

# **EPA Region 5 Superfund and Emergency Management Division Response Capabilities**

This catalog provides an overview of the EPA Region 5 Superfund and Emergency Management Division's (SEMD) capabilities for the local, State, Tribal and Federal response communities.

#### **Superfund Overview**

The Superfund program was created in 1980 when Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), amended in 1986 by the Superfund Amendments and Reform Act (SARA). These laws created a program to clean up abandoned or uncontrolled hazardous waste sites that pose a threat to human health or the environment. It made "potentially responsible parties" (owners, operators, or transporters to the facility, also known as PRPs) retroactively, jointly, and severally responsible for cleaning up the sites. For those sites where the PRPs cannot be found, are bankrupt, or refuse to perform the cleanup, it created a separate Federal fund (the "Superfund") for the U.S. Environmental Protection Agency (EPA) to carry out the cleanup.



#### What Type of Emergency Response or Cleanups does EPA Conduct?

Emergency responses that must be addressed immediately, such as:

- Derailed train cars containing hazardous chemicals
- · Fires containing hazardous materials
- Traffic incidents involving hazardous materials spills
- Chemical or mercury spills
- Chemical air releases where air monitoring is required
- Potable water system contamination













#### Reimbursement to Local Governments for Emergency Response to Hazardous Substance Releases

In the event of a release of hazardous substances, EPA may reimburse local governments for expenses related to the release and associated emergency response measures. The Local Governments Reimbursement (LGR) Program provides a "safety net" of up to \$25,000 per incident to local governments that do not have funds available to pay for response actions. For more information, including details on eligibility and how to apply for reimbursement: https://www.epa.gov/emergency-response/local-governments-reimbursement-program

#### **Superfund Local Government Reimbursement Program**

- Alleviates financial burden on local governments
- Town, township, city, munincipality, parish, county
- Federally-recognized Indian Tribe
- Reimbursements provided for:
  - Rental or leasing of equipment
- Special technical and laboratory services
- Evacuation services
- Replacement of equipment lost or destroyed

#### Time-critical removals

Time-critical removals are defined as sites that should be cleaned up within a few months of discovery. In most communities typical time-criticals are:

- Abandoned hazardous waste sites including plating waste or unknown drums, tanks or other containers
- Vapor intrusion sites
- Lead or chemical contaminated soil sites, especially in residential settings

Removal sites are managed by an On-Scene Coordinator (OSC), often supported by EPA contractors and in coordination with local officials.







#### **Oil Spill Response**

Since CERCLA explicitly excluded cleanup of petroleum-only releases, those sites (if the release threatens a navigable water) are handled by OSCs under the Oil Pollution Act (OPA) of 1990. The OPA has its own appropriation, including funding received from the U.S. Coast Guard National Pollution Fund Center. The OPA, which is a part of the Clean Water Act (CWA), strengthened EPA's ability to prevent and respond to catastrophic oil spills. A fund is available to EPA and the Coast Guard to clean up oil spills when the responsible party is incapable or unwilling to do so. The OPA also requires the development of Area Contingency Plans to prepare and plan for oil spill response on a regional scale. EPA Region 5 maintains a staff of Area Planners dedicated to this work.









#### How to Contact EPA for Oil and Hazardous Substance Response

The National Response System (NRS) is a mechanism routinely and effectively used to respond to a wide range of oil and hazardous substance releases. It is a multilayered system involving individuals and teams from local, State, Tribal, and Federal agencies, as well as industry and other organizations.

At the heart of the system is the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The NCP outlines the process to ensure that the Federal government's resources and expertise are available immediately for response actions that are beyond the capabilities of local and State responders. The NCP provides the framework for the NRS and establishes how it works.

The National Response Center (NRC) is a part of the Federally established National Response System and staffed 24 hours a day at 1-800-424-8802. It is the designated Federal point of contact for reporting all oil, chemical, radiological and biological discharges into the environment, anywhere in the United States and its territories. Reports to the NRC activate the





NCP and the Federal government's response capabilities. It is the responsibility of the NRC staff to notify the predesignated OSC assigned to the area of the incident and to collect available information on the size and nature of the release, the facility or vessel involved, and the party or parties responsible for the release.

# **Superfund Program in Region 5**







EPA manages its programs through ten regional offices across the country. Region 5 is responsible for the following six Midwestern states: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. Within the Regional office located in Chicago, the program is handled by the Superfund and Emergency Management Divison (SEMD), which includes OSCs managing emergency responses and time-critical removal actions and Remedial Project Managers managing NPL sites.





# SEPA SEPONSE AND RESPONSE AND R

## Region 5 Emergency Response Branch

Region 5 maintains approximately 40 Level A response-ready OSCs, who have also received advanced training in biological, chemical, and radiological terrorism response, as well as training in advanced Incident Command System (ICS) operations. The Regional office

(ICS) operations. The Regional office also has "reach back" capacity to activate several hundred additional emergency trained staff with a wide range of specialized skills and expertise.

Emergency response has recognized the value and benefit of having OSCs work in close proximity to the communities they serve. OSCs stationed in the field develop effective working relationships with local and State responders. They also enhance the understanding of multigovernment roles and capabilities during coordinated response actions.







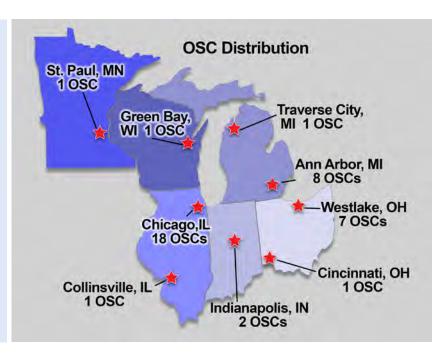






# Region 5 has OSCs stationed in 11 locations:

- Chicago, Illinois
- Des Plaines, Illinois
- Collinsville, Illinois
- Willowbrook, Illinois
- Indianapolis, Indiana
- · Ann Arbor, Michigan
- Traverse City, Michigan
- St Paul, Minnesota
- · Cincinnati, Ohio
- · Westlake, Ohio
- Green Bay, Wisconsin



Region 5 has a number of field offices and staffs approximately half of the OSCs outside of the Chicago, IL regional office. Superfund emergency response and the Region have already benefited from these recent field offices. Over the past several years, local and State governments referred an unprecedented number of response and removal actions to these offices.

# **Removal Program in Region 5**

Since the program began in 1980, Region 5 has performed or overseen removal actions at 2,234 sites. Over the past 10 years, there were 546 removal cleanups (emergency responses, time-critical removals, and non-time-critical removals). During this time, the program has worked to increase the number of PRPs leading cleanups, increasing the percentage of PRP-lead completions from 23% in the last 10 years.





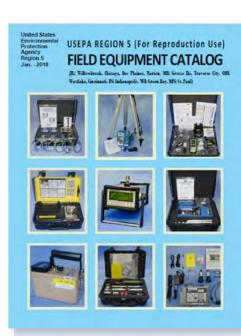












#### **Region 5 Response Equipment**

EPA Region 5 maintains a vast array of specialized emergency response (ER) and removal equipment to support the health and safety of OSCs and the program's overall response mission. Equipment is distributed across hub and outstationed OSC locations throughout Region 5.

Response equipment includes:

- ER health & safety (personal protection equipment)
- Real-time detection instruments for chemicals, dust, mercury
- ER chemical warfare agent/detectors
- Real-time radiation meters
- Weather station
- Air sampling equipment
- Field communication (radios and satellite phones)
- Transportation (mobile command post, ATV, air trailer)
- Specialized equipment such as chemical identifiers, thermal imaging cameras











#### Disaster Response and the National Response Framework

The National Response Framework (NRF) is a guide to how the U.S. responds to all types of disasters and emergencies. It is built on scalable, flexible, and adaptable concepts identified in the National Incident Management System (NIMS) to align key roles and responsibilities across the nation. The NRF describes specific authorities and best practices for managing incidents that range from the serious but purely local to large-scale terrorist attacks or catastrophic natural disasters. The NRF provides coordinating mechanisms to bring in additional agencies and components as they are needed.

The NRF's Emergency Support Function Annexes (ESFs) group capabilities and resources into functions most likely

needed during an Incident of National Significance. A large-scale natural disaster or significant terrorist incident can require the activation of many ESFs. A localized flood or tornado might only require activation of a few ESFs. Each ESF has one or two coordinating federal agencies that are in charge of orchestrating federal support and managing staff and resources for that functional area, and additional agencies that have supporting roles. For example, during the Hurricane Katrina in

2005, EPA managed ESF #10 (oil and hazardous waste materials recovery) across several states.







#### Emergency Support Function #10 – Oil & Hazardous Materials Response Annex

EPA and the Department of Homeland Security/U.S. Coast Guard are the primary agencies for overseeing Emergency Support Function ESF #10- Oil and Hazardous Materials Response Annex under the National Response Framework. ESF #10 provides a coordinated federal response to actual or potential oil and hazardous materials incidents. Response under ESF #10 occurs when there has been a Presidential Disaster Declaration under the Stafford Act or there is a need to support a response under the NCP, with additional resources.

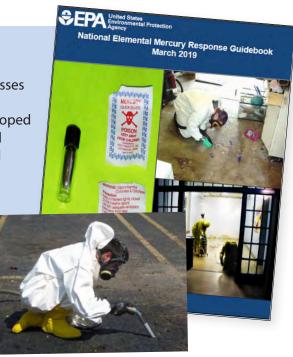
## **Does EPA Respond to Mercury Spills?**



#### **Mercury Response**

Region 5 OSCs respond to mercury spills in schools, homes and businesses that pose a threat of release to the environment. Our OSCs have developed regional guidance and participated in the development of the National Mercury Response Guidebook.



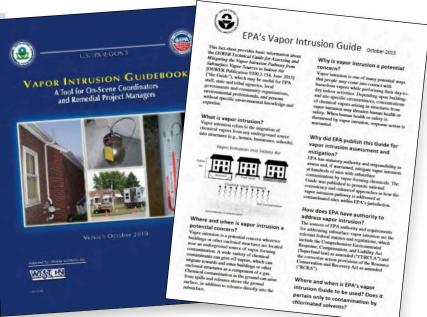


#### What About Vapor Intrusion Sites?

#### **Vapor Intrusion Response**

EPA has responded to Vapor Intrusion sites where an exposure pathway has been documented linking subsurface contamination from a source to residential indoor air. Examples include former dry-cleaners and solvent contaminated sites.





#### **Emergency Response Training for Railroad Incidents**

EPA Region 5 OSCs, working with U.S. Department of Transportation, U.S. Coast Guard, local, State and Tribal responders, and Class I railroads have updated and delivered the Transportation Rail Incident Preparedness and Response (TRIPR) training course to first responders in 16 locations since 2016. The new TRIPR training curriculum includes discussion of risk-based incident response principles, use of Incident Command System

(ICS) at responses, recent railroad case studies of crude-by-rail incidents, and an interactive panel discussion involving responders and railroads. Since 2016, over 1,600 local and State emergency managers, firefighters, hazmat technicians, public health professionals, and law enforcement officials have participated in the 8-hour training sessions.



TRANSPORTATION RAIL INCIDENTS PREPAREDNESS AND RESPONSE TRAINING JANUARY 25, 2017



#### **Homeland Security/Counter-Terrorism**

Since 1998, EPA Region 5 has been acquiring assets and developing tactical approaches to respond to incidents involving intentional chemical, biological, radiological, and nuclear (CBRN) releases. In addition, EPA has

developed a Homeland Security program to assist local and State partners prepare for potential incidents through research, planning, and pre-deployments. EPA Region 5 has extensive experience in cleaning up and assisting with the recovery of CBRN, nationally significant events, and highhazard incidents.

#### **EPA CBRN and Homeland Security** activities and resources

**CBRN Preparedness and Response:** 

- Specialized equipment including multimedia monitoring and laboratory assets
- Cleanup guidance
- Treatment and disposal guidance
- · Emerging research

**Homeland Security Preparedness:** 

- Integrated planning between Federal agencies and EPA regions
- Participation in local, statewide, and nationwide exercises
- Pre-deployment support to key events (political conventions, major sporting events)





#### National Special Teams available to support EPA and stakeholders



#### **Environmental Response Team**

The Environmental Response Team (ERT) is a national group of EPA technical experts who provide around-the-clock assistance at the scene of hazardous substance releases. ERT offers expertise in such areas as oil spill response, air monitoring, hydrology, geology, and engineering. ERT can

provide support to the full range of emergency response actions, including unusual or complex emergency incidents. In such cases, ERT can bring in specialized equipment and experienced responders, and can provide an EPA On-Scene Coordinator or lead responder with experience and advice. The ERT Warehouse is in the Cincinnati, Ohio area.









#### Radiological Emergency Response Team

The Radiological Emergency Response Team (RERT) is a specialized unit that responds to emergencies requiring the cleanup of radioactive substances. RERT provides onsite and lab-based radiation risk monitoring services.





#### **Consequence Management Advisory Division**

The Chemical, Biological, Radiological, and Nuclear Consequence Management Advisory Division (CBRN CMAD) provides scientific support and technical expertise for decontamination of buildings, public infrastructure, and agriculture. CMAD also

provides specialized expertise, such as health physics, toxicology, HVAC engineering, and industrial hygiene.

Based near Dallas Texas, and able to deploy within one hour of notification, ASPECT is the nation's only airborne real-time chemical and radiological detection, infrared and photographic platform available to assist local, national, and international agencies. ASPECT is available 24/7/365 and can collect data at any site in the continental U.S. within 9 hours.





#### **National Criminal Enforcement Response Team**

The Office of Criminal Enforcement, Forensics, and Training's National Criminal Enforcement Response Team (NCERT) supports environmental crime investigations involving chemical, biological, or radiological releases to the environment. NCERT's specially trained law enforcement officers collect forensic evidence within contaminated zones, serve as liaisons with other agencies, and provide protective escorts to EPA's OSCs, contractors, and other EPA special teams during national emergencies.







#### **Region 5 Emergency Operation Center**

The Region 5 Emergency Operations Center (EOC) is the central command and control hub responsible for managing emergency preparedness and emergency response at a strategic level. Located at EPA's R5 Chicago office, the EOC is designed to ramp up when warranted by emergency circumstances.

The EOC assists with disseminating information, and deploying and tracking field assets, including EPA Region 5 personnel. The EOC also collects, gathers, and analyzes data; and disseminates information to all responders, agencies, and communities involved in the emergency response.

#### Incident Command System/Incident Management Team

The Incident Command System (ICS) provides a standardized incident management approach used by all levels of government—local, State, Tribal, and Federal. ICS integrates resources and provides a coordinated response among jurisdictions to hazardous incidents of regional or national scope. EPA has used ICS for response actions under its CERCLA, OPA, and Stafford Act authorities (i.e., hazmat incidents, oil spills, and natural disaster response).

EPA Region 5's Regional and sub-area contingency plans identify a National Incident Management System-type ICS as the response management system to be implemented.

EPA Region 5 maintains a fully staffed Incident Management Team (IMT) that may be mobilized to any point within the Region within 12 to 24 hours. In addition, most Region 5 OSCs have been trained and exercised as Division/Group Supervisors.







#### **Oil Spill Prevention**

EPA conducts inspections at oil storage facilities to determine compliance with the Clean Water Act's Spill Prevention, Control, and Countermeasure (SPCC) regulation. SPCC helps facilities prevent oil releases from reaching navigable waters and adjoining shorelines. The SPCC team works with facilities to ensure that they

correct violations identified during inspections.

According to the CWA, facilities that store more than 1 millon gallons of oil are required to prepare and submit a Facility Response Plan (FRP) to respond to a worst-case discharge of

oil and the threat of such a discharge. Once the FRP has been submitted to EPA and approved, EPA conducts Government-Initiated Unannounced Exercises (GIUE) to verify that a facility can implement the response plan.







#### **Regional Response Team**

The Region 5 Regional Response Team (RRT5) is comprised of members from State and Federal agencies and Tribes committed to working collaboratively to minimize oil and chemical incidents that affect human health and safety, as well as the environment. RRT5 ensures coordinated, efficient, and effective support of local, State, Tribal, and

Federal responders to significant oil and hazardous substance incidents across the six Great Lakes states.









RRT5 functions in two ways: as a standing team and an incident specific team.

- The Standing RRT meets twice yearly in varying locations in Region 5 to develop working relationships, exchange information, and develop regional response policies and procedures. The Standing RRT provides a regional mechanism for developing and coordinating preparedness and planning activities.
- The incident-specific RRT provides assistance to OSCs and other responding agencies during a major event. The role of the Incident-Specific RRT is determined by the circumstances of the incident, but key responsibilities can include: monitoring the response, providing advice to the OSC on the use of chemical countermeasures and in-situ burning, and assisting the OSC in mobilizing resources available from RRT members within Region 5. Participation by RRT members will depend on the specific nature of the incident, including location.

































#### **Spill Response Planning Areas** R5 Planning Areas - OSCs (Planners) The Regional Contingency Plan (RCP) describes 1. Cleveland/Central Lake Erie - Pohl (Miller) response protocols and assists in providing a 2. Columbus/Scioto - Cole (Miller) coordinated response capability in the event of a 3. Detroit/SE Michigan - Kimble/Edwards (Churchill) 4. Eastern Ohlo/Upper Ohio River - Cashmere (Miller) release or spill that poses a threat to the environment 5. Great Black Swamp Inland - Gulch (Miller) or to human health and welfare. 6. Great Rivers - Turner/Vrabec (Lee) 7. Greater Chicago - Ruesch/Mitchell (Lee) 8. Horicon Marsh - Vacant/Kondrick (Ropski) To enhance the integration of other Area Plans which 9. Louisville/South Indiana (R4) - Lam/Vrabec/Sewell (Lee) ■ 10. Minneapolis/St. Paul - Morrison (Ropski) fosters a local/State/Federal relationship, EPA Region 5 11. Muskingum – Peters/Cole (Miller) created Sub-Area Contingency Plans. There are 27 ■ 12. N. Lower W. MI - Nightingale/Cole (Miller) 13. N. Michigan – Dollhopf (Churchill) sub-areas identified in EPA Region 5. A planner and 14. NE Wisconsin – Vacant/Kondrick (Ropski) OSC(s) are assigned to work in each sub-area. 15. NW Indiana - Hassan (Ropski) ■ 16. Ohio River/Cincinnati – Renninger (Lee) For more information on a specific sub-area, 17. Patoka – Sewell/Vrabec (Lee) http://www.rrt5.org/SubAreas.aspx 18. Quad Cities – Turner (Lee) 19. Red River – Jarrell/Morrison (Ropski) 20, S. Lower W. MI – Kane (Miller/Churchill) 21. SE Ohio/Huntington – Kocher (Lee/Miller) 22. SE Wisconsin – Kondreck/Vacant (Ropski) 23. Siouxland - Thomas (Ropski) 24. St. Louis -Vrabec (Lee) 25. Upper Mississippi River – Maguire/Morrison (backup) (Lee/Ropski) 26. W. Lake Superior - Villicana/Morrison (Miller/Churchill) 27. White River - Lam/Sewell (Lee) Canada - Kimble/Edwards (Churchill/Miller) Unassigned (Covered under the Area Contingency Plan) 26 Indian Lands Census 2016 8 3 12 20 15 111 Region 7 16 Region 4

#### **Chemical Emergency Preparedness**

Region 5 Superfund Emergency
Response includes the Chemical
Emergency Preparedness and
Prevention Section (CEPPS), which
works to prevent chemical and oil spills
and assist local preparedness efforts.
The CEPPS team includes staff who
conduct outreach and inspections—





and where necessary, pursue enforcement actions—involving CERCLA 103 (chemical releases), EPCRA 311/312 (chemical storage reporting to State and local officials), CWA 311 (oil spill prevention, control, and countermeasures) and CAA 112r (preparedness and prevention for highly hazardous chemicals).

#### **CEPPS Outreach Support Tools:**

- Presentations at State, industry and education-specific conferences, meetings, and classes
- Coaching and capacity building for local, State, and Tribal organizations
- Webinars focusing on current topics such as chlorine management for water systems
- Outreach efforts to help develop an understanding of the reporting requirements and best practices under EPA's chemical and oil preparedness and prevention regulations

In addition, CEPPS provides contractor support to assist Local Emergency Planning Committees (LEPCs) exercise their emergency response plans. Exercising these plans is critical to test and evaluate a local preparedness plan's effectiveness. Exercises identify and eliminate planning and procedural problems and highlight successes.

LEPC exercises also enable stakeholders from local, State, Tribal and Federal, law enforcement, emergency, civil support, healthcare, and industry to interact and learn more about their respective roles in chemical incidents.





LEPC exercises can be either tabletop or full-scale exercises.

Tabletop exercises are discussion-based sessions, often on a weeknight, where members meet in an informal classroom setting to discuss roles during an emergency and responses to a particular emergency situation. A full-scale exercise is a multi-agency, multi-jurisdictional, multi-discipline exercise involving functional (e.g., joint field office, emergency operation centers) and "boots on the ground" response (e.g., testing equipment or decontaminating mock victims) scenarios. Full-scale exercises are generally more elaborate, time-consuming, and resource intensive.



# **EPA Region 5 SEMD Response Capabilities Contact Information**

To learn more about EPA Region 5 response capabilities or to discuss removal support, contact Jason El-Zein (el-zein.jason@epa.gov, 734-214-4900), or Sam Borries (borries.samuel@epa.gov, 312-353-8360).

