and concentrations, validate model dose/exposure projections, and verify the basis for protective action recommendations.
4. Each Field Monitoring Team is composed of a mixture of trained staff from various state agencies. With the exception of Ohio EPA and specific ONG forces, state agencies are not trained or equipped with the appropriate PPE to make entry into an area where the source is unknown.
5. Field Monitoring Teams set up at sites in the most advantageous locations possible to collect samples and information to pass along to the SEOC ESF-5 Information and Planning Section.
6. Hazardous materials sampling instruments are available for air (Ohio EPA and ODH BRP), water and soil (Ohio EPA, ODNR and ODH BRP), vegetation (ODA, Ohio EPA and ODH BRP), and fish and wildlife (ODNR). Environmental sampling is incident specific and is accomplished as per respective agency SOPs. Field analysis of water, air, and hazardous substances is limited.
7. Several state agencies have in-house or contracted laboratories to provide analytical information on samples:
 - a. ODA- In-house analytical testing capabilities for chemical and biological agents in food (authorized by FDA and USDA/FSIS); analytical testing capabilities for biological agents in food-producing and other animals (authorized by USDA/APHIS).
 - b. Ohio EPA- In-house and contracted
 - c. ODH- In-house radiological and biological analysis laboratory
 - d. SFM- the in-house SFM Forensic Lab conducts forensic examinations on evidence from fires, explosions, hazardous materials incidents, and other criminal activity. This includes pre-blast, post-blast, and explosives manufacturing incidents including traditional explosives and Homemade/Improvised explosives.
 - e. OSHA On-Site Consultation Program – uses the Wisconsin Occupational Health Laboratory.
8. The Ohio EPA On-Scene Coordinator (OSC) can provide field monitoring/sampling information to the Incident Commander. ODH personnel can provide monitoring/sampling information on radiological contamination.

9. Monitoring and sampling results are applied to dose/concentration projections to determine response and protective action recommendations which are immediately forwarded to the affected jurisdictions' Incident Commands/EOCs. The SEOC ESF-5 Information and Planning Section can make initial and long-term protective action recommendations based on this information.
10. For incidents affecting the Ohio River, Ohio EPA OSCs work in conjunction with the Ohio River Sanitation Commission (ORSANCO) in evaluating spill impact. ORSANCO maintains a network of automated gas chromatographs strategically placed at water utilities in the Ohio River valley basin to provide real-time monitoring for source water contamination caused by volatile organic compounds. ORSANCO can also provide downstream projections based on complex hydrologic modeling.
11. The on-scene field staff (local and state) will continue monitoring the air, water, soil, and animals to determine if the situation is intensifying or dissipating and the level of contamination. The ESF-5 Information and Planning Section can make protective action recommendations on contaminants and when to allow the repatriation of evacuees.
12. After sheltering/evacuation recommendations are lifted, there may still be restrictions on food, water, operating in contaminated areas, etc.

N. Water and Food Evaluation and Restrictions

1. If water, food, livestock or agriculture is contaminated in a hazardous materials incident, state agencies assist in the damage assessment, sampling, monitoring, evaluation, and control of these items.

Water

Local Water District
 ODH/Local Health Depts. (private wells)
 Ohio EPA (public, groundwater, streams)
 ODNR (public waterways when requested)
 ODA (bottled water and manufacturers)

Livestock/Agriculture

ODA
 Local Veterinarians
 ODNR (wildlife)
 ODNR (fish, public waterway)

Food

ODA/ODH
 Local Health Depts.

2. Assessment and sampling are done initially to determine if protective actions must be implemented to provide uncontaminated food within the affected area. All warnings, instructions, and/or restrictions in the use or consumption of food and water will be relayed to the public through the EAS, the media, health advisories, and/or other established means.
3. Evaluation of food, processing, and distribution on the state level is accomplished by ODA. Food control is accomplished by ODA, with assistance from local health departments.
4. ODH provides technical and field assistance to local health departments in evaluating food service operations (restaurants). ODA provides technical and field assistance to local health departments in evaluating Retail Food Establishments (grocery stores).

5. ODA samples and evaluates livestock, poultry, crops, food, food ingredients, milk, and milk products for contamination.
6. ODNR will sample fish and wildlife and send samples to a lab for analysis. ODNR will issue advisories as needed to warn the public.
7. If field samples are found to exceed the compliance guidelines set by the US Department of Agriculture (USDA), Food & Drug Administration (FDA), or ODA, control actions may be issued to prevent contaminated food from being consumed or entering the market. Follow up monitoring and collections will continue until the threat has diminished.
8. ODH Public Health Lab handles samples collected for the purpose of analyzing for radioactive material. Samples may also be sent to an outside, accredited laboratory.
9. ODA, in coordination with ODH, will issue health advisories for all food products and food ingredients, including but not limited to Grade A and B milk, meat, poultry, fruits, vegetables, and processed foods for safety in human consumption.
10. Water regulation and restriction is performed by ODH, Ohio EPA, and ODNR with coordination from local level response and water utility personnel. Water restrictions include private water systems, ground water, public water supplies, and public waterways recreational activity.
11. Ohio EPA implements state and federal safe drinking water standards. In conjunction with public water supply utilities and ODH, Ohio EPA will sample and/or monitor drinking and ground water as necessary and coordinate the use of health advisories warning of contamination or restrictions on water use when appropriate.
12. The Bureau of Environmental Health (ODH) is responsible for certifying the effectiveness of local health departments' private water programs. They may consult with local health departments to assist in abatement of water related public health hazards and with Ohio EPA regarding results of non-radiological contamination and pollutants following an incident. ODH will also conduct private water system sampling in coordination with Ohio EPA or with ODH Bureau of Radiological Protection in the event of a radiological release.
13. ODNR's Divisions of Soil and Water Resources (SWR) can provide data of mapped aquifers and model vulnerability of contamination. SWR also has locations of water wells and many geologic and hydraulic GIS layers.

O. Re-entry

1. Re-entry is allowing the public to return to the recently endangered area to continue normal daily activities. Once safe levels have been attained, the Incident Commander will make the determination on removing protective actions and allowing re-entry.
2. State agencies (Ohio EPA, ODH, ODA, ODNR) can provide technical assistance through monitoring and sampling to determine if a health or environmental hazard continues to exist, and what types/level of activities could be conducted upon re-entry. Private cleanup contractors and federal agencies also have the equipment and expertise to assist in this determination.
3. A determination for re-entry is based upon the acceptable residual levels of the released material in the air, water, vegetation, and soil as established in statute, by rule, or through risk assessment.
4. The public will be informed when areas are opened for re-entry in the same ways they were warned to leave: sirens, emergency alert systems (EAS), media, etc. State agencies can make recommendations on how to best implement re-entry and assist with operations (similar to those used for evacuation) such as warning, traffic control, transportation assistance, etc.

P. Decontamination

1. State agencies may conduct decontamination for their own specialized teams or they may rely on local fire/hazardous materials teams or cleanup contractors to decontaminate state personnel and equipment (methods are based on local and state agency SOPs).
2. The ONG, CERFP has the capability to conduct decontamination site selection, establish and conduct patient accountability log-in and log-out procedures, conduct clothing removal, and provide ambulatory and non-ambulatory patient decontamination.
3. Medical facilities, such as hospitals, have varying degrees of decontamination equipment and SOPs that address treatment for hazardous materials exposures. Some hospitals do not accept hazardous materials victims until they go through gross decontamination.
4. The inspection, inventory, decontamination, replacement, and return of equipment to field operation are the responsibility of each individual state agency. Equipment involved in a radiological event is subject to the review by ODH BRP.
5. For radiological incidents, ODH Bureau of Radiation Protection coordinates:
 - a. Radiological decontamination and population monitoring efforts;

- b. All personnel and equipment radiological decontamination efforts;
- c. Tracking and control of radiologically contaminated equipment, materials, tools, and vehicles;
- d. Tracking and control of radiological waste;
- e. Review and evaluation of all equipment, materials, tools, and vehicles released from radiologically contaminated areas.

Q. Cleanup, Restoration, and Disposal

1. Cleanup is the act of physically eliminating, removing, and/or disposing of the residue or the actual spilled material. Cleanup operations are incident specific and are the responsibility of the owner/operator. A list of environmental cleanup contractors is available through Ohio EPA.
2. State agencies oversee the cleanup operations and provide technical assistance to the owner/operator or contractor and usually do not get involved in the actual "hands-on" work. State agencies have lists of approved storage or disposal sites according to applicable state and federal regulations. ODH has a list of approved radioactive waste brokers both in Ohio and in the United States.
3. Ohio EPA and/or ODH may review the work plan for remediation and cleanup based on protective health guidelines, risk assessment, or other applicable requirements.
4. Restoration of the contaminated area to its original state or acceptable level of contamination could range from very minor (strictly cleaning up the debris) to extremely extensive- which may take years (i.e. replacing contaminated soil, replanting trees and flora, replacing fish and wildlife populations). State agencies provide regulatory oversight of the owner/operator and contractors. Some state agencies could assist in the operations.
5. Contaminated debris related to the incident must be separated from non-contaminated debris and sent to a special site for disposal. The [Ohio EOP ESF-3, Tab A, Debris Management Plan](#) for further details.
6. Ohio EPA and ODNR will provide support and coordination of agencies or organizations participating in the cleanup of affected wildlife. ODNR can assist local officials in determining the extent of impact on wildlife and the actions to be taken, depending on the species and hazardous material. ODNR will coordinate with U.S. Fish and Wildlife.

7. Post-incident accident surveying and continued confirmatory sampling/monitoring of the air, water, and soil would be based on the recommendations of the Ohio EPA, ODH, ODA and/or ODNR.

R. Documentation & Investigative Follow-Up

1. Documentation includes the recording of information during and after an incident from each involved agency, including all of the pertinent actions and resources used, from notification to the close-out of incident operations. Methods of documentation, whether they are individual logs, team logs, field reports or specific formal reports, are specific to each responding agency; refer to the individual agency's SOPs.
2. Investigative follow-up is performed at the scene by state and federal agencies to determine the circumstances prior to and the actual cause of the incident. Some incidents require no investigation as the causes are apparent. State agencies potentially involved in the investigation include: Ohio EPA, SFM, ODA, ODH, ODNR, Ohio EMA (for purposes of a response evaluation and critique), PUCO, OSHP, and ODOT. Federal agencies involved also include: the FAA for incidents involving air transportation, the Federal Railroad Administration, the National Transportation Safety Board for all modes of transportation accidents, the U.S. Nuclear Regulatory Commission and U.S. DOE for radiological incidents, the Department of Defense concerning military incidents, U.S. EPA, USCG, U.S. DOT, U.S. CDC, the Chemical Safety Board, and the Bureau of Explosives.
3. At the end of an incident the local responders and state agencies, if involved, will be asked to critique and report on the overall emergency operations to the lead responding agency. Documented reports and investigative follow-up reports are to be consolidated into a final incident report of recommendations, distributed to all participating agencies, and kept on file for future reference. A copy will also be sent to the Governor, if appropriate.
4. Documentation and investigative follow-up may be used to monitor for long term health effects, for state agencies to take legal actions against the owner/operator if they are negligent or violating safety laws, and for recovery of response costs.

S. Cost Recovery

1. State agencies can seek recovery of costs from the responsible owner/operator according to ORC Sections 3745.12-13.

T. Training

1. All state agency personnel who deal with hazardous materials incidents during any phase of the operation (mitigation, preparedness, response, or recovery) should obtain initial (Awareness Level) and advanced training (Operations, Technician, Specialist, or On-Scene Incident Commander Levels) appropriate for their role in order to meet the

requirements of OSHA 1910.120 (HAZWOPER) pursuant to state law (RC/AC 4167). All state agency personnel also complete the appropriate NIMS/ICS training required for their position.

U. Transportation of certain Radioactive/Nuclear Materials Shipments

1. Ohio is impacted by high-level and enhanced-security shipments of radioactive/nuclear waste that are transported by highway and rail. These shipments originate from DOE sites, U.S. NRC sites, or commercial facilities. Special federal and state regulations apply to these shipments and require state regulatory and emergency preparedness efforts on the part of certain state agencies.
2. Periodically, DOE may have a group of shipments that travel through Ohio. These shipment campaigns may involve DOE funding for preparedness efforts and individual shipment tracking.

IV. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

A. Organization

1. The direction and control of state response agencies is dependent upon the magnitude of the particular incident. Small incidents may be directed and controlled at the scene of the incident. Large scale/major incident response that involves multiple state agencies requires a greater degree of coordination. Agencies will be activated by Ohio EMA for assessment, response, and recovery operations at the SEOC if needed.
2. Ohio EPA is the primary state agency that coordinates state support for hazardous materials incident response and remediation. Responsibilities include manning the ESF-10 desk, coordinating ESF-10 activities and support agencies in the SEOC, tracking missions, conducting briefings and writing reports. Where possible, the ESF-10 agency will defer to the lead agency for specific brief outs and reports for mission details.

B. Assignment of Responsibility

1. Lead Agencies

- a. The Ohio EPA, ODH, and SFM have legal responsibility to be the initial responding state agencies during hazardous materials incidents according to each agency's enabling legislation, as found in the Ohio Revised Code.
- b. These three lead agencies will provide personnel, technical advice/assistance, and equipment to the incident site command post, off-site command post, staging area, mass care shelters, County EOC, SEOC, or other locations as needed.

- c. These agencies are capable of sustaining continuous 24-hour operations in the role of protective operations, either in the EOCs or the field. These agencies are notified of the situation following their agencies notification SOPs. Specific roles and responsibilities for each agency are outlined in the following pages.

2. Ohio Environmental Protection Agency (Ohio EPA)

- a. Ohio EPA's lead response function in a chemical hazardous materials incident is to support local response efforts and provide technical assistance to abate water, land and air pollution, protect human health and ensure the safety of public waters, and drinking water supplies. Ohio EPA also provides technical assistance on the management and disposal of solid, infectious, and hazardous wastes.
- b. Ohio EPA is designated under ORC Section 3750.06 to receive notification of oil and hazardous substances releases to the environment from facilities and transporters. The Division of Environmental Response and Revitalization (DERR) provides notification to other state agencies, as necessary.
- c. ORC Chapters 3704, 3734, 3745, 3750, and 6111 provide the legal authority for the Ohio EPA's actions.
- d. Ohio EPA has developed, maintained, and trained to internal SOPs, guidance, lists of personnel, telephone rosters, and equipment which will be available and used during an incident.
- e. As the lead agency for chemical incidents, Ohio EPA will report to the SEOC. A team of personnel may also be called to the SEOC to support operations. Members of this team may include the following:
 - i. Emergency Response Section Manager
 - ii. Emergency Response Supervisor
 - iii. Ohio EPA Duty Officers
 - iv. Radiological Health Physicist
 - v. Public Drinking Water or Solid Waste Support Staff
 - vi. Other Agency Representatives as the situation dictates
- f. SEOC response involves:
 - i. Acting as the lead agency during chemical hazardous materials incidents.
 - ii. Supporting other state agencies, to provide advice, monitoring, and coordination of the removal, neutralization, and/or disposal of hazardous materials from the incident scene in compliance with appropriate laws and regulations.
 - iii. Providing a representative to ESF-5 Information and Planning to perform chemical dose projection and other assessment functions.
 - iv. Acting as a liaison with U.S. EPA, USCG, and the Regional Response Team (RRT) in the SEOC or in the field. If the state requires additional technical assistance or the incident will exceed the state's financial limitations, the state,

through OEPA's Division of Environmental Response and Revitalization, may request assistance from the U.S. EPA, USCG, and RRT.

- v. Requesting activation of a Regional Response Team in accordance with the National Contingency Plan.
 - vi. Report results of assessments and incident information from the field to the SEOC.
 - vii. For chemical waste, acting as the lead agency for regulation of hazardous waste management (except for transportation registration and regulation).
 - viii. For chemical waste and/or other contaminated materials, advising the counties of the selection of debris disposal sites as it relates to environmental protection.
 - ix. Assisting the counties in obtaining federal assistance for the restoration of damaged public facilities and property.
 - x. Directing and monitoring the decontamination of public waterways and potable water facilities in anticipation of and during an incident.
 - Testing of public drinking water is coordinated between Ohio EPA and the local public water utility to ascertain the water's safety for consumption. The water utility is responsible for notifying the public of any water use restrictions.
- g. Field response involves:
- i. Ohio EPA On-Scene Coordinators (OSCs) respond to hazardous materials incidents to investigate and assess the source and extent of pollution, and evaluate or initiate containment measures. The OSC provides technical assistance to the local Incident Commander and provides direction to the owner/operator that is responsible for cleanup.
 - ii. Ohio EPA may also dispatch additional field responders to:
 - Assess the impact of a release and evaluate cleanup alternatives.
 - Take environmental sampling of soil, water, and vegetation and provide analysis through contracted and in-house laboratories.
 - Conduct environmental sampling and analysis in accordance with guidance and protocol for evidence collection and preservation.
 - Report results of assessments and incident information to the SEOC.
 - Liaison with County EOCs and federal responders.
 - Provide technical assistance and support on management and disposal of debris, as well as infectious and solid waste.
 - Provide technical assistance and support to local water treatment facilities to protect water supplies.
- h. For radiological incidents, Ohio EPA assists ODH with assessment by conducting environmental sampling of soil, water, and vegetation to quantify the level of radioactive contamination.
- i. Restoration: Ohio EPA's role in restoration activities in response to a hazardous materials incident is related to cleanup. This involves coordinating the removal,

neutralization, and proper disposal of hazardous and contaminated materials from the incident scene.

3. Ohio Department of Health (ODH)

- a. As the lead agency for nuclear, radiological or biological incidents, ODH will report to the SEOC to provide technical coordination of state agencies for response and remediation.
- b. ODH has developed, maintained, and trained to internal SOPs, guidance, lists of personnel, telephone rosters, and equipment which will be available and used during an incident.
- c. ODH may dispatch field responders to:
 - i. Assess the impact of a release and evaluate cleanup alternatives.
 - ii. Report results of assessments and incident information to the SEOC.
 - iii. Liaison with County Emergency Operations Centers and federal responders.
 - iv. Provide technical assistance and support on management and disposal of debris, as well as infectious and solid waste.
 - v. Provide technical assistance and support to local water treatment facilities to protect water supplies.
- d. Radiological Incidents: Lead- Bureau of Radiation Protection (BRP)
 - i. As the lead agency for radiological incidents, ODH will report to the SEOC. A team of personnel may also be called to the SEOC to support operations.
 - ii. The Radiological Assessment Branch will activate under the SEOC ESF-5 Information and Planning Section to coordinate hazard matter experts. ODH is responsible for the coordination of the Dose Assessment Group within that branch. SEOC response involves:
 - Providing staff to coordinate local and state radiological field sampling and monitoring teams.
 - Providing representatives to the Dose Assessment Group to perform dose projections/plume modeling or other assessment of the hazard, review protection action guidelines, and develop and issue protective recommendations.
 - Recommending protective actions for the public, first responders, and other emergency workers.
 - Passing protective recommendations to the Executive Group (if activated) for approval or directly to appropriate local officials or Incident Command.
 - Providing advice to local health departments.

- Developing recommendations for mass prophylaxis and making appropriate recommendations to local officials or public health organizations.
 - Making ODH laboratory facilities available to Ohio EMA and other state agencies following an incident.
 - Making physicians available to answer medically related questions.
- iii. Field response: In most events, an ODH Radiological On-Site Supervisor may report to the incident scene or County EOC to coordinate field activities, obtain data, and provide technical assistance to the Incident Commander. ODH personnel respond to the field and work with local health department personnel and the local Health Commissioner to perform monitoring and provide health services. In nuclear or radiological events that warrant a field response, ODH will send a qualified incident responder or a team of responders, depending on the magnitude of the event, at the request of local officials or incident command. ODH field response involves:
- Dispatching ODH Health Physicist representatives/team to assist local officials, the Incident Commander, hospital, or the affected facilities, depending on the magnitude and scope of the event.
 - Staffing Radiological Monitoring Teams to collect radiological data from the affected area.
 - Providing data, assessment of the incident, and protective recommendations to the SEOC ESF-5 Information and Planning Section (or directly to local officials and incident command until ESF-5 is fully operational).
 - Advising the Incident Commander on techniques to minimize radiation exposure to emergency responders.
 - Advising the Incident Commander on radiological monitoring.
 - Advising the Incident Commander on control of radiological contamination.
 - Providing health advice based on monitoring results.
 - Investigating exposures and potential health problems from radiological/nuclear materials exposures.
 - Coordinating with ODH Bureau of Environmental Health.
 - Coordinating with local health departments to ensure the capability of safe food handling at mass feeding centers established for an incident.
 - Providing guidance concerning collection of samples for nuclear or radiological incidents.
 - Maintaining the proper chain of custody for samples/evidence that is sent to the ODH lab for analysis.
- iv. Restoration and recovery activities include:
- Regulatory oversight in coordination with Ohio EPA and U.S. EPA as applicable:

- Specifying the radiological site cleanup criteria that satisfy the state’s free-release criteria listed in 3701:1-38-22 of the Ohio Administrative Code or that have been negotiated and are as low as reasonably achievable while ensuring public health and safety of the critical group or affected population.
 - Review and approval of the site remediation plan and activities by the owner/operator or contractor.
 - Performing confirmatory radiological monitoring to verify the site cleanup criteria have been met by the owner/operator or contractor and that the site is ready for release and reutilization.
 - Ensuring that efforts to control the spread or migration of radiological contamination are established along with a program to collect and control radiological waste in accordance with the Debris Management Plan.
- Evaluating and assigning radiological dose limits to the members of the affected population, including emergency workers.
 - Establishing a program to track long term health effects from the radiological dose in coordination with the CDC.
 - Coordinating the release of re-entry health and safety information to the public or affected population.
 - Leading the state’s re-entry activities, including coordinating the sampling of food, water, wildlife, and the environment by other state agencies, as appropriate.
 - ODH should be consulted for techniques for spill containment and cleanup for any incident involving a radiological/nuclear agent.
- e. Biological: Lead- Bureau of Infectious Diseases (BID)
- i. As the lead agency for biological incidents, ODH will report to the SEOC and activate [*ESF 8 Public Health and Medical Services Plan*](#) including [*Tab C, “Human Infectious Disease Incident Plan”*](#).
 - ii. SEOC and field response involves:
 - Providing health advisories and recommendations to local health departments, medical providers, and the general public.
 - Developing recommendations for mass prophylaxis and making appropriate recommendations to local health departments and medical providers.
 - Providing recommendations regarding patient testing, where needed.
 - Provide guidance and expertise in the collection of biological samples for identification or evidentiary purposes.
 - Ensure that the Ohio Protocol for Handling Biologic Incidents is followed.

- iii. BID should be consulted for techniques for spill containment and cleanup for any incident involving a biologic agent.
 - f. Chemical: Support- Bureau of Environmental Health (BEH)
 - i. BEH provides technical assistance for toxic chemicals to Ohio EPA.
 - ii. SEOC and field response includes:
 - Ensuring the safety of private water through private water system sampling, oversight of LHDs, and the provision of public information.
 - Coordinating with Ohio EPA and local health departments on the identification of alternate water supplies to individuals.
 - Coordinating with Ohio EPA on assessing public health exposure and impacts from release of toxic chemicals to the environment.
 - Providing health advisories and recommendations.
 - Providing health advice based on monitoring results.
4. Department of Commerce – Division of State Fire Marshal (SFM)
- a. SFM is the lead agency for technical coordination of state agencies for fire/explosion incident response and remediation.
 - b. SFM has developed, maintained, and trained to internal SOPs, guidance, lists of personnel, telephone rosters, and equipment which will be available and used during an incident.
 - c. SFM can assist in communications at the off-site incident command post(s).
 - d. If requested by the Incident Commander or when appropriate, the SFM Major Incident Response Vehicle (MIRV) can deploy to:
 - i. Assist local organizations in the establishment of an off-site incident command post for emergency personnel.
 - ii. When able, provide communications links between the field and other response organizations to aid in coordinating response units.
 - iii. Provide information related to firefighting response, hazardous materials, and the availability of firefighting equipment on an area-specific basis.
 - iv. Provide a portable weather station to assist in on-site weather assessment.
 - e. When appropriate, assist in the investigation of the cause, origin, and circumstances of fires and explosions by:
 - i. Providing field detection of explosives and explosive precursors.

- ii. Providing an explosive detection canine team to assist in searching for explosive pre- and post-blast evidence or additional Improvised Explosive Devices (IEDs).
- iii. Providing a Post Blast Investigation Team consisting of FEIB investigators and Forensic Lab personnel.
- iv. Assist in evidence collection from explosives and other hazmat incidents.

C. Support Agencies

1. General

- a. The State of Ohio support agencies provide additional support, personnel, advice, and equipment to the county and state agencies already involved. The support agencies are also capable of sustained continuous twenty-four hour operations.
- b. Notification of support agencies and their personnel is conducted in the same manner. Any state agencies not listed here may provide additional support based on the needs of the particular hazardous materials incident.

2. Ohio Emergency Management Agency (Ohio EMA)

- a. Ohio EMA supports the activities of all state agencies by providing communications, information support, and off-site coordination during emergency response and recovery.
- b. Ohio EMA has developed, maintained, and trained to internal SOPs, guidance, lists of personnel, telephone rosters, and equipment which will be available and used during an incident.
- c. SEOC response includes:
 - i. Activating the SEOC, various state agencies, ESF-5 Information and Planning Section, and Hazard Specific Experts to assess the incident and coordinate actions.
 - ii. Activating the SEOC at CAS Level 2 or 3 and filling resource requests.
 - iii. Coordinating with other state agencies to perform dose assessment or projections and make concentration exposure determinations.
 - iv. Communicating protective action recommendations to the County EOC for Incident Command and local officials.
 - v. Collecting and analyzing information from local jurisdictions and state agencies on the situation and actions taken.
 - vi. Developing informational reports to distribute to all stakeholders.

- d. Field response includes:
 - i. Deploying Field Liaisons to the County EOC to assist with coordinating field activities in support of incident command and the County EOC and providing information to the SEOC.
 - ii. Deploying the State of Ohio Emergency Mobile Communications Vehicle to the field to assist with communications.
 - iii. Deploying a State PIO to the field JIC near the affected site to coordinate incident information with the SEOC.
 - iv. Providing trained staff Radiation Monitoring Teams for nuclear power plant incidents to support air monitoring. This team reports to the Command Post or Staging Area and is placed strategically as required by the specific situation.
- e. Pre-incident, Ohio EMA is responsible for coordinating information regarding shipments of high-level radioactive/nuclear waste and shipments of radioactive materials that require enhanced security measures in accordance with state and federal regulations.

3. Adjutant General's Department, Ohio National Guard

- a. The Ohio National Guard (ONG) provides military support, when called upon, to aid civil authorities in the protection of life and property and to preserve peace and order in times of emergency. If there is a mission assignment that the ONG has accepted, specific authority must be included in the Governor's proclamation authorizing them to perform that mission in State Active Duty status.
- b. ONG acts pursuant to Chapters 5911 - 5923 of the Ohio Revised Code.
- c. ONG has developed, maintained, and trained to internal SOPs, guidance, lists of personnel, telephone rosters, and equipment which will be available and used during an incident.
- d. SEOC response involves:
 - i. Reporting to the SEOC to coordinate field activities and provide specific information as needed.
 - ii. Coordination with federal partners.
 - iii. Facilitation of EMAC requests for National Guard assets.
- e. Field response involves:
 - i. The ONG Homeland Response Force (HRF) can respond to a CBRNE incident and support local, state, and federal agencies by managing the consequences of an event by providing capabilities to conduct casualty search and extraction, medical triage, decontamination, and internal force protection

in order to save lives, mitigate human suffering, and prepare for follow-on forces in support of Civil Authorities.

- ii. The ONG CBRNE Enhanced Response Force Package (CERFP) can support the Incident Commander by providing capabilities for search and rescue, decontamination, and medical triage/stabilization.
- iii. The ONG can provide Weapons of Mass Destruction support to civil authorities, through the 52nd Weapons of Mass Destruction-Civil Support Team (WMD-CST) at a CBRNE incident site by:
 - Presumptively identifying unknown CBRNE agents/substances
 - Assessing current and projected consequences
 - Advising on response measures
 - Assisting with appropriate requests for state support
 - Providing communications assets
 - Providing modeling assets

4. Ohio Department of Agriculture (ODA)

- a. ODA's support response function in a hazardous materials incident is to coordinate with state and local health officials to evaluate the needs and actions for protection against radiological, biological, and chemical damage related to the possible contamination of livestock, foodstuff, and crops. ODA coordinates food control and assesses damage, as necessary, and will handle issues as they relate to the licensing, storing, handling and application of pesticides.
- b. Title 9 of the ORC provides the legal authority for the ODA's actions.
- c. ODA has developed and maintained internal SOPs, guidance documents, lists of pertinent personnel, telephone rosters, and equipment which will be available and used during an incident. Appropriate personnel have received emergency response training including ICS, NIMS, and participated in mock exercise.
- d. SEOC response involves:
 - i. Reporting to the SEOC to coordinate field activities and provide specific information as needed.
 - ii. Assisting Ohio EMA in the contact of county agricultural societies to arrange for the use of county fairgrounds, as needed.
 - iii. Assisting in obtaining additional food products from commercial sources whenever required.
 - iv. Issuing control actions including embargo, quarantine, isolation, confiscation, or destruction of crops, livestock, and foodstuffs that may be contaminated (limited action until pertinent testing complete).
 - v. Supporting state and county emergency agencies in the acquisition and distribution of retail food and mass feeding supplies.

- vi. Obtaining additional assistance from the USDA through state and county emergency organizations (i.e. Nutrition Center in Chicago).
 - vii. Coordinating with federal counterparts in affected areas to estimate crop and livestock damage.
 - viii. Coordinating with federal counterparts to estimate food product supply and demand during an incident.
 - ix. Forwarding disaster damage reports to the State Emergency Committee of the Agricultural Stabilization and Conservation Service for possible aid from the USDA.
- e. Field response involves:
- i. Deploying to the field with five teams with representatives from the following ODA divisions: Animal Health, Dairy, Food Safety, Livestock, Meat Inspection, and Plant Health.
 - ii. Providing control and assessment for damage to livestock, foodstuffs, and crops and addresses issues related to the licensing, storing, handling, and application of pesticides.
 - iii. Sampling for testing of foodstuffs for contamination, when necessary.
 - iv. Coordinating with state and local health officials to evaluate needs and actions related to livestock, foodstuff, and crops.
 - v. Providing damage assessment teams to County EOC, as needed.
 - vi. Performing livestock, foodstuff, and crop sampling, as needed.
 - vii. Conducting analysis on collected samples at the ODA laboratory facility.
- e. Restoration: The ODA has a monitoring/evaluation role in restoration activities in response to a hazardous materials incident. ODA performs follow-up collections to test for contamination of livestock, foodstuffs, and crops.
5. Ohio Bureau of Workers' Compensation, Division of Safety and Hygiene, OSHA On-Site Consultation Program
- a. The OSHA On-Site Consultation Program support response functions in a hazardous materials incident are to ensure the protection of the public, the environment, and property as it relates to employed persons, places of employment, and buildings and establishments.
 - b. This protection involves providing Industrial Hygienists for sampling and monitoring. Industrial Hygienists are not trained or equipped to provide these services in uncontrolled environments (i.e., outside of the industrial or workplace setting).
 - c. Title 41 of the ORC provides the legal authority for the Division to perform the above actions.

- d. BWC has developed, maintained, and trained to internal SOPs, guidance, lists of personnel, telephone rosters, and equipment which will be available and used during an incident.
 - e. SEOC response includes:
 - i. Reporting to the SEOC to coordinate field activities and provide specific information as needed.
 - ii. Providing hazardous materials information from hardcopy and computer databases.
 - iii. Providing backup sample analysis capability through a laboratory contract, if necessary.
 - f. Field response includes:
 - i. Responding to the field to conduct monitoring, if necessary.
 - ii. Performing basic sample analysis.
 - g. Restoration: The Division only becomes involved in restoration through the examination of restoration efforts concerning building codes and worker protection.
6. Public Utilities Commission of Ohio (PUCO)
- a. In the event of a hazardous materials transportation incident, the support function of PUCO is to provide technical assistance and information regarding the vehicles, packaging, and practices used to transport hazardous materials by highway and rail.
 - b. PUCO can provide points of contact for companies that transport hazardous materials in the State of Ohio by highway and rail.
 - c. Immediately following a hazardous materials incident, PUCO Transportation Department staff will begin activities consistent with the agency's regulatory responsibilities.
 - d. PUCO's authority to regulate motor carriers is found in §4923.03 (private carriers) and §4921.04 (for-hire carriers) of the Ohio Revised Code. These sections direct PUCO to supervise and regulate the safety, service, and transport of hazardous materials by private motor carriers and for-hire motor carriers in Ohio.
 - e. PUCO is Ohio's motor carrier regulatory agency and is the lead state agency for the Motor Carrier Safety Assistance Program (MCSAP) administered by the United States Department of Transportation (US DOT) Federal Motor Carrier Safety Administration (FMCSA). The MCSAP provides federal

funding for many of the motor carrier safety and enforcement activities conducted by the PUCO and the Ohio State Highway Patrol. As Ohio's MCSAP lead agency, the PUCO is responsible for developing the state's Commercial Vehicle Safety Plan as well as providing information to the FMCSA regarding hazardous materials incidents involving the interstate and intrastate highway transport of hazardous materials, hazardous wastes, and hazardous substances.

- f. PUCO railroad inspectors are certified by the Federal Railroad Administration (FRA) to enforce the USDOT safety and hazardous materials requirements for railroads transporting hazardous materials into, out of, or through Ohio. The PUCO assists the FRA in the investigation of incidents involving the rail transport of hazardous materials.
- g. PUCO is responsible for coordinating and conducting compliance and safety inspections of certain shipments of radioactive/nuclear materials in accordance with state and federal regulations.
- h. PUCO has developed, maintained, and trained to internal SOPs, guidance, lists of personnel, telephone rosters, and equipment which will be available and used during an incident.
- i. SEOC response includes:
 - i. Reporting to the SEOC to provide technical and regulatory information and coordinate agency field staff as needed.
 - ii. Functioning as state liaison with federal commercial vehicle and railroad safety agencies (i.e. Federal Motor Carrier Safety Administration, Federal Railroad Administration, Research and Special Programs Administration, Federal Highway Administration, etc.).
 - iii. Maintaining communications with other state agencies to dispatch/transfer supplies and materials needed for handling a hazardous materials incident.
 - iv. Providing information on applicable hazardous materials transport requirements.
- j. Field response includes:
 - i. PUCO Transportation Department field staff responding to the site of a highway or railroad hazardous materials transportation incident to assist the lead state agency.
 - ii. Providing technical details and specifications on the construction, performance, and use of the bulk and non-bulk packaging used to transport hazardous materials by highway and rail as well as carrier contact and the regulatory status of individual highway and rail carriers operating in Ohio.
 - iii. Providing communications resources to the lead state agency.

- k. The PUCO Transportation Department's hazardous materials specialists are trained to the Occupational Safety & Health Administration (OSHA) and National Fire Protection Association (NFPA) requirements for technician level emergency responders.
 - l. Restoration: PUCO Transportation Department can provide personnel and communications resources when needed by other agencies. The PUCO Consumer Services Department can obtain information from electric, gas, water or waste water utilities on the status of service in areas affected by a hazardous materials incident.
7. Ohio State Highway Patrol (OSHP)
- a. OSHP's support response function in a hazardous materials incident is to provide support to other state and local law enforcement agencies. Generally, this support consists of traffic control and information gathering and dissemination.
 - b. Chapter 5503 of the Ohio Revised Code provides the legal authority for the OSHP's actions.
 - c. OSHP has developed, maintained, and trained to internal SOPs, guidance, lists of personnel, telephone rosters, and equipment which will be available and used during an incident.
 - d. SEOC response includes:
 - i. Reporting to the SEOC to coordinate field activities and provide specific information as needed.
 - ii. Contacting Ohio EMA and the appropriate lead agency in a timely fashion when a hazardous materials incident occurs.
 - iii. Staffing the OSHP communications network in the SEOC, as needed.
 - iv. Coordinating information from the field for use in the SEOC, particularly with ODOT on evacuation routing.
 - e. Field response includes:
 - i. An OSHP Post Commander or Assistant Post Commander may report to the County EOC along with a District Staff Officer to coordinate field activities and information.
 - ii. OSHP personnel respond to the off-site incident command post and provide area control. These personnel report to the Post Commander or designee who, in turn, keeps the District Headquarters Staff apprised of all activities.
 - iii. The OSHP personnel work with the Incident Commander to respond to the incident.

- iv. Providing traffic control, enforcement, traffic crash investigation, criminal investigation, and related tasks on state highways and state owned or leased property.
 - v. Assisting in area control, evacuation, and emergency rescue as needed in coordination with local law enforcement agencies.
 - vi. Providing helicopters/fixed wing aircraft for reconnaissance.
 - vii. Relaying equipment to the incident scene via helicopters and fixed wing aircraft.
 - viii. Providing meteorological data from NOAA (accomplished by the main office and all district offices).
 - ix. Providing protection for the Governor and other visiting dignitaries, as needed.
 - x. Providing communications and situation information.
 - xi. Assisting in the voluntary evacuation of people and property, as required.
- f. In addition to the above, the OSHP can provide the Ohio State Highway Patrol Emergency Command Vehicle to Sheriff Departments, Police Departments, and Emergency Management Agencies. The Emergency Command Vehicle is a mobile command post and communications center. It contains specialized radio and telephone equipment that enables technicians to coordinate all law enforcement and emergency frequencies.
- i. The command vehicle is available for use by approved agencies during emergency situations where a self-contained remote communications system is needed. An OSHP communications officer and driver will be provided when the command vehicle is requested. These officers will set up the radio and telephone frequencies and are specially trained in the care and use of this equipment.
 - ii. The command vehicle equipment includes: Programmable radios with encryption available; Multi-channel tape recorder; Auxiliary power unit; Telephones (cellular and land lines); Conference/command room; Four dispatch positions; Video monitoring; Cable TV access; Hostage negotiation/monitoring room; Copier and fax machine, and; weather station.
 - iii. The command vehicle can be used during civil disturbances; natural disasters, and; technological incidents.
 - iv. For information on obtaining the vehicle, contact the Ohio State Highway Patrol in Columbus at 614-466-2660, or their local patrol post.
- f. Restoration: The OSHP Office of Field Operations, Licensing and Commercial Standard, Motor Carrier Enforcement Unit and the Crash Reconstruction Unit have a role in restoration activities of investigating accidents involving commercial carriers in order to assist the courts or the PUCO in assessing penalties against the owner/operator.

8. Ohio Department of Transportation (ODOT)
 - a. ODOT's support response function in a hazardous materials incident is to provide information, equipment, and area control related to highways, bridges, aviation and mass transportation facilities.
 - b. Titles 45, 49, and 53 of the ORC provide the legal authority for the ODOT's actions. ODOT is notified when a spill occurs on a state route which may affect traffic and when a cleanup may block a road.
 - c. ODOT has developed, maintained, and trained to internal SOPs, guidance, lists of personnel, telephone rosters, and equipment which will be available and used during an incident.
 - d. SEOC response includes:
 - i. Reporting to the SEOC to coordinate field activities and provide information as needed.
 - ii. Providing information and personnel to Ohio EMA, the IC, and/or the off-site ICP to communicate road conditions, impassable state roads or restricted areas.
 - iii. Coordinating the ODOT communications network in the field, as needed.
 - e. Field response includes:
 - i. Providing traffic assistance to the Incident Commander, and/or the off-site ICP.
 - ii. Coordinating with local entities to determine and designate both available and prohibited routes of travel in the incident area.
 - iii. Assisting in maintaining access to state corridors for first responders.
 - iv. Assisting the SEOC in providing area reconnaissance during an incident situation.
 - v. Providing engineering damage assessment teams, as needed.
 - vi. Providing aerial transportation for radiological monitoring teams and field samples to lab sites.
 - vii. Assisting in rescues and other conditions requiring ODOT resources including the use of ODOT garages in affected districts.
 - viii. Providing vehicles, heavy equipment, and materials such as sand, oil dry, kitty litter etc. to assist as appropriate.
 - ix. Providing signage as requested by the Incident Commander to safely regulate traffic speeds in the hazard area.
 - x. Providing requested technical resources for the inspection, repair, alteration, condemnation, and destruction of damaged transportation facilities following an incident, and diking or diverting materials.
 - xi. Assisting with construction and engineering services on rural state highways in an incident area.

- xii. Assisting county governments in obtaining federal assistance for the restoration of damaged public facilities and property.
- xiii. Estimating the cost to restore any state highways or rest areas damaged by hazardous materials and completing the work.

9. Ohio Department of Natural Resources (ODNR)

- a. ODNR's support response function in a hazardous materials incident is to provide assistance with sampling and issue advisories in areas involving public waterways and fish and wildlife.
- b. ORC Chapter 1501 provides the legal authority for the ODNR's actions.
- c. ODNR has developed, maintained, and trained to internal SOPs, guidance, lists of personnel, telephone rosters, and equipment which will be available and used during an incident.
- d. SEOC response includes:
 - i. Reporting to the SEOC to coordinate field activities and provide information as needed.
 - ii. Contacting Ohio EMA and appropriate lead agencies when a hazardous materials incident occurs.
- e. Field response includes:
 - i. Providing a Liaison to a local EOC.
 - ii. Providing inter-operability communications equipment to support operations.
 - iii. Sampling of fish and wildlife to determine impacts, issue advisories, and determine actions needed for cleanup.
 - iv. Assisting Ohio EPA in the collection of water samples, and issue advisories on recreational waterways.
 - v. Collecting water and soil samples for incidents involving oil and gas drilling activities.
 - vi. Providing personnel to work on-scene to conduct investigations when the spill affects fish, wildlife, and recreational waterways.
 - vii. Providing ground and water transportation into remote areas.

V. REFERENCES AND AUTHORITIES

A. Federal

- 1. Federal Water Pollution Control/Clean Water Act (CWA)
- 2. Clean Air Act (CAA)

3. National Oil and Hazardous Substances Pollution Contingency Plan (NCP)
4. Comprehensive Environmental Response, Compensation, & Liability Act (CERCLA)
5. Superfund Amendments & Reauthorization Act (SARA)
6. Emergency Planning and Community Right-to-Know Act (EPCRA)
7. Resource Conservation and Recovery Act (RCRA)
8. Oil Pollution Act (OPA)
9. Hazardous Materials Transportation Act (HMTA)
10. Hazardous Materials Transportation Uniform Safety Act (HMTUSA)
11. Hazardous Substances Act (HAS)
12. Solid Waste Disposal Act (SWDA)
13. Occupational Safety & Health Administration Standards
14. Stafford Act

B. State

1. ORC Chapters 3704, 3714, & 3745 Environmental Protection
 - ORC Section 3737.80 Incident Command
2. ORC Sections 3745.12 & 3745.13 Cost Recovery
3. ORC Chapter 3748 Radiation Control Program
4. ORC Chapter 3750 Hazardous Materials Emergency Planning
5. OAC Chapter 3750 SERC Rules
6. ORC Chapters 4921 & 4923 Regulation of Motor Transportation Companies & Private Motor Carriers
7. ORC Chapter 5502 Emergency Management
8. ORC Section 5502.38 Effects of SARA on EMA

ORC Chapters 6109 & 6111 Environmental Protection

C. Local

1. For local laws and ordinances pertaining to hazardous material response and planning refer to individual County Emergency Operations Plans, Hazardous Materials Plans, and Annexes.

VI. ACRONYMS AND DEFINITIONS

A. Acronyms

ALOHA	Areal Locations of Hazardous Atmospheres (plume model software)
BRP	Bureau of Radiation Protection (ODH)
CAA	Clean Air Act
CAMEO	Computer Aided Management of Emergency Operations
CBRNE	Chemical, Biological, Radiological, Nuclear, Explosive
CERCLA	Comprehensive Environmental Response Compensation Liability Act
ChemTrec	Chemical Transportation Emergency Center
CWA	Clean Water Act
DOL	Department of Labor
DOE	Department of Energy
DOS	Department of State
DOT	Department of Transportation
EHS	Extremely Hazardous Substances
EPCRA	Emergency Planning & Community Right-to-Know Act (SARA Title III)
ERPG	Emergency Response Planning Guidelines
ERT	Evidence Response Team (Ohio EPA)
ESF	Emergency Support Function
FOSC	Federal On-Scene Coordinator
GLC	Great Lakes Commission
HHS	U.S. Dept. of Health & Human Services
Hazmat	Hazardous Material(s)
HM-EEM	<i>Hazardous Material-Exercise Evaluation Manual</i>
IDLH	Immediately Dangerous to Life or Health
JFO	Joint Field Office
LEPC	Local Emergency Planning Committee
LEPD	Local Emergency Planning District
MSDS	Material Safety Data Sheet
NAWAS	National Warning System
NCERT	National Counter-Terrorism Evidence Response Team
NCP	National Oil and Hazardous Substance Pollution Contingency Plan
NIOSH	National Institute for Occupational Safety & Health
NRC	National Response Center
U.S. NRC	Nuclear Regulatory Commission
NRF	National Response Framework
NRT	National Response Team

NRT-1	<i>Hazardous Materials Emergency Planning Guide</i>
NRT-2	<i>Developing a Hazardous Materials Exercise Program</i>
OSC	On-Scene Coordinator
PPE	Personal Protection Equipment
RAT	Radiation Assessment Team (Ohio EPA)
REAC/TS	Radiation Emergency Assistance Center/Training Site (DOE)
RQ	Reportable Quantity
RRT	Regional Response Team
SEOC	State Emergency Operations Center
SERC	State Emergency Response Commission
TLV	Threshold Limit Value
USCG	United States Coast Guard
WMD	Weapon of Mass Destruction

B. Definitions

Aquifer - An underground rock formation composed of material such as sand, soil, or gravel that can store and supply water to wells and springs. Most aquifers used in the United States are within a thousand feet of the earth's surface.

Chemical Transportation Emergency Center (ChemTrec) - A program providing information and/or assistance to emergency responders. ChemTrec contacts the shipper or producer of the material for more detailed information, including on-scene assistance when feasible.

Clean Air Act (CAA) - Federal law enabling air quality standards to be set and monitored. Also requires facilities with certain chemicals to develop risk management plans.

Cleanup - Actions taken to deal with a release or threatened release of hazardous substances that could affect health and/or the environment. Broadly describes various response actions or remedial actions such as investigations or studies.

Clean Water Act (CWA) - Federal law enabling water quality standards to be set and monitored.

Computer Aided Management of Emergency Operations (CAMEO) - A computer program and database (developed by NOAA and USEPA) that uses SARA Title III reporting information to associate hazardous materials inventories with respective facilities. The program can model several release scenarios for planning purposes. MARPLOT, a mapping program, can work in conjunction with CAMEO to plot facilities, special populations, and other significant icons, on a map with roadways, rivers, and census information.

Comprehensive Environmental Response Compensation Liability Act (CERCLA) - A federal law passed in 1980 and modified in 1986 by the SARA. The Acts created a special tax that goes into a Trust Fund, commonly known as "Superfund," to investigate and cleanup abandoned or uncontrolled hazardous waste sites. Under the program USEPA can either: 1) pay for site cleanups when parties responsible cannot be located or are unwilling or unable to perform the work or 2) take legal action to force parties responsible to clean up the site or pay the federal government for the cost of cleanup.

Cost Recovery - A legal process where potentially liable parties can be required to reimburse responders for the cost of response and cleanup actions.

Emergency Planning and Community Right-To-Know Act (EPCRA) – An act (also known as SARA Title III) specifying requirements for organizing the planning process at the state and local levels for extremely hazardous substances; minimum plan content; requirements for facility owners and operators for informing officials about applicable substances they use/store/produce; mechanisms for informing the public of covered facilities and substances.

Extremely Hazardous Substances (EHS) - A list of chemicals identified by the USEPA on the basis of toxicity and listed under Title III of SARA.

Facility - Defined in Section 302 of SARA Title III as all buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any persons which control, is controlled, or under common control, with such person). For purposes of emergency release notification, the term includes motor vehicles, rolling stock, and aircraft.

Ground Water - Water found beneath the earth's surface that travels between materials such as sand, soil, or gravel. In aquifers, ground water occurs in such quantities that it can be used as supply for drinking, irrigation, or other purposes.

Hazardous Material (hazmat)- Any substance or material in a quantity or form which may be harmful or injurious to humans, domestic animals, wildlife, economic crops or property when released into the environment. Hazardous materials are classified in this plan as chemical, biological, radiological or explosive.

Chemical - Toxic, corrosive or injurious substance because of inherent chemical properties and includes but is not limited to such items as petroleum products, paints, plastics, acids, caustics, industrial chemicals, poisons, drugs, mineral fibers (asbestos).

Biological - Microorganisms or associated products which may cause disease in humans, animals or economic crops and includes pathogenic wastes from medical institutions, slaughterhouses, poultry processing plants, and the like.

Radiological - Any radioactive substance emitting ionizing radiation at a level to produce a health hazard.

Explosive - Material capable of releasing energy with blast effect in a split second upon activation; the released energy usually damages or destroys objects in close proximity to the blast.

Hazardous Materials Management - The correlated activities of agencies for the prevention or mitigation of the immediate direct effects on public health, safety, and the environment of a hazardous materials release. These direct effects include fire, explosion, contamination, and radioactive exposure. This is the responsibility of the lead agency.

Hazardous Substances (Superfund) - Substances designated as hazardous under CERCLA (also known as Superfund). CERCLA incorporates substances listed under the Clean Water Act, the Clean Air Act, RCRA, and the Toxic Substances Control Act Section 7.

Hazardous Substances - Any material that poses a threat to the public health and/or the environment. Typical hazardous substances are materials that are toxic, corrosive, ignitable, explosive, or chemically reactive.

Local Emergency Planning Committee (LEPC) - A committee whose members are nominated by County Commissioners and appointed by the SERC. The LEPCs formulate a comprehensive hazardous materials emergency plan for its district.

Material Safety Data Sheet (MSDS) - A compilation of information required under the OSHA Hazard Communications Standard about the identity of hazardous chemicals, health and physical hazards, exposure limits, and precautions. Section 311 of SARA Title III requires facilities to submit MSDSs under certain conditions.

National Oil and Hazardous Substance Pollution Contingency Plan (NCP) - A plan, found in 40 CFR Part 300, prepared by USEPA, to put into effect the response powers and responsibilities created by CERCLA and the authorities established by Section 31 of the Clean Water Act.

National Response Center (NRC) - A communications center for activities related to response actions. The NRC is located at USCG headquarters in Washington D.C. The center receives and relays notices of releases to the appropriate OSC and RRT and reports to the NRT when appropriate. The NRC provides facilities for the NRT to use when a national response action is required.

National Response Team (NRT) - A team consisting of 15 federal agencies: DOD, DOI, DOT, USCG, USDA, USEPA, FEMA, DOS, DOJ, HHS, U.S. NRC, DOL, GSA, NOAA, and DOE. The team is the principal organization for implementing the National Contingency Plan. The NRT serves as a standing committee to develop and maintain preparedness, to evaluate methods of responding to releases, and to recommend revisions to the National Contingency Plan. The NRT may make recommendations to appropriate agencies on training, equipping, and the protection of response teams. Research, development, and evaluation for the improvement on capabilities can fall under the NRT's purview.

National Response Team-1 (NRT-1) - The hazardous materials planning guide, updated in 2001 and developed by the NRT. This guide lists the guidelines for the writing of local and state hazardous materials emergency plans as required by SARA. It has been adopted by the Ohio State Emergency Response Commission (SERC) as its standard of care for hazardous materials planning in Ohio.

On-Scene Coordinator (OSC) - The pre-designated agent of the U.S. EPA that provides direction and coordination of pollution control efforts at the scene of a release. The OSC determines pertinent facts about the release such as the nature, the amount, location, resources available, and

installations that may be affected. The OSC shall coordinate the needed resources for containment and cleanup.

Owner/Operator - Individual(s) or company(s) potentially responsible for, or contributing to, the contamination problems at a hazardous materials site. Whenever possible, the law requires them to clean up contaminated sites.

Plume - Effluent cloud resulting from a continuous release.

Resource Conservation and Recovery Act (RCRA) - A framework for the proper management and disposal of all wastes. RCRA directs USEPA to identify hazardous wastes, generically and by specific class of waste streams. Generators and transporters are required to use good management practices and to track the movement of wastes with a manifest system. Owners and operators of treatment, storage, and disposal facilities also must comply with standards, which are generally implemented through permits issued by the USEPA.

Regional Response Team (RRT) - A team composed of federal agencies and a representative from each state in a federal region. OSCs may request that the RRT convene to provide advice in specific areas requiring resolution. Under the NCP, RRTs may be convened by the Chair when a hazardous materials release exceeds the response capability available to the OSC; crosses regional boundaries; poses a substantial threat to public health, welfare, or environment, or significant amounts of property. Regional Contingency Plans specify detailed criteria for activation of RRTs. RRTs may review plans developed in compliance with SARA Title III upon the request of LEPCs.

Remedial Action - An immediate action taken over the short-term to address a release or threatened release of hazardous substances.

Reportable Quantity (RQ) - The quantity of a hazardous substance that triggers reporting under CERCLA. If a substance is released in amounts that exceed the RQ, the release must be reported to the NRC, the SERC, and the LEPC Emergency Coordinator.

Superfund Amendments & Reauthorization Act (SARA) - Title III of SARA includes detailed provisions for community planning and is also known as the Emergency Planning and Community Right to Know Act (EPCRA).

State Emergency Response Commission (SERC) - A commission appointed by the Governor in accordance with SARA Title III. Duties of the commission include designating Local Emergency Planning Districts (LEPDs), appointing Local Emergency Planning Committees (LEPCs), supervising and coordinating the activities of planning committees, reviewing emergency plans, receiving chemical release notifications, and establishing procedures for receiving and processing requests from the public for information on facilities and chemicals.

Threshold Limit Value--Time Weighted Average (TLV-TWA) - Concentrations for a normal 8-hr workday, 40-hr workweek to which nearly all workers may be repeatedly exposed, day after day, without adverse effects.

Threshold Limit Value--Short Term Exposure Limit (TLV-STEL) - Concentrations to which workers can be exposed continuously for short periods without suffering: irritation; chronic or irreversible tissue damage; narcosis of sufficient degree to increase the likelihood of accidental injury, impaired self-rescue, or materially reduce work efficiency.

Toxicity - The ability of a substance to cause damage to living tissue, impairment of the central nervous system, severe illness, or death when ingested, inhaled, or absorbed by the skin.

Weapon of Mass Destruction (WMD) - As defined in Title 18, U.S.C. § 2332a: (1) any explosive, incendiary, or poison gas, bomb, grenade, rocket having a propellant charge of more than four ounces, or missile having an explosive or incendiary charge of more than one-quarter ounce, or mine or similar device; (2) any weapon that is designed or intended to cause death or serious bodily injury through release, dissemination, or impact of toxic or poisonous chemicals or their precursors; (3) any weapon involving a disease organism; or (4) any weapon that is designed to release radiation or radioactivity at a level dangerous to human life.

Ohio Emergency Operations Plan
Tab A to ESF 10 Hazardous Materials/WMD

*State of Ohio Plan for Response to Emergencies at Commercial
Nuclear Power Plants* (REP Plan)

Ohio Emergency Operations Plan
Tab B to ESF 10 Hazardous Materials/WMD

State of Ohio Emergency Response Attachment for Incidents at
U.S. Department of Energy (DOE) Facilities

**This Document has been classified as a SECURE Document
as per Ohio Revised Code 149.433 and is maintained under separate cover.**

**For any questions regarding this document, please contact the Plans Branch
at Ohio EMA.**