Regional Hazardous Materials Emergency Preparedness Plan

Mid-America Local Emergency Planning Committee

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REGIONAL HAZARDOUS MATERIALS EMERGENCY PREPAREDNESS PLAN

Approved November 14, 2019

Serving the Missouri counties of Cass, Clay, Jackson, Platte, and Ray, and incorporated cities; and the Kansas counties of Johnson, Leavenworth and Wyandotte, and incorporated cities

Prepared for:

Mid-America Regional Council
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Foreword and Letter of Promulgation

To: All Agencies and Readers

The purpose of this Regional Hazardous Materials Emergency Preparedness Plan (RHMEPP) is to coordinate the planning and response actions of the Mid-America Local Emergency Planning District, commonly referred to as the Mid-America Local Emergency Planning Committee (LEPC). This plan provides an administrative framework for hazardous materials planning and response in the areas served by the Mid-America LEPC including Cass, Clay, Jackson, Platte, and Ray counties in Missouri and Johnson, Leavenworth, and Wyandotte counties in Kansas. The LEPC is intended to embody a Whole Community approach as promoted by the National Preparedness Goal, by working with private industry and the public safety community on behalf of our citizens, businesses, and visitors. The LEPC coordinates with federal agencies as well as state, county, and local governments in both Kansas and Missouri. There are three primary audiences for this plan: emergency response agencies with a role in preparedness and response to a hazardous materials incident, local industries that manufacture handle and store hazardous materials, and the general public.

The RHMEPP is not intended to serve as an operational document although some aspects will be a valuable planning resource for operations plans. Rather, it provides an administrative framework and guidance to assist emergency response agencies, local governments, and the private sector in understanding concepts underlying the Emergency Planning and Community Right-to-Know Act (EPCRA) (Superfund Amendment Reauthorization Act Title III) and provisions for planning for hazardous materials emergencies. The document serves as an emergency planning tool to facilitate an effective, coordinated, multi-jurisdictional response by all personnel during a hazardous materials emergency. It also serves to reinforce to local governments and private industry the roles they play in informing the citizens of their communities of the inherent risks of hazardous materials and proactive steps that they can take to protect themselves, their families, and their communities.

The RHMEPP outlines actions by private industry, local government, and other participating organizations that will: (1) identify and communicate risks to communities of a hazardous substance release, (2) coordinate the response efforts of local jurisdictions, (3) establish response capabilities, and (4) maximize the effectiveness of response agencies within the LEPC. County and local emergency operation plans should be updated to reflect LEPC administrative functions and planning guidance resources. Local jurisdictions should identify the LEPC’s role and responsibility within their local emergency operations plans.

While this plan is focused on hazardous materials it can also be referenced for all-hazards emergency preparedness. Hazardous materials can be found in every jurisdiction within the Mid-America region – on our highways and rail lines, in our airports and shipping ports, in businesses and industry, and in our homes. As such, incidents like floods, fires, or tornadoes are likely to include hazardous materials. Additionally, while this document is not intended to address acts of terrorism involving weapons of mass destruction, the information contained within may be useful in supporting preparedness, prevention, protection, and response capabilities for these incidents.

While each local jurisdiction is required to maintain a local emergency operations plan that includes a hazardous materials annex, this plan is regional in scope and offers guidance on planning and response to hazardous materials incidents in the eight-county area served by the Mid-America LEPC. The RHMEPP supports the development of local emergency operations plans and procedures as well as provides resources and references to facilitate the planning process. The RHMEPP is intended to inform
emergency response agencies, local governments, and the private sector in their planning efforts for hazardous materials emergencies in regards to mitigation, preparedness, response, and recovery. Local jurisdictions may elect to adopt this plan, in whole or part, to augment their Local Emergency Operations Plans (LEOPs). The RHMEPP embraces the concepts of the National Preparedness System and the National Incident Management System (NIMS).

Authority for this document is set forth by the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III); Division 40, Chapter 4, Missouri Code of State Regulations, and the Revised Statutes of Missouri, sections 292.600 to 292.625; and by the Kansas Administrative Regulations (KAR) 28.65.1 to 28.65.4, Kansas Statutes Annotated (KSA) Chapter 48, Article 9, Executive Reorganization Order No. 29, and K.S.A. sections 65.5703-5705, and 057-0021-K.

This plan will be reviewed in its entirety on an annual basis and updated as necessary. This document supersedes all previous versions issued by the Mid-America LEPC. The Mid-America LEPC welcomes your comments and suggestions for improving this plan. Please direct your comments and suggestions to Mid-America Local Emergency Planning Committee, 600 Broadway, Suite 200, Kansas City, Missouri 64105-1554 or via e-mail to elynch@marc.org.

Sincerely,

Pete Knudsen  
Chair, MARC LEPC

James Zeeb  
1st Vice Chair, MARC LEPC

Scott Munk  
2nd Vice Chair, MARC LEPC
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Distribution List

This plan is made available to the following agencies in both Kansas and Missouri:

- Law Enforcement Agencies
- Fire Departments and Districts
- Emergency Management Agencies
- Emergency Medical/Health Care Agencies
- Local, State and Federal Government Entities
- Human Services and other Voluntary Agencies
- Tier II, Extremely Hazardous Substances (EHS), and Risk Management Program (RMP) Facilities.

See Appendix A for a list of all the agencies and regulated facilities.
BASE PLAN

1. Introduction

1.1 PURPOSE

The purpose of this plan is to identify the policies and procedures for relevant stakeholders within the geographic area of the Mid-America Local Emergency Planning Committee (LEPC) planning area for hazardous materials incident management. This plan is designed to prepare local governments, private industry, and emergency response agencies within the Mid-America LEPC area to respond and minimize exposure to or damage from a hazardous materials incident that could adversely impact human health and safety or the environment.

1.2 OBJECTIVES

This plan achieves the following objectives:

- Meet federal and state requirements for establishing the policies and procedures regarding local hazmat incident notification, response, coordination, and other elements.
- Provide information on hazardous materials in the LEPC area to various audiences to increase understanding of the risk and reduce the impact of a hazardous materials incident in the Mid-America LEPC planning area.
- Identify key stakeholders and interagency relationships necessary for achieving a coordinated response to a hazardous materials incident within the Mid-America LEPC area.
- Provide guidance for public access to community right-to-know information in compliance with the Emergency Planning and Community Right-To-Know Act of 1986.
- Assist jurisdictions in meeting local emergency planning requirements for hazardous materials pursuant to state and federal law. Local jurisdictions are encouraged to build on the planning outlined herein relative to their specific communities.

1.3 SCOPE

The Superfund Amendments and Reauthorization Act (SARA), Title III, Emergency Planning and Community-Right-to-Know Act (EPCRA) requires each state to administer a State Emergency Response Commission (SERC). The Missouri Emergency Response Commission (MERC) and Kansas Commission on Emergency Planning and Response (CEPR) serve as the SERC for each state, respectively.

A regional local emergency planning area also exists that includes local jurisdictions within both Missouri and Kansas to maximize planning resources and address hazmat threats and incidents affecting the entire Mid-America planning region. The Mid-America LEPC consists of the counties of Cass, Clay, Jackson, Platte, and Ray in Missouri and Johnson, Leavenworth, and Wyandotte in Kansas.
Figure 1: Jurisdictions Served by Mid-America LEPC
EPCRA requires the Mid-America LEPC to submit a plan that meets requirements of United States Code (USC) Title 42 Chapter 116 Subchapter 1 – Emergency Planning and Notification § 11003 (a)-(g). As per § 11003 (c) the plan shall include:

(1) Identification of facilities subject to the requirements of this subchapter that are within the emergency planning district, identification of routes likely to be used for the transportation of substances on the list of extremely hazardous substances, and identification of additional facilities contributing or subjected to additional risk due to their proximity to facilities subject to the requirements of this subchapter, such as hospitals or natural gas facilities.

(2) Methods and procedures to be followed by facility owners and operators as well as local emergency and medical personnel to respond to any release of such substances.

(3) Designation of a community emergency coordinator and facility emergency coordinators, who shall make determinations necessary to implement the plan.

(4) Procedures providing reliable, effective, and timely notification by the facility emergency coordinators and the community emergency coordinator to persons designated in the emergency plan, and to the public, that a release has occurred.

(5) Methods for determining the occurrence of a release, and the area or population likely to be affected by the release.

(6) A description of emergency equipment and facilities in the community and at each facility in the community that are subject to the requirements of this subchapter, and an identification of the persons responsible for such equipment and facilities.

(7) Evacuation plans, including provisions for a precautionary evacuation and alternative traffic routes.

(8) Training programs, including schedules for training of local emergency response and medical personnel.

(9) Methods and schedules for exercising the emergency plan.

EPCRA additionally stipulates operational, membership, governance, reporting, and other requirements for every LEPC.1

1.4 PLAN ORGANIZATION

The plan consists of a Base Plan and multiple Appendices. The Base Plan’s audience is intended for government officials, emergency response agency leadership and personnel, and critical industry partners. It describes the hazardous materials present in the LEPC planning area, and contains supporting documents that explain how guidance was developed by the LEPC and how that guidance should be integrated into local plans, including:

- Overall guide for hazardous material emergency management activities for jurisdictions within the Mid-America LEPC.
- Policies and regulations that govern hazardous materials releases and responsibilities for emergency response functions.
- The capacities of and coordination process of local hazardous material response teams.
- Supporting documentation.

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The plan’s Appendices consist of supplementary or additional details regarding components of the plan. The metadata for the associated graphics in this plan are accessible to readers via a MARC LEPC Geographic Information Systems (GIS) SharePoint site. For access, contact MARC LEPC at 816-474-4240 or elynch@marc.org.

1.5 INTEGRATION WITH OTHER PLANS

1.5.1 Regional Coordination Guide

The Kansas City Metropolitan Area Regional Coordination Guide (RCG) is an all-hazards, capabilities-based guide designed to address hazards potentially affecting the Kansas City metropolitan area. The RCG provides tools such as initial response checklists that may be helpful during an emergency. Content within this RHMEPP has been cross referenced with the RCG to ensure complimentary information.

The RCG includes an Emergency Support Function (ESF) #10 Oil and Hazardous Materials Annex to the RCG that addresses local and regional hazardous materials plans, regionally available hazardous materials resources and specially trained personnel, state and federal specialized resources and personnel, and regional coordination and information sharing activities to be accomplished in a hazardous materials incident. The RCG and ESF #10 Annex provide coordination guidance to stakeholders and are not designed as full operational plans.

1.5.2 Local Emergency Plans

Underlying all hazardous materials emergency response activities in the Mid-America LEPC planning area are the emergency operations plans developed by each local jurisdiction and emergency services agency.

The Mid-America LEPC Regional Hazardous Materials Emergency Preparedness Plan does not supersede other emergency plans, but rather provides guidance from a regional perspective to stakeholder organizations that can be used during emergency planning efforts. This Plan does not replace or substitute local emergency response plans. Operational guidance for incident response, including methods and procedures for facility owners/operators and emergency medical personnel, will be found primarily in local emergency operations plans.

1.6 LEGAL AUTHORITIES

This plan has been developed in accordance with the following applicable federal, state, and local regulations:

- Kansas Administrative Regulations (KAR) 28.65.1-28.65.4
- Kansas Executive Reorganization Order No. 29
- Kansas Statutes Annotated (KSA) Chapter 48, Article 9
- KSA Sections 65.5703-5705 and 057-0021-K
- Missouri Code of State Regulations, Division 40, Chapter 4
- Missouri Revised Statutes, Sections 292.600-292.625

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- Superfund Amendments and Reauthorization Act (SARA) Title III of 1986 – Emergency Planning and Community Right to Know Act of 1986 (EPCRA), Title 42 Chapter 116 Subchapter 1 – Emergency Planning and Notification § 11003 (a-g)

A comprehensive and detailed listing of legal authorities is available for reference in Appendix B.
2. Situation

### 2.1 HAZARDOUS MATERIAL RELEASE INCIDENTS

#### 2.1.1 National Response Center

The National Response Center (NRC) is the designated federal point of contact for reporting all oil, chemical, radiological, biological, and etiological discharges into the environment, anywhere in the United States and its territories. It serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The following table provides a 5-year (2012-2017) look at the incidents reported to the NRC, and the types of chemicals spilled, and operators of these incidents. The number of incidents reported below is not necessarily the same number of submitted reports from regulated facilities based on incident threshold reporting requirements, as the NRC data below may include any kind of substance in any quantity that may or may not have reached threshold reporting requirements:

<table>
<thead>
<tr>
<th>Incident Type</th>
<th>Kansas</th>
<th>Missouri</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Johnson</td>
<td>Leavenworth</td>
</tr>
<tr>
<td>Fixed Facility</td>
<td>33</td>
<td>4</td>
</tr>
<tr>
<td>Mobile</td>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>Aircraft</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Pipeline</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Railroad</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Railroad Non-Release</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Storage Tank</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td>Vessel</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unknown Sheen</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>

The historical chemicals involved in these incidents are: Jet “A” fuel, diesel fuel, waste oil, butadiene, gasoline, refrigerant gases, methyl mercaptan, pesticides, fiberglass, hydraulic oil, phenol, acrolein, benzene, ethylene glycol, hydrogen cyanide, hydrochloric acid, fly ash, trichloroethylene, gear oil, polychlorinated biphenyls, perchloroethylene, hydrochloric acid, fly ash, trichloroethylene, gear oil, polychlorinated biphenyls, perchloroethylene, anhydrous ammonia, sodium hypochlorite, asbestos, hydrogen peroxide, potassium hydroxide, propane, crude oil, vinyl chloride, radioactive material, natural gas, glacial acrylic acid, dimethylformamide, and chlorine.

Contact information for the NRC can be found in Appendix A.
2.1.2 Toxics Release Inventory

The Toxics Release Inventory (TRI) is a publicly available Environmental Protection Agency (EPA) database that contains information on specific toxic chemical releases and other waste management activities that are reported annually by certain covered industry groups as well as federal facilities. This inventory was established under the EPCRA of 1986, which requires facilities to use their best readily available data to calculate their releases and waste management estimates. The figure below illustrates the TRI sites in the LEPC planning area.

Figure 2: Toxics Release Inventory Sites
The following tables are an EPA release report summary using data from 2017 by county in the region.

**Table 2: TRI Data for Johnson County, Kansas**

<table>
<thead>
<tr>
<th>Johnson County, Kansas</th>
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<tbody>
<tr>
<td>Number of Reporting Facilities</td>
<td>27</td>
</tr>
<tr>
<td>Total On-Site Disposal or Other Releases</td>
<td>7,696 pounds</td>
</tr>
<tr>
<td>Total Off-Site Disposal or Other Releases</td>
<td>25,089 pounds</td>
</tr>
<tr>
<td>Total On- and Off-Site Disposal or Other Releases</td>
<td>32,785 pounds</td>
</tr>
<tr>
<td>Chemicals of Concern</td>
<td>1,2,4-trimethylbenzene, certain glycol ethers, chlorine, chromium, cobalt, copper, formaldehyde, lead, lead compounds, manganese, mercury compounds, n-butyl alcohol, nickel, nitric acid, selenium compounds.</td>
</tr>
</tbody>
</table>

**Table 3: TRI Data for Leavenworth County, Kansas**

<table>
<thead>
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<th>Leavenworth County, Kansas</th>
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<tbody>
<tr>
<td>Number of Reporting Facilities</td>
<td>4</td>
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<tr>
<td>Total On-Site Disposal or Other Releases</td>
<td>4,252 pounds</td>
</tr>
<tr>
<td>Total Off-Site Disposal or Other Releases</td>
<td>0 pounds</td>
</tr>
<tr>
<td>Total On- and Off-Site Disposal or Other Releases</td>
<td>4,252 pounds</td>
</tr>
<tr>
<td>Chemicals of Concern</td>
<td>Chromium, lead, manganese, nickel.</td>
</tr>
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**Table 4: TRI Data for Wyandotte County, Kansas**

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<tr>
<td>Number of Reporting Facilities</td>
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<tr>
<td>Total On-Site Disposal or Other Releases</td>
<td>1,358,489 pounds</td>
</tr>
<tr>
<td>Total Off-Site Disposal or Other Releases</td>
<td>683,023 pounds</td>
</tr>
<tr>
<td>Total On- and Off-Site Disposal or Other Releases</td>
<td>2,041,513 pounds</td>
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<td>Chemicals of Concern</td>
<td>Ammonia, antimony, antimony compounds, sulfuric acid, 1,2,4-trimethylbenzene, 2,4-D, certain glycol ethers, n-hexane, n-butyl alcohol, barium compounds, manganese, benzene, benzo(G,H,I)perylene, chromium, cobalt, copper compounds, cumene, cyclohexane, dicamba, dimethylamine, dioxin andioxin-like compounds, epichlorohydrin, ethylbenzene, ethylene glycol, ethylene oxide, formaldehyde, lead, lead compounds, manganese, manganese compounds, mercury compounds, methanol, methyl isobutyl ketone, n-hexane, n-methyl-2-pyrrolidone, naphthalene, nickel, nitrate compounds, nitric acid, nonylphenol, phenol, polycyclic aromatic compounds, propylene oxide, sulfuric acid, toluene, triethlamine, vanadium compounds, xyxlene (mixed isomers), zinc, zinc compounds.</td>
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### Table 5: TRI Data for Cass County, Missouri

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<tr>
<th></th>
<th>Cass County, Missouri</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Reporting Facilities</strong></td>
<td>8</td>
</tr>
<tr>
<td><strong>Total On-Site Disposal or Other Releases</strong></td>
<td>68 pounds</td>
</tr>
<tr>
<td><strong>Total Off-Site Disposal or Other Releases</strong></td>
<td>99 pounds</td>
</tr>
<tr>
<td><strong>Total On- and Off-Site Disposal or Other Releases</strong></td>
<td>167 pounds</td>
</tr>
</tbody>
</table>

**Chemicals of Concern**: Manganese, lead compounds, mercury compounds

### Table 6: TRI Data for Clay County, Missouri

<table>
<thead>
<tr>
<th></th>
<th>Clay County, Missouri</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Reporting Facilities</strong></td>
<td>22</td>
</tr>
<tr>
<td><strong>Total On-Site Disposal or Other Releases</strong></td>
<td>1,135,102 pounds</td>
</tr>
<tr>
<td><strong>Total Off-Site Disposal or Other Releases</strong></td>
<td>74,422 pounds</td>
</tr>
<tr>
<td><strong>Total On- and Off-Site Disposal or Other Releases</strong></td>
<td>1,209,524 pounds</td>
</tr>
</tbody>
</table>

**Chemicals of Concern**: Xylene (mixed isomers), n-butyl alcohol, methyl isobutyl ketone, n-methyl-2-pyrrolidine, ethylbenzene, cumene, 1,2,4-trimethylbenzene, certain glycol ethers, sulfur fluoride, benzene, chromium, copper, di(2-ethylhexyl) phthalate, diisocyanates, ethylene glycol, lead, lead compounds, manganese, mercury compounds, methanol, methyl isobutyl ketone, n-butyl alcohol, naphthalene, nickel, nickel compounds, nitrate compounds, nonylphenol, propylene oxide, sodium nitrate, styrene, sulfur fluoride, thiabendazole, toluene, vinyl acetate, xylene (mixed isomers), zinc compounds.

### Table 7: TRI Data for Jackson County, Missouri

<table>
<thead>
<tr>
<th></th>
<th>Jackson County, Missouri</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Reporting Facilities</strong></td>
<td>42</td>
</tr>
<tr>
<td><strong>Total On-Site Disposal or Other Releases</strong></td>
<td>826,457 pounds</td>
</tr>
<tr>
<td><strong>Total Off-Site Disposal or Other Releases</strong></td>
<td>212,105 pounds</td>
</tr>
<tr>
<td><strong>Total On- and Off-Site Disposal or Other Releases</strong></td>
<td>1,038,562 pounds</td>
</tr>
</tbody>
</table>

**Chemicals of Concern**: Styrene, toluene, formic acid, n-hexane, ammonia, nitric acid, sulfur fluoride, hydrochloric acid, hydrogen fluoride, barium compounds, cyclohexane, 1,2,4-trimethylbenzene, 2-methylacetonitrile, antimony, benzo(g,h,i)perylen, bromomethane, carbon disulfide, certain glycol ethers, chlorine, chromium, copper, copper compounds, cyanide compounds, cyfluthrin, dibutyl phthalate, dimethyl sulfate, ethylbenzene, ethylene glycol, hydrazine, lead, lead compounds, manganese, manganese compounds, mercury compounds, methanol, methyl isobutyl ketone, methyl methacrylate, metribuzin, n-butyl alcohol, n-hexane, n-methyl-2-pyrrolidone, nickel, nitrate
compounds, nitroglycerin, polycyclic aromatic compounds, sulfuric acid, triethylamine, vanadium compounds, xylene (mixed isomers), zinc compounds.

### Table 8: TRI Data for Platte County, Missouri

<table>
<thead>
<tr>
<th>Number of Reporting Facilities</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total On-Site Disposal or Other Releases</td>
<td>1,672,375 pounds</td>
</tr>
<tr>
<td>Total Off-Site Disposal or Other Releases</td>
<td>133 pounds</td>
</tr>
<tr>
<td>Total On- and Off-Site Disposal or Other Releases</td>
<td>1,672,508 pounds</td>
</tr>
<tr>
<td><strong>Chemicals of Concern</strong></td>
<td>Ammonia, barium compounds, benzene, chromium, chromium compounds, copper, copper compounds, hydrochloric acid, hydrogen fluoride, lead, lead compounds, manganese, manganese compounds, mercury compounds, methyl tert-butyl ether, naphthalene, nickel, nickel compounds, polycyclic aromatic compounds, styrene, sulfuric acid, toluene, toluene diisocyanate (mixed isomers), vanadium compounds, xylene (mixed isomers), zinc compounds.</td>
</tr>
</tbody>
</table>

### Table 9: TRI Data for Ray County, Missouri

<table>
<thead>
<tr>
<th>Number of Reporting Facilities</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total On-Site Disposal or Other Releases</td>
<td>17,739 pounds</td>
</tr>
<tr>
<td>Total Off-Site Disposal or Other Releases</td>
<td>26,907 pounds</td>
</tr>
<tr>
<td>Total On- and Off-Site Disposal or Other Releases</td>
<td>44,646 pounds</td>
</tr>
<tr>
<td><strong>Chemicals of Concern</strong></td>
<td>4,4’-isopropylidenediphenol, diethanolamine, diisocyanates, epichlorohydrin, ethylbenzene, isobutyraldehyde, nonylphenol, o-cresol, thiram, toluene, xylene (mixed isomers), zinc compounds.</td>
</tr>
</tbody>
</table>

## 2.2 Regional Hazardous Materials

Regional hazardous material sites are inclusive of regulated facilities (EHS, Tier II, RMP) as well as roadways, maritime ports, airports, and pipelines. Contact information is available for these facilities in Appendix A.

### 2.2.1 Facilities

The Mid-America LEPC planning area is home to a variety of facilities housing numerous chemicals. Depending on the type of chemical and/or quantity, facilities housing hazardous materials have different federal reporting requirements, which are summarized below:

#### 2.2.1.1 Hazardous Chemicals (Tier II) Facilities

Any substance for which a facility must keep a Safety Data Sheet (SDS) under OSHA’s Hazard Communication Standard is classified as a “hazardous chemical.” Any “hazardous chemical” that a
facility has more than ten thousand (10,000) pounds on hand at any time must complete a Tier II reporting form. A partial list of hazardous chemicals exists on the EPA website.3

2.2.1.2. Extremely Hazardous Substances Facilities

The Environmental Protection Agency (EPA) designates which substances are Extremely Hazardous Substances (EHS) and sets threshold planning quantities (TPQ) and reportable quantities (RQ) for each substance. The Consolidated List of Chemicals Subject to the EPCRA and Section 112(r) of the Clean Air Act (also known as the List of Lists) was prepared to help firms handling chemicals determine whether they need to submit reports under sections 302, 304, or 313 of EPCRA and, for a specific chemical, what reports may need to be submitted. These lists should be used as a reference tool, not as a definitive source of compliance information. Compliance information for EPCRA is published in the Code of Federal Regulations (CFR), 40 CFR Parts 302, 355, and 372. The List of Lists is available in several formats on the EPA’s website.4

2.2.1.3. Risk Management Program Facilities

Section 112 (r) of the Clean Air Act established the Risk Management Plan (RMP) requirements for facilities processing or manufacturing one or more of 140 acutely toxic substances, flammable gases, and volatile liquids at certain threshold quantities. Under these requirements, industry has the obligation to prevent accidents, operate safely, and manage hazardous chemicals in a safe and responsible way through hazard assessment, a prevention program, and an emergency response program. These programs are summarized in the Risk Management Plan. Risk Management Plans are submitted to the EPA with a required update of at least once every five years. Elements in the plan include:

- An off-site consequence analysis that evaluates specific potential release.
- Scenarios, including worst-case and alternate scenarios.
- A five-year accident history of releases of regulated substances.
- An integrated accident prevention program.
- An emergency response program.
- An overall management system to supervise the implementation of these program elements.


This EPA Final Rule addresses requirements for regulated facilities (identified as having Program 2 or 3 processes) to coordinate notification and exercises with local first responders. Program 2 or 3 processes define the three program levels based on processes’ relative potential for public impacts and the level of effort needed to prevent accidents.5 Facilities are required to coordinate with the local emergency response agencies at least once a year to determine how the source is addressed in the community emergency response plan and to ensure that local response organizations are aware of the regulated substances at the source, their quantities, the risks presented by covered processes, and the resources and capabilities at the facility to respond to an accidental release of a regulated substance.

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Additionally, all facilities with Program 2 or 3 processes are required to conduct notification exercises annually to ensure that their emergency contact information is accurate and complete.

This action also requires that all facilities conduct field exercises and tabletop exercises. Full-scale field exercises will be conducted at least once every ten years and tabletop exercises conducted at least once every three years, at minimum, and facilities may elect to complete these exercises more often in consultation with their local emergency response officials.

Responding facilities that have an RMP reportable accident, and document the response activities in an after-action report comparable to the exercise evaluation reports may use that response to satisfy the field exercise requirements. Furthermore, owner and operators of responding facilities that conduct exercises to meet other federal, state or local exercise requirements may satisfy the RMP exercise requirements provided that the scope of the exercise includes the objectives of an RMP exercise.6

2.2.1.5. Regional Hazmat Risk Summary

As part of this Plan update, data for Tier II, EHS and Risk Management Program (RMP) facilities were analyzed to form an overall picture of the region’s risk from hazardous materials. An abbreviated overview of the results of this analysis is included in this section below. See Appendix C for information regarding the region’s complete hazard maps that provide an analysis by county.

Information included in this plan was obtained from the Regional Multi-Hazard Mitigation Plan for Jackson, Clay, Platte, Cass, and Ray Counties in Missouri and individual jurisdictional plans for Johnson, Wyandotte, and Leavenworth Counties in Kansas.

The following table enumerates the number of regulated hazardous facilities in the MARC LEPC planning area.

Table 10: Number of Hazmat Facilities by County

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cass (MO)</td>
<td>6</td>
<td>24</td>
<td>86</td>
</tr>
<tr>
<td>Clay (MO)</td>
<td>3</td>
<td>74</td>
<td>139</td>
</tr>
<tr>
<td>Jackson (MO)</td>
<td>10</td>
<td>186</td>
<td>398</td>
</tr>
<tr>
<td>Platte (MO)</td>
<td>3</td>
<td>32</td>
<td>84</td>
</tr>
<tr>
<td>Ray (MO)</td>
<td>4</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td>Johnson (KS)</td>
<td>12</td>
<td>164</td>
<td>137</td>
</tr>
<tr>
<td>Leavenworth (KS)</td>
<td>4</td>
<td>13</td>
<td>51</td>
</tr>
<tr>
<td>Wyandotte (KS)</td>
<td>9</td>
<td>83</td>
<td>79</td>
</tr>
<tr>
<td>Totals</td>
<td>51</td>
<td>587</td>
<td>1004</td>
</tr>
</tbody>
</table>

The following table lists the most prevalent chemicals in RMP facilities in the MARC LEPC planning area based on 2019 data taking in to account the number of facilities and amount.

# Table 11: Top RMP Chemicals by County

<table>
<thead>
<tr>
<th>County</th>
<th>Chemical</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cass (MO)</td>
<td>Ammonia (anhydrous)</td>
<td>594 tons</td>
</tr>
<tr>
<td></td>
<td>Flammable mixture</td>
<td>250 tons</td>
</tr>
<tr>
<td>Clay (MO)</td>
<td>Propane</td>
<td>445 tons</td>
</tr>
<tr>
<td></td>
<td>Propylene oxide [Oxirane, methyl-]</td>
<td>92 tons</td>
</tr>
<tr>
<td></td>
<td>Chlorine</td>
<td>445 tons</td>
</tr>
<tr>
<td></td>
<td>Ammonia (anhydrous)</td>
<td>28 tons</td>
</tr>
<tr>
<td>Jackson (MO)</td>
<td>Ammonia (anhydrous)</td>
<td>318 tons</td>
</tr>
<tr>
<td></td>
<td>Hydrazine</td>
<td>800 tons</td>
</tr>
<tr>
<td></td>
<td>Hydrogen chloride</td>
<td>46 tons</td>
</tr>
<tr>
<td></td>
<td>Carbon disulfide</td>
<td>850 tons</td>
</tr>
<tr>
<td></td>
<td>Formaldehyde (solution)</td>
<td>47 tons</td>
</tr>
<tr>
<td></td>
<td>Chlorine</td>
<td>2,149 tons</td>
</tr>
<tr>
<td></td>
<td>Flammable mixture</td>
<td>60 tons</td>
</tr>
<tr>
<td></td>
<td>Propane</td>
<td>12 tons</td>
</tr>
<tr>
<td></td>
<td>Hydrogen chloride</td>
<td>46 tons</td>
</tr>
<tr>
<td>Johnson (KS)</td>
<td>Ammonia (anhydrous)</td>
<td>391 tons</td>
</tr>
<tr>
<td></td>
<td>Propane</td>
<td>33 tons</td>
</tr>
<tr>
<td></td>
<td>Toluene diisocyanate</td>
<td>37 tons</td>
</tr>
<tr>
<td></td>
<td>Cyclohexylamine</td>
<td>8 tons</td>
</tr>
<tr>
<td></td>
<td>Chlorine</td>
<td>4 tons</td>
</tr>
<tr>
<td></td>
<td>Isobutane</td>
<td>13 tons</td>
</tr>
<tr>
<td>Leavenworth (KS)</td>
<td>Ammonia (anhydrous)</td>
<td>163 tons</td>
</tr>
<tr>
<td></td>
<td>Chlorine</td>
<td>8 tons</td>
</tr>
<tr>
<td>Platte (MO)</td>
<td>Ammonia (anhydrous)</td>
<td>248 tons</td>
</tr>
<tr>
<td></td>
<td>Toluene diisocyanate</td>
<td>215 tons</td>
</tr>
<tr>
<td>Ray (MO)</td>
<td>Ammonia (anhydrous)</td>
<td>1,805 tons</td>
</tr>
<tr>
<td></td>
<td>Epichlorohydrin [Oxirane, (chloromethyl)-]</td>
<td>43 tons</td>
</tr>
<tr>
<td></td>
<td>Chlorine</td>
<td>3 tons</td>
</tr>
<tr>
<td>Wyandotte (KS)</td>
<td>Ethylene oxide [Oxirane]</td>
<td>685 tons</td>
</tr>
<tr>
<td></td>
<td>Ammonia (anhydrous)</td>
<td>260 tons</td>
</tr>
<tr>
<td></td>
<td>Propylene oxide [Oxirane, methyl-]</td>
<td>280 tons</td>
</tr>
<tr>
<td></td>
<td>Epichlorohydrin [Oxirane, (chloromethyl)-]</td>
<td>258 tons</td>
</tr>
<tr>
<td></td>
<td>Chlorine</td>
<td>77 tons</td>
</tr>
<tr>
<td></td>
<td>Vinyl acetate</td>
<td>395 tons</td>
</tr>
</tbody>
</table>

For a complete listing of RMP facilities with contact information, see Appendix A.
An interactive map depicting hazardous material facilities (Tier II, EHS, and RMP) is available on the MARC website. This interactive map provides detailed information about each respective hazardous material facility as well as the local fire department that serves as the primary response agency to each respective facility. Maps in Error! Reference source not found. provide information on population vulnerability and hazardous facilities present.

2.2.1.6 Tier II and RMP Facilities in Floodplains

Numerous Tier II sites are located within the 100-year flood zones. These facilities should have specific plans and procedures regarding flood protection. See the figures below to locate RMP and Tier II sites located in the 100-year flood zones in the MARC LEPC planning area and Kansas City, Missouri, respectively.

7 Fire District and Tier II Hazards ArcGIS Map, MARC:
https://www.arcgis.com/home/webmap/viewer.html?webmap=539d6f901bd64cadb783a7be4517c314&extent=-95.4266,38.4258,-93.3982,39.5043
Figure 3: RMP and Tier II Facilities in the 100 Year Flood Zone
A list of hazardous facilities located in 100-year flood zones can be found in Appendix A.

2.2.2 Pipelines

Energy pipelines are prevalent throughout all counties in the planning region. Energy pipeline crossings in the areas include large diameter pipes that carry energy products to population centers, along with small diameter pipes that bring products, such as natural gas, to homes and businesses. There are two general types of energy pipelines: liquid petroleum pipelines and natural gas pipelines. Within the liquid petroleum pipeline network there are crude oil lines, refined product lines, highly volatile liquids (HVL) lines.

Pipelines are a safe way to transport energy products across the country. Pipeline failures decreased by more than 60% from 2001 to 2012. When pipelines fail, large quantities of hazardous materials can be released. While the likelihood of failure is low, if any of these energy pipelines were to be damaged or rupture, such an event could imminently endanger lives and cause damage to the environment and property in the immediate area (within a half-mile radius). Incidents involving pipeline failures are typically isolated, although the risk area may appear large. The most common manmade cause of pipeline failures is pipeline rupture due to pipes breaking when heavy construction equipment is used to excavate for construction projects. Pipeline ruptures can also be caused by deliberate actions of
sabotage or terrorism. Major pipeline ruptures could disrupt gas service over wide areas with resulting significant economic impacts.

The following graphic illustrates the pipelines in the MARC LEPC planning area:

![Pipelines](image)

Contact information is available for these pipelines in Appendix A.

### 2.2.3 Rail

The Kansas City region is a recognized major railroad hub in the US. Four (4) Class 1 railroad companies have rail lines and yards in the region to serve customers as well as to distribute freight on a national scale. The figure below shows the radial spokes of the rail system in the region, including abandoned rail. Detailed railroad maps can be accessed on the Aberdeen Caroline & Western Railway Company website\(^8\) and are illustrated at a regional level in the figure below:

---

Figure 6: Regional Rail Freight Traffic and Flood Zones
The following figure illustrates the railways in the Kansas City, Missouri, area.

Figure 7: Kansas City, Missouri, Area Rail Lines

Contact information is available for these railway companies in Appendix A.
Kansas City ranks first in U.S. freight volume by tonnage and is generally regarded as the second largest rail center in the United States. Four Class 1 rail carriers, three regional lines and one local switching carrier (Kansas City Terminal) serve the area.

Missouri has approximately 4,400 miles of main track, 2,500 miles of yard track, and approximately 7,000 public and private crossings. At the present time, 19 different railroads operate in the state of Missouri. See Figure 7: Kansas City for the rail lines operating in the Kansas City area.

In the Kansas City region, railway is classified as follows:
- Four – Class 1 (large national railroads)
- Two – Regionals (only operate in two or three states)
- Two – Terminal Railroads (based in large metropolitan areas)
- Six – Shortlines (regional railroads inside state lines)
- Three – Tourist lines (short trip railroads hauling passengers for less than one-day excursions)
- Two – Amtrak trains (national inter-city railroad passenger system)

Until recently, railroads did not carry large shipments of crude oil; however, many trains now transport 80 to 100 cars of oil per train. In eight of the years between 1975 and 2009, railroads reported virtually no spills of crude oil; and, in five of those years, they reported spills of one gallon or less. Comparably, in 2010, railroads reported spilling about 5,000 gallons of crude oil, according to federal data. Fewer than 4,000 gallons were spilled annually in 2011 and 2012. The oil spills in 2013 reached 1.15 million gallons. The Association of American Railroads industry group estimates that railroads shipped 400,000 carloads of crude oil in 2013 — more than 11.5 billion gallons. One tank car holds roughly 28,800 gallons of oil.

The two most significant routes through the Kansas counties are the BNSF Railway’s Transcontinental Route and Union Pacific Railway’s East-West Coal Route. The BNSF Railway’s Transcontinental Route runs from the southwest to the northeast portion of the region connecting ports in California with Illinois. The Union Pacific major coal route operates through Leavenworth, Johnson, and Wyandotte Counties into Missouri. Both routes support 80-90 trains per day.

Between January 2009 and March 2015, there were 127 hazardous materials spills associated with railroads in the five-county planning area. Of these 84 (64%) occurred in the rail yards while 43% occurred at railroad crossings or at isolated track locations. Of the 127 railroad spills, four occurred in Cass County, five in Clay, 115 in Jackson, one in Platte and two in Ray.

The 2012 Missouri State Rail Plan forecast Missouri’s inbound/outbound hazardous materials rail freight traffic commodities to increase by four percent from 2013 to 2014 based on projected growth in Missouri counties and their national and international trading partners. The following tables details various statistics regarding commodities transported by rail in the MARC LEPC planning area.
### Table 12: Kansas Top 10 Inbound Commodities Transported by Rail 2017

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Tons (x1,000)</th>
<th>% of Total Inbound Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal-n.e.c.</td>
<td>44,822.7</td>
<td>34.7</td>
</tr>
<tr>
<td>Crude petroleum</td>
<td>14,625.1</td>
<td>11.3</td>
</tr>
<tr>
<td>Coal</td>
<td>11,657.2</td>
<td>9.0</td>
</tr>
<tr>
<td>Cereal grains</td>
<td>10,320.4</td>
<td>8.0</td>
</tr>
<tr>
<td>Gasoline</td>
<td>4,551.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Nonmetal mineral products</td>
<td>4,282.0</td>
<td>3.3</td>
</tr>
<tr>
<td>Other foodstuffs</td>
<td>3,312.2</td>
<td>2.6</td>
</tr>
<tr>
<td>Animal feed</td>
<td>3,255.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Nonmetallic minerals</td>
<td>2,663.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Fertilizers</td>
<td>2,572.6</td>
<td>2.0</td>
</tr>
</tbody>
</table>

### Table 13: Kansas Top 10 Outbound Commodities Transported by Rail

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Tons (x1,000)</th>
<th>% of Total Inbound Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereal grains</td>
<td>61,953.9</td>
<td>41.4</td>
</tr>
<tr>
<td>Coal-n.e.c.</td>
<td>32,816.7</td>
<td>21.9</td>
</tr>
<tr>
<td>Animal feed</td>
<td>5,211.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Mixed freight</td>
<td>5,109.1</td>
<td>3.4</td>
</tr>
<tr>
<td>Gasoline</td>
<td>3,882.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Meat/seafood</td>
<td>3,697.4</td>
<td>2.5</td>
</tr>
<tr>
<td>Other foodstuffs</td>
<td>3,631.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Nonmetallic minerals</td>
<td>3,562.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Nonmetal mineral products</td>
<td>3,166.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Other ag prods.</td>
<td>3,124.0</td>
<td>2.1</td>
</tr>
</tbody>
</table>

### Table 14: Missouri Top 10 Inbound Commodities Transported by Rail

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Tons (x1,000)</th>
<th>% of Total Inbound Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal-n.e.c.</td>
<td>33,815.1</td>
<td>19.6</td>
</tr>
<tr>
<td>Coal</td>
<td>33,002.8</td>
<td>19.2</td>
</tr>
<tr>
<td>Other ag prods.</td>
<td>14,553.2</td>
<td>8.4</td>
</tr>
<tr>
<td>Other foodstuffs</td>
<td>7,613.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Cereal grains</td>
<td>7,521.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Basic chemicals</td>
<td>6,735.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Nonmetal mineral products</td>
<td>6,545.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Gasoline</td>
<td>6,396.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Crude petroleum</td>
<td>5,543.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Mixed freight</td>
<td>5,399.0</td>
<td>3.1</td>
</tr>
</tbody>
</table>
Table 15: Missouri Top 10 Outbound Commodities Transported by Rail

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Tons (x1,000)</th>
<th>% of Total Inbound Commodities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal-n.e.c.</td>
<td>22,479.1</td>
<td>18.3</td>
</tr>
<tr>
<td>Cereal grains</td>
<td>16,258.3</td>
<td>13.2</td>
</tr>
<tr>
<td>Gravel</td>
<td>12,130.2</td>
<td>9.9</td>
</tr>
<tr>
<td>Chemical prods.</td>
<td>7,844.7</td>
<td>6.4</td>
</tr>
<tr>
<td>Other foodstuffs</td>
<td>6,448.8</td>
<td>5.3</td>
</tr>
<tr>
<td>Nonmetal mineral products</td>
<td>5,002.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Animal feed</td>
<td>4,774.3</td>
<td>3.9</td>
</tr>
<tr>
<td>Other ag prods.</td>
<td>4,328.9</td>
<td>3.5</td>
</tr>
<tr>
<td>Waste/scrap</td>
<td>3,950.3</td>
<td>3.2</td>
</tr>
<tr>
<td>Mixed freight</td>
<td>3,557.0</td>
<td>2.9</td>
</tr>
</tbody>
</table>

2.2.4 Intermodal Facilities

Intermodal transportation refers to the shipping of containers that are transferred between two or more modes of transportation. For example, a container may be moved from a truck to a rail, then back to a truck, without any handling of the freight itself. Contact information is available for these intermodal facilities in Appendix A.

2.2.4.1 Intermodal/Intermediate Bulk Containers

Intermediate bulk containers (IBC) and ton containers are cylindrical in shape with rounded heads welded to the cylinder. They range in liquid capacity from 180 to 320 gallons. Tank test pressures range from 500 to 1,000 psig. When shipped by rail, ton containers are carried on special flat cars, in boxcars or gondola cars, and in trailer-on-flat-cars or container-on-flat-cars. All fittings are in the heads, including fusible plugs and/or spring-loaded safety relief valves. Safety relief devices are prohibited for certain poisonous or noxious materials. Ton containers transport gases such as:

- Anhydrous ammonia
- Butadiene
- Chlorine
- Phosgene
- Refrigerant or dispersant gases
- Sulfur dioxide

2.2.4.2 Intermodal Tank Containers

Intermodal tank containers (IMs) consist of a single metal tank mounted inside a sturdy metal supporting frame. This unique frame structure means that they can be used in two or more modes of transport, such as rail, highway, or water. The tank is generally built as a cylinder enclosed at the ends by heads. Its capacity is generally less than 6,340 gallons (about 24,000 liters). Other tank shapes and configurations are rare, as are tanks with multiple compartments.

Non-pressure intermodal tank containers comprise over 90% of the total number of tank containers. They generally transport liquid and solid materials at maximum allowable working pressures (MAWP) of up to 100 psig. In the United States, two groups of non-pressure tank containers are common:
• IM-101 portable tanks are built to withstand MAWPs from 25.4 to 100 psig. These tanks may transport both non-hazardous and hazardous materials, including toxic, corrosive, and flammable materials with flash points below 32°F.
• IM-102 portable tanks are designed to withstand lower MAWPs of 14.5 to 25.4 psig. These tanks transport materials such as whiskey and other alcohols, some corrosives, pesticides, resins, and flammable liquids. More commonly, they transport various non-regulated materials, including food grade commodities.

Pressure intermodal tank containers, known as SPEC 51 and SPEC 51L, are less common. They are designed to withstand pressures ranging from 100 to 500 psig. These tanks generally transport gases liquefied under pressure, including liquefied petroleum gas (LPG), anhydrous ammonia, and metal alkyls.

2.2.4.3 Non-Bulk Containers

Non-bulk packaging includes:

• A maximum capacity of less than 119 gallons (450 liters) for containers of liquids.
• A maximum net capacity of less than 882 pounds (401 kilograms) for containers of solids.
• A water capacity of less than 1,001 pounds (454 kilograms) for containers of gases.

It is difficult to determine the contents of non-bulk containers based on the shape and design of the container. Non-bulk packaging for hazardous (as well as nonhazardous) materials include:

• Drums
• Cylinders
• Dewars
• Carboys
• Bottles
• Bags
• Aerosol cans
• Fiberboard and wooden boxes
• Multi-cell packages
• Other containers of similar size

These containers are in wide use for a variety of products. Newer plastic containers can hold 400 to 1,000 pounds of liquid. In addition, these containers can be found virtually anywhere around warehouses, retail outlets, homes, in boxcars, cargo vans, and semi-trailers.

2.2.4.4 Bulk Containers at Fixed Sites

Most storage tanks are designed to meet the specific needs of certain commodities. Tanks are built to withstand the properties of their intended contents in their size, shape, and design. Like other forms of storage and transportation containers, fixed facility storage tanks have certain characteristics that identify the tank as non-pressurized (or under low pressure), or as pressurized. For example:

• Pressurized tanks have rounded ends and visible pressure relief valves.
• Non-pressurized tanks, or tanks under low pressure, generally have flat ends, although there are exceptions; pressure relief devices will not be present.

More than 70 intermodal ramps exist in North America, and this number continues to increase. Intermodal transportation is expected to grow, as it provides flexibility and can reduce costs. The following table lists the rail companies in the Kansas City, Missouri, area.
Table 16: Kansas City Intermodal Railroad Terminals

<table>
<thead>
<tr>
<th>Intermodal Railroad Terminals</th>
<th>Street</th>
<th>City</th>
<th>State</th>
<th>Zip</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNSF – Logistics Park</td>
<td>34500 W 199th St</td>
<td>Edgerton</td>
<td>KS</td>
<td>66021</td>
</tr>
<tr>
<td>CSX – Kansas City</td>
<td>3301 East 147th St</td>
<td>Kansas City</td>
<td>MO</td>
<td>64147</td>
</tr>
<tr>
<td>KCS – Kansas City</td>
<td>3301 East 147th St</td>
<td>Kansas City</td>
<td>MO</td>
<td>64147</td>
</tr>
<tr>
<td>NS – Voltz Yard</td>
<td>4800 N. Kimball Dr</td>
<td>Kansas City</td>
<td>MO</td>
<td>64161</td>
</tr>
<tr>
<td>UP – Neff Yard</td>
<td>4801 Gardner Ave</td>
<td>Kansas City</td>
<td>MO</td>
<td>64120</td>
</tr>
</tbody>
</table>

2.2.5 Aviation

There are 12 Missouri airports that support air cargo operations; seven conduct scheduled operations for integrated and all-cargo carriers, while five others support ad-hoc charter operations to varying degrees of volume and frequency.

These airports all act as local market stations, serving their respective surrounding market areas. Missouri’s scheduled air cargo service airports include:

- Kansas City International Airport (MCI)
- St. Louis Lambert International Airport (STL)
- Springfield/Branson Regional Airport (SGF)
- Joplin Regional Airport (JLN)
- Kirksville Regional Airport (IRK)
- Dexter Municipal Airport (DXE)
- Columbia Regional Airport (COU)

Contact information is available for the facilities listed above in Appendix A. The following table lists various statistics regarding Kansas City International Airport (MCI).

Table 17: Kansas City International Airport Flight Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Passengers (Number Arriving/Departing)</th>
<th>Freight Handled (Pounds)</th>
<th>Flights (Number of takeoffs and landings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>9,749,507</td>
<td>189,872,059</td>
<td>133,196</td>
</tr>
<tr>
<td>2013</td>
<td>9,644,264</td>
<td>193,848,870</td>
<td>129,243</td>
</tr>
<tr>
<td>2014</td>
<td>10,166,879</td>
<td>187,804,858</td>
<td>126,460</td>
</tr>
<tr>
<td>2015</td>
<td>10,472,461</td>
<td>182,892,667</td>
<td>119,061</td>
</tr>
<tr>
<td>2016</td>
<td>11,041,750</td>
<td>203,860,071</td>
<td>122,844</td>
</tr>
<tr>
<td>2017</td>
<td>11,492,010</td>
<td>198,491,890</td>
<td>123,335</td>
</tr>
<tr>
<td>Total</td>
<td>62,566,871</td>
<td>1,156,770,415</td>
<td>754,139</td>
</tr>
</tbody>
</table>
2.2.5.1 Freight Carriers

In addition to scheduled service, the following airports offer “ad-hoc” or charter type air cargo service: Cape Girardeau Regional Airport; Spirit of St. Louis Airport; Macon-Fowler Memorial Airport; Malden Regional Airport; and Sedalia Memorial Airport.

The Kansas City International and St. Louis International Airports represent the state’s largest markets and highest respective air cargo volume. The combined catchment area of these airports covers most of the state. Kansas City International Airport (MCI) is a major hub for air cargo due to its location adjacent to numerous interstate highways. The airport consistently ranks as one of the best locations for air cargo and distribution facilities in the U.S.

Other airports in the region with runways of enough length to support large aircraft for air cargo operations include Kansas City’s Charles B. Wheeler downtown airport and New Century AirCenter in Johnson County. Currently, these facilities do not handle air cargo. The following table lists the changes in freight shipment in the region.

Table 18: Regional Air Freight Shipments

<table>
<thead>
<tr>
<th>Carrier</th>
<th>Total freight Shipped in 2017 (lbs)</th>
<th>Total freight Shipped in 2016 (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Canada</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Alaska</td>
<td>633,876</td>
<td>398,111</td>
</tr>
<tr>
<td>American</td>
<td>993,723</td>
<td>1,343,766</td>
</tr>
<tr>
<td>Allegiant Air</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Delta</td>
<td>2,015,118</td>
<td>1,788,294</td>
</tr>
<tr>
<td>Frontier</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VIA Airlines</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Airlines</td>
<td>684,434</td>
<td>641,426</td>
</tr>
<tr>
<td>United</td>
<td>9,007,834</td>
<td>9,635,631</td>
</tr>
<tr>
<td>Southwest</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Spirit</td>
<td>13,334,985</td>
<td>13,807,228</td>
</tr>
<tr>
<td>FedEx</td>
<td>125,039,521</td>
<td>132,176,310</td>
</tr>
<tr>
<td>Airborne Express</td>
<td>15,053</td>
<td>464,874</td>
</tr>
<tr>
<td>Southern Air</td>
<td>6,227,306</td>
<td>5,428,541</td>
</tr>
<tr>
<td>UPS</td>
<td>53,079,629</td>
<td>50,562,848</td>
</tr>
<tr>
<td>Charters</td>
<td>795,396</td>
<td>1,421,250</td>
</tr>
<tr>
<td>Total</td>
<td>198,491,890</td>
<td>203,861,051</td>
</tr>
</tbody>
</table>

2.2.5.2 Storage of Aviation Fuel

The Hilltop Airport and Inter-State Airport (Cass County), Kitty Hawk Estates Airport and Liberty Landing Airport (Clay County) and the Noah’s Ark Airport (Platte County) are private airfields that reported on-site availability of aviation fuel. The remaining private airports did not report the availability of fuel or
services, but it is assumed that small fuel quantities are maintained at every site for normal and emergency operations.

Of the public airports listed in the five Missouri counties, the following reported storing aviation fuels on-site: Lawrence Smith Memorial Airport (Cass County); Roosterville Airport and Midwest National Air Center Airport (Clay County); Charles B Wheeler Downtown Airport, East Kansas City Airport, and Lee’s Summit Municipal Airport (Jackson County); Triple R Airport and Kansas City International Airport (Platte County); and Excelsior Springs Memorial Airport (Ray County). The numerous airports and heliports indicate they have fuel on-site as listed in airport directories but did not report aviation fuel stored on-site. It is assumed that small fuel quantities are maintained at every site for normal and emergency operations.

The following figure illustrates the locations of airports and heliports in the region.

![Regional Airports and Heliports](image)

**Figure 8: Regional Airports and Heliports**
2.2.6 Maritime

Maritime bodies are utilized to transport hazardous materials. This section describes the major waterways in the MARC region and associated hazardous materials risks.

Contact information is available for these ports in Appendix A.

The figure below illustrates the maritime facilities along the Missouri River.

Figure 9: Regional Maritime Facilities
2.2.6.1 Kansas River

The Kansas River was considered commercially navigable for only a brief period during the early to mid-1800s. In 1864, the State Legislature of Kansas declared the Kansas River non-navigable and allowed for the construction of bridges, primarily railroad, and dams without restriction. This was the status of the Kansas River until 1913 when the State Legislature restored the Kansas River to navigable status. Today, the U.S. Coast Guard, which has jurisdiction for bridge restrictions over navigable waterways, has determined that the Kansas River is not a navigable waterway due to the dam and water intake constraints. The Coast Guard does not exercise any bridge administration functions for navigation regarding the river today.

2.2.6.2 Missouri River

The Missouri River supports numerous public and private ports, docks, launching ramps and marinas. Though there is some freight movement between the municipal docks, boat ramps, or marinas, it is limited movement. Mostly, freight moves by river barges (commonly referred to as tows) that are loaded and unloaded at private dock facilities. The private dock facilities are often owned, operated, and maintained by a private firm or a cooperative, such as a group of farmers in the case of grain loading and unloading facilities.

2.2.6.3 Kansas Ports

As per the 2009 Kansas DOT Statewide Freight Study, there are numerous public and private ports, docks, launching ramps and marinas along the Missouri River. Most docks (15 out of 27 in Kansas, or 55%) handle either grain products or building materials such as sand, gravel, and rock. Five (5) docks are inactive, and four (4) are listed as Other/Public Access and do not appear to support the transport of goods. Two (2) docks ship Fertilizer (dry, liquid) to/from Atchison and Wyandotte counties. The last dock, also noted in Wyandotte County, was reported to transport Chemicals (acid, fuel, liquid).

2.2.6.4 Missouri Ports

In 1977, the Kansas City Port Authority was established by the City of Kansas City, Missouri. Governed by a nine-member citizen board of commissioners appointed by the mayor, the Port Authority is a public corporation and a political subdivision of the State of Missouri. The Port of Kansas City’s Port Authority has statutory authority to issue bonds, reclaim land, and enter into contracts for development projects, making it a unique agency that is vital to the city’s economic progress.

The Port of Kansas City facility has about 274 meters (900 feet) of shoreline with serviceable transloading, storage areas and a 50- to 100-ton capacity crane to transfer cargo to/from truck to barge. The terminal has the capacity to handle over 800 thousand tons of cargo each year, including dry and liquid bulk, construction materials, chemicals, and over-sized cargoes. Located on the Missouri River where it meets the Kansas River, the Port of Kansas City is part of an urban complex that also includes Kansas City, Kansas, Kansas City, Missouri, and several smaller municipalities in the surrounding area. The 2010 US Census reported a population of almost 460,000 people in the Port of Kansas City.

Most of the regional river freight is transported from Kansas City (the Port of Kansas City, Missouri) to the mouth of the Missouri River just north of St. Louis, Missouri. Of the 85,007 short tons (2,000 lb.) of regional river freight carried by barges on the Missouri River from 1997 to 2006, 96% of the tonnage was from Kansas City (River Mile 374.8) to the mouth of the Missouri River. The range of short tons was from a high in 2001 of 9,295 to a low of 7,608 in 2005, with an average tonnage of 81,300. The Port of Kansas
City (River Mile 374.8 to River Mile 353.8) accounted for a total of 36,614 short tons and with an average of 3,661 tons per year.

Major commodities transported by barge tow on the Missouri River include agricultural products (farm and food products); chemicals, including fertilizers, refined and unrefined petroleum products, manufactured goods, including building materials and products (cement and lumber) and crude bulk commodities such as sand and gravel. Farm products, including corn, soybeans, and animal feeds, are the largest single commodity group transported on the Upper Mississippi River system. Of this total, hazardous materials include industrial chemicals (4%) and Petroleum Products (10%).

In 2007, the port was closed because river levels were dropping and floating barges down the Missouri River was unfeasible. In 2015 the port was reopened and is now one of the largest storage and distribution centers serving Missouri River barge traffic. By the end of 2015, the terminal will ship 5,000 short tons of coal, scrap metal, and mill scale. It is projected to ship over 150,000 short tons of material in 2016.

2.2.7 Surface Transportation

Kansas City’s system of roadways is among the most extensive in the nation. According to Federal Highway Administration statistics, the Kansas City region has the most freeway miles per person of all urbanized areas with populations greater than 500,000. The Kansas City metropolitan area also has the second highest total roadway miles per person and the eighth highest daily vehicle miles traveled (DMVT) per person. It is one of eight cities in the United States in which four interstates intersect. Kansas City’s highway infrastructure includes:

- Four interstates (I-70, I-49, I-35, and I-29)
- Four interstate linkages (I-435, I-635, I-470, and I-670)
- Nine U.S. highways

Contact information for the State Departments of Transportation can be found in Appendix A. The following table outlines the miles traveled in roadways in the region.

<table>
<thead>
<tr>
<th>Roadway Type</th>
<th>Interstate</th>
<th>Freeway/Expressway</th>
<th>Principal Arterial</th>
<th>Minor Arterial</th>
<th>Major Collector</th>
<th>Minor Collector</th>
<th>All Other Roads</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cass</td>
<td>60</td>
<td>0</td>
<td>49</td>
<td>100</td>
<td>236</td>
<td>46</td>
<td>1,569</td>
<td>2,060</td>
</tr>
<tr>
<td>Clay</td>
<td>93</td>
<td>110</td>
<td>61</td>
<td>145</td>
<td>199</td>
<td>11</td>
<td>1,600</td>
<td>2,219</td>
</tr>
<tr>
<td>Jackson</td>
<td>177</td>
<td>122</td>
<td>191</td>
<td>515</td>
<td>296</td>
<td>3</td>
<td>3,600</td>
<td>4,404</td>
</tr>
<tr>
<td>Platte</td>
<td>99</td>
<td>25</td>
<td>32</td>
<td>91</td>
<td>158</td>
<td>8</td>
<td>943</td>
<td>1,356</td>
</tr>
<tr>
<td>Ray&lt;sup&gt;9&lt;/sup&gt;</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

<sup>9</sup> MARC does not maintain a functional classification for roads in Ray County.
As measured by the Bureau of Transportation Statistics (BTS), the Commodity Flow Survey indicates that trucks moved more than one-half of all hazardous materials shipped from within the US.

Flammable liquids, especially gasoline, are the predominant hazardous materials transported in the US. In terms of ton-miles, flammable liquids account for about 56% of hazardous materials shipments. The next largest class of hazardous materials, in terms of ton-miles, is gases at about 17%

Highways, railways, waterways, pipelines, and commercial and military aviation routes are especially vulnerable to hazardous materials spills because of the multitude of chemical, radioactive, nuclear, explosives and hazardous substances transported along them. Approximately 16,000 hazardous materials incidents occurred in 2013, excluding pipelines.

A small share of hazardous materials transportation incidents are the result of vehicular crashes or train derailments (referred to as “accident-related”). 90% of incidents related to the movement of hazardous materials occur on highways or in truck terminals. In 2013, 2.1 percent of accident-related incidents were attributable to vehicle crashes or train derailments, which accounted for most property damage. Most hazardous materials incidents occur because of human error or package failure, particularly during loading and unloading.

Trucks carried the largest share of freight shipments moving less than 500 miles from point of origin. Railroads and pipelines, combined, carried over one-half of the tonnage shipped from 750 miles to 1,000 miles. Air cargo and shipments by multiple modes (e.g., shipments transferred from rail to truck) accounted for over one-half of the value of freight moved more than 2,000 miles. The following table outlines the type and quantity of hazardous chemicals that have been shipped in the region.

### Table 20: Hazardous Chemical Types Shipped

<table>
<thead>
<tr>
<th>UN Description of Hazardous Chemical Type</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012 (millions)</td>
</tr>
<tr>
<td>Ammonia, anhydrous</td>
<td>6,283</td>
</tr>
<tr>
<td>Argon, compressed</td>
<td>6,178</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>8,788</td>
</tr>
</tbody>
</table>

10 Kansas City miles were counted separately and are included in appropriate county totals as well.
11 Mileage calculations are estimates based on current regional road data that is in transition. Some segment calculations may be duplicated.
<table>
<thead>
<tr>
<th>UN Description of Hazardous Chemical Type</th>
<th>Tons</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012 (thousands)</td>
<td>Intrastate (percent)</td>
<td>Interstate (percent)</td>
<td>2012 (millions)</td>
<td>Intrastate (percent)</td>
<td>Interstate (percent)</td>
</tr>
<tr>
<td>Helium, compressed</td>
<td>S</td>
<td>S</td>
<td>8.3</td>
<td>181</td>
<td>66.7</td>
<td>33.3</td>
</tr>
<tr>
<td>Nitrogen, compressed</td>
<td>11,083</td>
<td>70</td>
<td>30</td>
<td>853</td>
<td>44.2</td>
<td>55.8</td>
</tr>
<tr>
<td>Oxygen, compressed</td>
<td>8,559</td>
<td>75.2</td>
<td>24.8</td>
<td>653</td>
<td>48.7</td>
<td>51.3</td>
</tr>
<tr>
<td>Petroleum gases, liquefied or liquefied petroleum gas</td>
<td>25,687</td>
<td>93.5</td>
<td>6.5</td>
<td>2,075</td>
<td>94.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Ethanol or ethyl alcohol or ethanol solutions or ethyl alcohol solutions</td>
<td>3,602</td>
<td>88</td>
<td>12</td>
<td>170</td>
<td>70.2</td>
<td>29.8</td>
</tr>
<tr>
<td>Diesel fuel, including gas oil or heating oil, light</td>
<td>47,773</td>
<td>95.2</td>
<td>4.8</td>
<td>1,554</td>
<td>70.4</td>
<td>29.6</td>
</tr>
<tr>
<td>Gasoline, includes gasoline mixed with ethyl alcohol</td>
<td>227,932</td>
<td>91.7</td>
<td>8.3</td>
<td>9,418</td>
<td>79.5</td>
<td>20.5</td>
</tr>
<tr>
<td>Kerosene</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>68</td>
<td>86.4</td>
<td>S</td>
</tr>
<tr>
<td>Hypochlorite solutions</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>Sodium hydroxide solution</td>
<td>7,350</td>
<td>75.7</td>
<td>24.3</td>
<td>506</td>
<td>43</td>
<td>57</td>
</tr>
<tr>
<td>Sulfuric acid with more than 51 percent acid</td>
<td>6,230</td>
<td>78.4</td>
<td>21.6</td>
<td>480</td>
<td>61.4</td>
<td>38.6</td>
</tr>
<tr>
<td>Propane, see also petroleum gases, liquefied</td>
<td>4,360</td>
<td>98.2</td>
<td>1.8</td>
<td>S</td>
<td>S</td>
<td>1.7</td>
</tr>
<tr>
<td>Alcohols, n.o.s</td>
<td>3,409</td>
<td>65</td>
<td>35</td>
<td>418</td>
<td>44.9</td>
<td>55.1</td>
</tr>
<tr>
<td>Flammable liquids, n.o.s</td>
<td>205,234</td>
<td>93.2</td>
<td>6.8</td>
<td>10,225</td>
<td>87.4</td>
<td>12.6</td>
</tr>
<tr>
<td>Tars, liquid including road oils and cutback bitumens, including road asphalt</td>
<td>5,546</td>
<td>95.2</td>
<td>4.8</td>
<td>149</td>
<td>73.7</td>
<td>S</td>
</tr>
<tr>
<td>Ammonia solutions</td>
<td>3,861</td>
<td>60.7</td>
<td>39.3</td>
<td>326</td>
<td>44.9</td>
<td>S</td>
</tr>
<tr>
<td>Elevated temperature liquid, n.o.s., at or above 100 c and below its flash point</td>
<td>5,371</td>
<td>70.6</td>
<td>29.4</td>
<td>508</td>
<td>47.6</td>
<td>52.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>649,117</td>
<td>89</td>
<td>11</td>
<td>34,541</td>
<td>73.6</td>
<td>26.4</td>
</tr>
</tbody>
</table>

**KEY:** S = Withheld because the estimate did not meet publication standards. UN numbers shown had the highest estimated weight without considering sampling variability. Since an “All other UN numbers” line is not shown, estimates do not add to the total. Ton-miles estimates are based on estimated distances traveled along a modeled transportation network.

**NOTES:** Value-of-shipments estimates have not been adjusted for price changes. Tables above provide estimated measures of sampling variability. For purposes of this table, individual shipment data are classified as either completely “interstate” or completely “intrastate.” All shipments with the state of destination different from the state of origin are classified as “interstate.” All shipments having the state of origin the same as the state of destination are classified as “intrastate.” SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics and U.S. Department of Commerce.
The following table outlines the weight of domestic, export, and import shipping by transportation mode in the region.

<table>
<thead>
<tr>
<th>Table 21: Weight and Value of Shipments by Transportation Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2007</strong></td>
</tr>
<tr>
<td>Millions of tons</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Truck</td>
</tr>
<tr>
<td>Rail</td>
</tr>
<tr>
<td>Water</td>
</tr>
<tr>
<td>Air, air &amp; truck</td>
</tr>
<tr>
<td>Multiple modes &amp; mail</td>
</tr>
<tr>
<td>Pipeline</td>
</tr>
<tr>
<td>Other &amp; unknown</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

\*Many 2007 and 2040 numbers in this table were revised as a result of Freight Analysis Framework (FAF) database improvements in FAF, version 3.4.

\*Data do not include imports and exports that pass through the United States from a foreign origin to a foreign destination by any mode.

NOTES: Numbers may not add to totals due to rounding. The 2012 data are provisional estimates that are based on selected modal and economic trend data. All truck, rail, water, and pipeline movements that involve more than one mode, including exports and imports that change mode at international gateways, are included in multiple modes & mail to avoid double counting. As a consequence, rail and water totals in this table are less than other published sources.


The Missouri Department of Transportation (MODOT) maintains Traffic Volume and Commercial Vehicle Count Maps. These maps detail the amount of traffic using Missouri's state highways. Due to the size of the system — 32,000 miles, the nation’s seventh largest — MODOT produces these maps on a three-year cycle.

This traffic count information was used to develop the hazardous materials shipments by truck in the Kansas City area. This information is generic, and all traffic counts, shipments and numbers are estimates only that can be used to help local jurisdictions determine the number of potentially hazardous materials shipments carried by trucks on area roadways. These figures are to be used for general hazardous materials planning purposes only and not for traffic flow or other types of operations or projects.

The Transportation Statistics Annual Report for 2013 indicates that about 7.5% of trucks transported amounts of hazardous materials large enough to require a placard warning that the truck was transporting hazardous cargo. This percentage has not differed much from a 2007 U.S. Census Bureau data estimated seven percent of all truck miles of freight involved hazardous materials.
Using the MODOT and KDOT traffic count data we can estimate the number of hazardous materials shipments on some regional highways. The following table outlines the number of vehicles and trucks with number of hazardous material shipments per day by roadway in the region.

**Table 22: Regional Hazmat Shipment by Truck**

<table>
<thead>
<tr>
<th>Roadway</th>
<th>Road Type</th>
<th>County</th>
<th>Traffic Count/Day</th>
<th>Truck Count/Day</th>
<th>Percentage of Truck Traffic</th>
<th>Number of Hazmat Shipments/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-70 at Woods Chapel</td>
<td>Interstate</td>
<td>Jackson</td>
<td>96,198</td>
<td>24,512</td>
<td>25.50</td>
<td>1,838</td>
</tr>
<tr>
<td>291 Hwy at I-70</td>
<td>MO Route</td>
<td>Jackson</td>
<td>58,825</td>
<td>6,645</td>
<td>11.30</td>
<td>498</td>
</tr>
<tr>
<td>I-435 at 350 Hwy</td>
<td>Interstate</td>
<td>Jackson</td>
<td>74,757</td>
<td>11,584</td>
<td>15.50</td>
<td>869</td>
</tr>
<tr>
<td>I-435 at 210 Hwy</td>
<td>Interstate</td>
<td>Clay</td>
<td>21,534</td>
<td>3,072</td>
<td>14.27</td>
<td>230</td>
</tr>
<tr>
<td>I-35 at 291</td>
<td>Interstate</td>
<td>Clay</td>
<td>52,059</td>
<td>9,506</td>
<td>18.26</td>
<td>713</td>
</tr>
<tr>
<td>I-435 and I-29</td>
<td>Interstate</td>
<td>Platte</td>
<td>11,543</td>
<td>3,614</td>
<td>31.31</td>
<td>271</td>
</tr>
<tr>
<td>I-29 at 45 Hwy</td>
<td>Interstate</td>
<td>Platte</td>
<td>77,376</td>
<td>4,413</td>
<td>5.70</td>
<td>331</td>
</tr>
<tr>
<td>I-49 and 58 Hwy</td>
<td>Interstate</td>
<td>Cass</td>
<td>35,276</td>
<td>7,433</td>
<td>21.07</td>
<td>557</td>
</tr>
<tr>
<td>7 Hwy and 58 Hwy</td>
<td>MO Route</td>
<td>Cass</td>
<td>4,572</td>
<td>388</td>
<td>8.49</td>
<td>29</td>
</tr>
<tr>
<td>10 Hwy and Route O</td>
<td>MO Route</td>
<td>Ray</td>
<td>5,313</td>
<td>563</td>
<td>10.60</td>
<td>42</td>
</tr>
<tr>
<td>40 Hwy and I-470</td>
<td>U.S. Route</td>
<td>Jackson</td>
<td>18,670</td>
<td>425</td>
<td>2.28</td>
<td>32</td>
</tr>
<tr>
<td>169 Hwy and I-435</td>
<td>U.S. Route</td>
<td>Clay</td>
<td>18,307</td>
<td>1,153</td>
<td>6.30</td>
<td>86</td>
</tr>
<tr>
<td>I-35 and 169 Hwy</td>
<td>Interstate</td>
<td>Wyandotte</td>
<td>95,800</td>
<td>21,014</td>
<td>21.9</td>
<td>1,576</td>
</tr>
<tr>
<td>I-35 and I-435</td>
<td>Interstate</td>
<td>Johnson</td>
<td>116,000</td>
<td>25,445</td>
<td>21.9</td>
<td>1,908</td>
</tr>
<tr>
<td>I-435 and 32 Hwy</td>
<td>Interstate</td>
<td>Wyandotte</td>
<td>61,100</td>
<td>13,402</td>
<td>21.9</td>
<td>1,005</td>
</tr>
<tr>
<td>I-70 and 69 Hwy</td>
<td>Interstate</td>
<td>Wyandotte</td>
<td>79,800</td>
<td>17,504</td>
<td>21.9</td>
<td>1,313</td>
</tr>
<tr>
<td>I-435 and 5 Hwy</td>
<td>Interstate</td>
<td>Wyandotte</td>
<td>29,900</td>
<td>6,559</td>
<td>21.9</td>
<td>492</td>
</tr>
<tr>
<td>10 Hwy and 7 Hwy</td>
<td>KS Route</td>
<td>Johnson</td>
<td>47,400</td>
<td>4,740</td>
<td>10.0</td>
<td>356</td>
</tr>
<tr>
<td>I-35 at 56 Highway</td>
<td>Interstate</td>
<td>Johnson</td>
<td>33,200</td>
<td>7,282</td>
<td>21.9</td>
<td>546</td>
</tr>
<tr>
<td>I-35 and 69 Hwy</td>
<td>Interstate</td>
<td>Johnson</td>
<td>55,500</td>
<td>12,174</td>
<td>21.9</td>
<td>913</td>
</tr>
<tr>
<td>5 Hwy and 7 Hwy</td>
<td>KS Route</td>
<td>Leavenworth</td>
<td>21,300</td>
<td>2,130</td>
<td>10.0</td>
<td>160</td>
</tr>
<tr>
<td>73 Hwy and Gilman</td>
<td>U.S. Route</td>
<td>Leavenworth</td>
<td>20,500</td>
<td>923</td>
<td>4.5</td>
<td>69</td>
</tr>
<tr>
<td>92 Hwy and 7 Hwy</td>
<td>KS Route</td>
<td>Leavenworth</td>
<td>14,800</td>
<td>1,480</td>
<td>10.0</td>
<td>111</td>
</tr>
</tbody>
</table>

12 Kansas does not have truck traffic counts. The percentage provided is based on Missouri Interstate figures (21.9%), Missouri Route figures (10.0%), or Missouri U.S. Route figures (4.5%).
The following graphic illustrates the major roadways throughout the region.

Figure 10: Regional Roadways

Roadway data created by The Mid-America Regional Council (MARC) and city and county governments. Flood Zone data obtained from the Federal Emergency Management Agency (FEMA). MARC makes no representations or warranties regarding the accuracy of data or maps. MARC shall not be liable under any circumstances for any direct, special, incidental or consequential damages with respect to any claim by any user or third party on account of or arising from the use of data or maps.
2.3 **Vulnerable Populations**

Thousands of facilities throughout the planning area utilize, transport, manufacture, and store significant inventories of hazardous materials. Many of these facilities are located within or adjacent to densely populated areas involving numerous critical public and private facilities. These populations and facilities would be directly affected either by actual exposure to a hazardous materials substance being release or by being preemptively evacuated or forced to shelter-in-place due to recommended protective action distances (PADs). The following table lists the percentage of vulnerable populations of the total population by county in the region.

**Table 23: Vulnerable Populations in LEPC Region by County**

<table>
<thead>
<tr>
<th></th>
<th>Total Population Estimate</th>
<th>Persons Under Age 5</th>
<th>Persons Under Age 18</th>
<th>Persons Age 65+</th>
<th>Persons Under Age 65 with a Disability (2012-2016)</th>
<th>Persons in Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson (KS)</td>
<td>591,178</td>
<td>6.5%</td>
<td>24.7%</td>
<td>14.0%</td>
<td>6.1%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Leavenworth (KS)</td>
<td>81,095</td>
<td>6.5%</td>
<td>23.8%</td>
<td>14.0%</td>
<td>10.8%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Wyandotte (KS)</td>
<td>165,288</td>
<td>8.2%</td>
<td>28.0%</td>
<td>12.0%</td>
<td>10.7%</td>
<td>19.4%</td>
</tr>
<tr>
<td>Cass (MO)</td>
<td>103,724</td>
<td>6.0%</td>
<td>24.4%</td>
<td>16.5%</td>
<td>9.3%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Clay (MO)</td>
<td>242,874</td>
<td>6.5%</td>
<td>24.3%</td>
<td>13.8%</td>
<td>8.3%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Jackson (MO)</td>
<td>695,895</td>
<td>6.7%</td>
<td>23.7%</td>
<td>14.6%</td>
<td>10.0%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Platte (MO)</td>
<td>101,187</td>
<td>6.2%</td>
<td>23.8%</td>
<td>14.2%</td>
<td>7.4%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Ray (MO)</td>
<td>22,855</td>
<td>5.6%</td>
<td>22.7%</td>
<td>18.1%</td>
<td>11.9%</td>
<td>11.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,007,096</strong></td>
<td><strong>133,641</strong></td>
<td><strong>503,432</strong></td>
<td><strong>285,130</strong></td>
<td><strong>172,409</strong></td>
<td><strong>219,477</strong></td>
</tr>
</tbody>
</table>

Most small hazardous materials incidents that occur are contained and suppressed at the facility level before damaging property or threatening lives. However, releases of extremely hazardous substances or large quantities of chemicals can have significant negative impacts on people, environment, and infrastructure. These impacts can cause multiple deaths/injuries, shut down facilities, contaminate large communal areas and in some cases require contaminated properties to be destroyed or permanently abandoned.

Certain chemicals may travel through the air or water, affecting a much larger area than just the point of the original release itself. Non-compliance with protective actions and building codes, as well as failure to maintain existing fire safety and containment features, can substantially increase the damage from a hazardous materials release.

Due to physical, mental, health, economic or emotional problems often associated with vulnerable populations, they experience disproportionate effects when a hazardous materials incident occurs. These disproportionate factors include locations where they live, the age of homes, increased reliance on support systems, reduced preparedness capabilities, health challenges, language barriers/difficulties in communicating risk, increased dependence on public transportation, and lack of funds to evacuate or leave impacted areas. Many facilities utilizing hazardous materials are in industrial areas, which are often adjacent to low-income housing consisting of older housing stock.

During a hazardous materials incident, the people living in these areas are often first to be impacted due to their proximity to the spill site. Should an evacuation be ordered, vulnerable populations may have
challenges leaving the area due to their reliance on public transportation. Often people with health issues are impacted the most from exposures to hazardous substances. If a shelter-in-place order is issued, note that older homes are not as airtight as newer homes, which allows chemical vapors to infiltrate into the living spaces much quicker, causing residents to have more exposures to dangerous chemicals.

2.3.1 Population Density

Population density is a critical vulnerability should a Tier II or RMP site have a hazardous materials accident. People at the spill location and near the site could be exposed to the negative effects of chemicals. Public safety response agencies use PADs to recommend evacuation or “Shelter-In-Place” orders for public protection during the initial phase of a hazardous materials incident. PADs are the recommended safety distances people should maintain from a hazardous materials spill site to avoid exposure from dangerous levels of a released chemical. These PADs can sometimes encompass large areas.

For example, the PAD for a small spill of chlorine gas is about 1 mile downwind, while the PAD for a large release of chlorine gas is about five miles downwind. An airborne release of a chemical at one RMP site could force the evacuation of thousands of residents and have the potential to sicken hundreds of people. A worst-case scenario would be the rapid release of a large amount of ammonia or chlorine from a storage tank rupture at a hazardous material “RMP” type facility. See the figures below to see population densities and RMP and Tier II Sites.
Figure 11: Population Density with RMP and Tier II Sites

Data source: U.S. Census Bureau, American Community Survey (ACS), 2017 5-year tract data. Hazard data represented is for all 2019 Risk Management Plan (RMP) facilities and 2018 Tier II, Extremely hazardous substances (EHS) reporting facilities. RMP data source: EPA Region VII. Tier II data source: Missouri Department of Public Safety, SEMA and Kansas Department of Health & Environment.
Figure 12: Kansas City, Missouri, Population Density with RMP and Tier II Sites

Data source: U.S. Census Bureau, American Community Survey (ACS), 2017 5-year tract data. Hazard data represented is for all 2019 Risk Management Plan (RMP) facilities and 2018 Tier II, Extremely Hazardous Substances (EHS) reporting facilities. RMP data source: EPA Region VII. Tier II data source: Missouri Department of Public Safety, SEMA and Kansas Department of Health & Environment.
2.3.2 Children and Adolescent Population

Coordination with schools (public and private), childcare centers, and other areas where children and adolescents congregate (summer camp, sport events, etc.) is important for public warning and evacuation support. School administrators and childcare centers should be aware of local hazards in their community, such as nearby locations where hazardous materials are stored, and maintain plans to effectively notify children, staff, and parents of an emergency, safely and quickly take protective action (e.g. shelter in place or evacuation) and reunify children with their family's post-evacuation/emergency. Additional resources and coordination may be needed for family reunification in large-scale incidents.

Provisions to support children with mental health services following a significant emergency may also be implemented. Additionally, hospitals may conduct preparedness measures to more effectively care for pediatric patients who may require specialty care following a hazardous materials incident. The following graphics describe the percent of the total population by child age group in the region.

Figure 13: Population Below Age 5 with RMP and Tier II Sites
2.3.3 Older Adult Population

Coordination with facilities that care or house older adults, including long-term care facilities, adult homes, nursing homes, senior centers is important for public warning and evacuation support. Facility administrators should be aware of local hazards in their community, such as nearby locations where hazardous materials are stored, and maintain plans to notify consumers, their caretakers, and facility staff of an emergency, and be able to safely and quickly take protective action (e.g. shelter in place or evacuation). Coordination with community-based and healthcare organization leadership that serve older adults residing in the community is critical to reach older adults who may be socially isolated (living in rural areas, decrease amount of social support near their home, reduced access to public messaging via online/social media platforms), lack transportation and are medically dependent on supplies and medications or medical or mobility concerns that would require speciality care (e.g. susceptibility to certain hazardous materials, home nurse, medications and medical equipment, bedbound). Community-based and healthcare organizations should be aware of local hazards in their community, such as nearby locations where hazardous materials are stored, and maintain plans to notify staff and those individuals they serve of an emergency, and be able to safely and quickly take protective action (e.g. shelter in place, evacuation of the facility, communication with and evacuation of those they serve in the community.)
Additional resources and coordination may be needed for evacuation support in large-scale incidents for older adults. The following graphic illustrates the older adult population in the region.

**Figure 15: Population Age 65 and Over with RMP and Tier II Sites**

### 2.3.4 People with Disabilities and Access and Functional Needs

Emergency planning and response for people with disabilities and access and functional needs requires a concerted effort to be inclusive, particularly regarding public warning/emergency communication and evacuation support. Public communication will need to be accessible, including for people who are deaf or hard of hearing or blind/have low-vision and emergency officials may utilize interpretation for American Sign Language (ASL) or another prevalent language in the impacted community other than English, accessible online preparedness or protective action information, etc.

People with access or functional needs may have barriers to evacuate quickly and safely in an emergency and emergency officials may need to provide planning and support, including through providing accessible transportation, liaising with area Center for Independent Living (CIL) to partner with the disability community, and assisting with providing other kinds of support for activities of daily living in post-evacuation Mass Care service delivery sites (e.g. congregate care shelters).
The Mental Health and Functional & Access Needs Committee, a former subcommittee of the Regional Homeland Security Coordinating Committee (RHSCC), worked to:

- Develop a network of subject matter experts, community organizations, advocacy groups, government agencies, individuals with mental health, functional and/or access needs, to identify the challenges faced by those with mental health and functional and access needs during times of disaster or emergency.
- Devise plans, procedures, guidelines, and resources to overcome those challenges and ensure equal access to goods and services for the whole of the community.
- Communicate those plans to emergency response professionals and the larger community.
- Engage these populations as well as identify resources to support functional and/or access needs.

Based on accomplishments of The Mental Health and Functional & Access Needs Committee, it evolved it’s vision and mission and became the Community Disaster Resiliency Network (CDRN).\(^{13}\) As defined by the CDRN, this group focuses on vulnerable populations, including young children, older adults, people with disabilities, people who are economically disadvantaged, and those who are geographically, culturally and/or socially isolated.

The following graphic illustrates the percentage of residents with access or functional needs of the total population in the region.
2.3.5 Individuals with Limited English Proficiency

Individuals who do not speak English as their primary language and/or who have a limited ability to read, speak, write, or understand English can be considered limited English proficient, or "LEP." Limited English speakers may not have immediate information about a chemical spill without translation. Additionally, access to appropriate aid and safety instructions may be complicated by language barriers.

MARC maintains a Limited English Proficiency Plan (2016) that addresses the federal requirements and MARC policies regarding LEP persons.14

The diversity of languages in the Kansas City area is represented by a study conducted by the North Kansas City School District which indicated about 110 different languages were spoken by students and families

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14 https://www.marc.org/Transportation/Equity/Programs/LEPP
thoroughout the district.\textsuperscript{15} A Kansas City Area Transit Authority (KCATA) study determined that approximately 4.32\% (36,515 / 845,434) of the population over the age of 5 in KCATA’s service area speaks English less than “very well” and hence is characterized as LEP (see Table below).\textsuperscript{16}

Table 24: Kansas City Area Spoken Languages

<table>
<thead>
<tr>
<th>Language</th>
<th>Population Speaking English less than &quot;very well&quot;</th>
<th>Percent of Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish or Spanish Creole</td>
<td>49,539</td>
<td>65.4</td>
</tr>
<tr>
<td>Chinese</td>
<td>4,524</td>
<td>6.0</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>2,739</td>
<td>3.6</td>
</tr>
<tr>
<td>African languages</td>
<td>2,730</td>
<td>3.6</td>
</tr>
<tr>
<td>Arabic</td>
<td>2,700</td>
<td>3.6</td>
</tr>
<tr>
<td>Korean</td>
<td>2,480</td>
<td>3.3</td>
</tr>
<tr>
<td>Tagalog</td>
<td>1,489</td>
<td>2.0</td>
</tr>
<tr>
<td>Other Asian languages</td>
<td>1,281</td>
<td>1.7</td>
</tr>
<tr>
<td>Russian</td>
<td>932</td>
<td>1.2</td>
</tr>
<tr>
<td>Urdu</td>
<td>924</td>
<td>1.2</td>
</tr>
<tr>
<td>Laotian</td>
<td>781</td>
<td>1.0</td>
</tr>
<tr>
<td>Other Indo-European languages</td>
<td>708</td>
<td>0.9</td>
</tr>
<tr>
<td>German</td>
<td>667</td>
<td>0.9</td>
</tr>
<tr>
<td>Hmong</td>
<td>633</td>
<td>0.8</td>
</tr>
<tr>
<td>French (incl. Patois, Cajun)</td>
<td>603</td>
<td>0.8</td>
</tr>
<tr>
<td>Japanese</td>
<td>515</td>
<td>0.7</td>
</tr>
<tr>
<td>Mon-Khmer, Cambodian</td>
<td>349</td>
<td>0.5</td>
</tr>
<tr>
<td>Italian</td>
<td>302</td>
<td>0.4</td>
</tr>
<tr>
<td>Other Indic languages</td>
<td>287</td>
<td>0.4</td>
</tr>
<tr>
<td>Portuguese or Portuguese Creole</td>
<td>242</td>
<td>0.3</td>
</tr>
<tr>
<td>Serbo-Croatian</td>
<td>235</td>
<td>0.3</td>
</tr>
<tr>
<td>Gujarati</td>
<td>192</td>
<td>0.3</td>
</tr>
<tr>
<td>Thai</td>
<td>181</td>
<td>0.2</td>
</tr>
<tr>
<td>Persian</td>
<td>176</td>
<td>0.2</td>
</tr>
<tr>
<td>French Creole</td>
<td>143</td>
<td>0.2</td>
</tr>
<tr>
<td>Other West Germanic languages</td>
<td>137</td>
<td>0.2</td>
</tr>
<tr>
<td>Other Slavic languages</td>
<td>129</td>
<td>0.2</td>
</tr>
<tr>
<td>Hungarian</td>
<td>76</td>
<td>0.1</td>
</tr>
<tr>
<td>Hindi</td>
<td>71</td>
<td>0.1</td>
</tr>
<tr>
<td>Other Pacific Island languages</td>
<td>8</td>
<td>—</td>
</tr>
</tbody>
</table>

\textsuperscript{16} https://www.kcata.org/documents/uploads/LEP.pdf
<table>
<thead>
<tr>
<th>Language</th>
<th>Population Speaking English less than &quot;very well&quot;</th>
<th>Percent of Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yiddish</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Scandinavian languages</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Greek</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Polish</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Armenian</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Navajo</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other Native North American languages</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Hebrew</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other and unspecified languages</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>75,773</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
2.3.6 Limited Transportation Households

Rates of automobile ownership are generally lower in urban areas, especially among inner-city economically disadvantaged populations. Older adults residing in the community have lower rates of automobile ownership. Individuals with disabilities will have increased need for accessible transportation. Children and youth may be at childcare centers or school and they do not have the necessary amount of transportation to evacuate all children and youth at the same time. Thus, transportation out of an evacuation zone is problematic for people who do not have or have limited access to a vehicle for evacuation. Increased focus on current environmental challenges has led many individuals to choose to find alternate methods of transportation (i.e. biking, walking, public transit) to reduce gas emissions. Conversely, lower urban auto-ownership rates do not necessarily translate into easy evacuation for people with vehicles because the high-population densities of cities can cause severe traffic congestion on interstate highways and other major roads.

The following graphic illustrates the number of households without a personal vehicle in the region.
Figure 18: Limited Transportation

2.3.7 Economically Disadvantaged

Studies indicate in some areas high-risk chemical facilities are more often located near low-income neighborhoods that are predominately minority populations. A report recently found some striking findings of residents who live closest to hazardous chemicals and with the least time to react in the event of a catastrophic release (called fenceline zones).17

- Residents of fenceline zones have an average home value of 33% below the national average. Average household incomes in the fenceline zones are 22% below the national average.

17 Environmental Justice And Health Alliance For Chemical Policy Reform – Who’s in Danger Race, Poverty and Chemical Disasters
Http://comingcleaninc.org/assets/media/images/Reports/Who's%20in%20Danger%20Report%20FINAL.pdf
- The percentage of African Americans in the fenceline zones is 75% greater than for the U.S. as a whole, while the percentage of Latinx in the fenceline zones is 60% greater than for the U.S. as a whole.
- The poverty rate in the fenceline zones is 50% higher than for the U.S. as a whole.
- The percentage of adults in the fenceline zones with less than a high school degree is 46% greater than for the U.S. as a whole.
- The U.S. as a whole and the percentage of adults in the fenceline zones with a college or other post-secondary degree is 27% lower than for the U.S. as a whole.

The following graphic illustrates the median household income in the region.

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**Figure 19: Median Household Income with RMP and Tier II Sites**

Data source: U.S. Census Bureau, American Community Survey 2017 5-year tract data. Hazard data represented is for all 2019 Risk Management Plan (RMP) facilities and 2018 Tier II, Extremely hazardous substances (EHS) reporting facilities. RMP data source: EPA Region VII. Tier II data source: Missouri Department of Public Safety, SEMA and Kansas Department of Health & Environment.
2.3.8 Health Care Facilities

Health care organizations may include, but are not limited to, hospitals, long-term care (LTC) facilities, Federally Qualified Health Centers (FQHCs), other health clinics, mental health providers, PACE programs, psychiatric residential treatment facilities, dialysis centers and intermediate care facilities for persons with intellectual disabilities. For purposes of this plan, those individuals who are in facilities with state licensed beds for short- and long-term stays are covered as these populations would have limited transportation availability if evacuations were needed and would likely require additional support in the event of shelter-in-place order. Individuals who reside in the community and are served by FQHCs, mental health providers, PACE programs and dialysis center have an increased probability of vulnerability, with increased medical needs, transportation, and differing communication needs. The following map shows the locations of hospitals and long-term care facilities within the region, and the following table lists the number of hospitals and bed counts by county within the region.
### Table 25: Hospitals by County with Bed Count

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Number of Hospitals</th>
<th>Number of Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson (KS)</td>
<td>6</td>
<td>1,491</td>
</tr>
<tr>
<td>Leavenworth (KS)</td>
<td>2</td>
<td>130</td>
</tr>
<tr>
<td>Wyandotte (KS)</td>
<td>2</td>
<td>1,147</td>
</tr>
<tr>
<td>Cass (MO)</td>
<td>2</td>
<td>106</td>
</tr>
<tr>
<td>Clay (MO)</td>
<td>3</td>
<td>677</td>
</tr>
<tr>
<td>Jackson (MO)</td>
<td>11</td>
<td>3,029</td>
</tr>
<tr>
<td>Platte (MO)</td>
<td>1</td>
<td>97</td>
</tr>
<tr>
<td>Ray (MO)</td>
<td>1</td>
<td>34</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>28</strong></td>
<td><strong>6,816</strong></td>
</tr>
</tbody>
</table>

Many of these facilities are located within a half mile of a hazardous materials transportation corridor and within the off-site consequence areas of risk management program facilities. Evacuation and sheltering resources for these facilities will be limited in the event of a hazardous materials release. Specific location information for these facilities can be found in Appendix C.

#### 2.3.9 Education Facilities

Public and private secondary education facilities are generally in session eight months out of the year (excluding summer vacation, spring break, and holidays) and serve children between the ages of six and 18 years of age. Public education facilities do not have enough transportation to successfully evacuate all students in the event of a hazardous material release. Locations of these facilities can be seen in the figure below.

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18 Not inclusive of psychiatric hospitals, rehabilitation hospitals, surgery centers, free-standing Emergency Departments, or micro-hospitals.
Figure 21: Kansas and Missouri Educational Facilities

These facilities have transportation capability; however, they are limited by time availability for movement from the facility in the event of an evacuation, and those parents wanting to get their students from the facility that can cause disruption of traffic flow and expediency of movement. Sheltering-in-place during a hazardous materials release can also take time to move children into designated areas and initiate sheltering protocols.

2.3.10 Other Types of Facilities

Preparing for hazardous materials release incidents by other types of vulnerable locations and populations is also important. These facilities, including but not limited to public housing, homeless shelters, shopping/commercial centers, and prisons and detention centers, each provide planning and response considerations based on the vulnerabilities present with a planning assumption that emergency responders may need to dedicate additional resources for these areas.

For example, prison officials will need to maintain a high-level of safety and security for their prisoners and staff during protective measures, including through transportation, protective materials, and communication strategies more so than other sectors of the public. Emergency officials will need to
coordinate closely with the relevant law enforcement agencies to ensure the most effective protective measures are taken depending on the scale and scope of the incident.

The graphic below illustrates the locations of public housing by building type in the region, and the graphic following illustrates the locations of shopping centers in the region, followed by homeless shelters, and prisons in the region.

Figure 22: Public Housing
Shopping Center data obtained from CoStar. The Mid-America Regional Council (MARC) makes no representations or warranties regarding the accuracy of data or maps. MARC shall not be liable under any circumstances for any direct, special, incidental or consequential damages with respect to any claim by any user or third party on account of or arising from the use of data or maps.

Figure 23: Shopping Centers
Figure 24: Homeless Shelters

Shelter data sources: KC Metro Homeless Management Information System (HMIS), Greater Kansas City Coalition to End Homelessness, United Way of Greater Kansas City, Park Hill School District and The Mid-America Regional Council (MARCC) and city and county governments.
Figure 25: Prisons/Detention Centers
2.4 **Planning Assumptions**

- Each facility properly submits chemical inventory lists (Tier II report) and emergency plans as appropriate to the MERC in Missouri or CEPR in Kansas, the Mid-America LEPC, and local fire department.
- Each local jurisdiction has an approved local emergency operations plan (LEOP) which includes additional information on hazardous materials emergency response that is coordinated and consistent with this plan.
- Local jurisdictions maintain ongoing communication with reporting facilities in their communities and work to institute practices to reduce risks to citizens as well as the environment; fire service agencies pre-plan response to a hazardous materials incident with key facilities as appropriate.
- Facilities that use hazardous materials are fully aware of their obligation to maintain a safe environment and immediately report spills and releases to the appropriate authorities as required by law.
- Cities and counties maintain procedures to request and receive mutual aid resources from other local agencies and select private sector partners for hazardous materials emergencies and provide resources when requested.
- This plan is consistent with, and complementary to, the Missouri Hazardous Substance Emergency Response Plan, the Missouri State Emergency Operations Plan, Kansas Response Plan, and local emergency operations plans.
- Hazardous materials incidents may occur at any time, day or night, and occur in densely populated as well as remote areas.
- The magnitude of a hazardous materials incident in an area depends on the volume, distribution, and/or use of chemicals and other hazardous substances.
- The negative impacts of an event on citizens, the environment, wildlife, and property depend on the type, characteristics, location, concentration, and quantity of material released. Releases of caustic, irritant, flammable, radiological, and explosive materials have caused deaths, injuries, widespread evacuations, and relocations.
- Releases of hazardous materials from facilities located in densely populated areas and major transportation routes can be particularly damaging.
- Emergency responders may be required to respond to both accidental and intentional releases of hazardous materials.
- Hazardous material incidents, even minor ones, may require a multi-agency and, multi-jurisdictional response including local, regional, state, and federal resources. The Incident Command System will be implemented immediately by responding agencies, and in many situations, leadership may elect to establish a Unified Command.
- Hazardous material incidents pose significant risks to emergency response personnel. All emergency responders will be properly equipped and trained for hazardous materials emergency response actions.
- Hazardous materials incidents may require large-scale evacuations or shelter-in-place actions. These operations may present significant challenges in terms of warning and notification, logistics, and agency coordination.
- Hazardous materials incidents will generate widespread media and public interest. The media will be a critical ally for local governments in quickly disseminating emergency public information and warnings. Local planning includes provisions for providing joint public
Hazardous materials incidents may cause serious long-term damage to public health, property, the environment, and the economy.

Significant hazardous materials incidents may require an extended commitment of personnel and resources from involved agencies and jurisdictions. MOUs and protocols are in place to address crew rotation, resource allocation, and reimbursement.

Response to hazardous materials emergencies in the Mid-America LEPC planning area generally begins with the facility and/or local fire department and can include a combination of city, county, regional hazmat team, special district, disaster relief agencies, and private sector representatives. As indicated, appropriate state and federal agencies with statutory authority will be notified and may respond to any incident.

The general public and media will demand information about the emergency and instructions on appropriate protective measures.

The local media, particularly radio, will perform an essential role in providing emergency instructions and periodic updates to the public.

Depending on the severity of the emergency, or the media’s perception of the severity of the emergency, regional and national media may also demand information and may play a role in reassuring (or alarming) relatives of disaster victims.

Depending on the severity of the emergency, telephone communications may be sporadic or impossible.

Local and regional radio and/or television stations without emergency power may also be off the air. Telephones may be inoperative.

Sufficiently trained staff is required to ensure the organization does not become overwhelmed with requests for information.

Most emergencies involve response from multiple disciplines and may involve more than one jurisdiction.
3. EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW (EPCRA)

3.1 GENERAL

The Emergency Planning and Community-Right-to-Know Act (EPCRA), also known as Title III of the Superfund Amendments and Reauthorization Act (SARA), exists to ensure the public and government agencies have timely access to information regarding chemicals and chemical releases in their communities so that risk can be addressed, and protective actions can be formulated in advance. Under EPCRA regulations, the administrative agency for the Mid-America Local Emergency Planning Committee (LEPC), is responsible for making hazardous materials emergency planning information publicly available. The release of information is governed by the Mid America Regional Council’s Open Records Policy.

EPCRA is made up of Sections 301-330 of Public Law 99-499 with Sections 302-313 and Section 324, being most pertinent to LEPCs.

Any Tribal Emergency Planning Committees (TEPC) of federally-recognized tribal nations located within the MARC LEPC planning area should consult the Environmental Protection Agency (EPA) Guidance for Preparing Tribal Emergency Response Plans (2004) for differences in reporting requirements and cost recovery.

3.1.1 EPCRA 302 – Extremely Hazardous Substances

Facilities that have extremely hazardous substances (EHS) present at or above an amount known as the Threshold Planning Quantity (TPQ) must report this to the states and the LEPC. The report must be filed within 60 days of the substance arriving at the facility. The facility must designate a liaison person to coordinate EHS response planning with the LEPC, and the LEPC must incorporate facility information into their response plan. Section 302 substances are subject to Section 312 (Tier II) reporting as well. The EPA designates which substances are EHS. The best single source for EHS is the EPA List of Lists, which contains not only Section 302 substances, but Section 304 substances, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) substances, and Section 313 substances. The Section 302 notification is a one-time report and does not have to be refiled unless new substances are brought on the facility (even temporarily) or old ones are permanently removed.

3.1.2 EPCRA 303 – Planning

Each state shall develop a comprehensive emergency response plan. The LEPC is also required to prepare a comprehensive emergency response plan which must be updated at least annually. Local changes in facilities, substances stored, etc., may indicate if more frequent reviews should be done. The LEPC plan is to be submitted to the states for approval.

3.1.3 EPCRA 304 – Accidental Releases

Substances on Section 302 or CERCLA lists are assigned Reportable Quantities (RQ). Any accidental release of these substances at or above the RQ triggers reporting requirements to the LEPC, the state, and the National Response Center (NRC).

3.1.4 EPCRA 311 and 312 – Tier 1 and Tier 2 Reporting
Facilities shall make annual reports to the state and LEPC regarding hazardous substances defined by the Occupational Safety and Health Act of 1970 (OSHA). If OSHA requires a facility to post or have available for inspection a Safety Data Sheet (SDS) for a substance, that substance is reportable under Section 311 and 312 of EPCRA. Section 302 substances must also be listed on the Tier II report.

Note, Missouri and Kansas Tier II reporting processes differ. See Appendix D for more information. Both Kansas and Missouri do not require Tier I reports because Tier II provides the required information and more. The reports are due March 1 of each year and are for the previous calendar year. The facility must send copies of the report to the State, LEPC, and the local fire department. Tier II reports, along with Section 302 reports; provide the information required for EPCRA. Any owner or operator who violates Tier II reporting requirements shall be liable to the United States for a civil penalty per day for each such violation.

3.1.5 EPCRA 313 – Routine Toxic Releases

The Toxics Release Inventory (TRI) involves the routine release of toxic or hazardous substances into the environment because of a manufacturing or operating process. The quantity and type of release are known, and the reporting threshold is based on the total quantity released during the year. Section 313 differs from Section 304; which deals only with accidental releases. The LEPC does not receive the TRI report directly; it is submitted to the state and EPA.

3.1.6 EPCRA 322 – Withholding Chemical Type

A facility may be permitted to withhold the identity of a chemical if revealing it could compromise company operations. Section 322 has very narrow criteria, identified in 40 Code of Federal Regulations (CFR) part 350. In practice, less than one percent of facilities in the United States have filed such claims. Section 322 addresses trade secrets as they apply to EPCRA Sections 303, 311, 312, and 313 reporting; a facility cannot claim trade secrets under Section 304 of the statute. Only chemical identity may be claimed as a trade secret, though a generic class for the chemical must be provided. Even if chemical identity information can be legally withheld from the public, EPCRA Section 323 allows the information to be disclosed to health professionals who need the information for diagnostic and treatment purposes or local health officials who need the information for prevention and treatment activities.

3.1.7 EPCRA 324 – Right-to-Know

The LEPC must make available to the public any emergency response plans, material safety data sheets (SDS) or list submission, Tier I/II, Form R and Section 304 written follow-up notices that have been submitted to the LEPC. The LEPC is required to publish annually a notice through print or electronic means (website, television, radio, etc.) that local emergency operations plans, SDS and Tier II forms have been submitted. The notice must include the location where such documents may be reviewed during normal business hours. Facilities that have submitted Tier II reports may request that the LEPC keep the location of the hazardous materials within the facility confidential.

3.2 PUBLIC MEETINGS

The Mid-America LEPC holds meetings at least quarterly to bring together emergency response partners, facilities that house hazardous materials, transporters of hazardous materials and others an opportunity to plan together, inform the public, and gather citizen input for planning efforts. Citizens are encouraged to attend meetings of the Mid-America LEPC to stay informed of activities and plans related to hazardous
3.3 COMMUNITY RIGHT-TO-KNOW INFORMATION

The Mid-America LEPC provides the following informational resources, when available and permissible to share, with the public:

- Tier II Reports
- SDS
- Written Follow-Up Notices of Emergency Chemical Releases
- Other information as received from facility owner(s) or operator(s) used in the course of emergency planning.

3.3.1 Tier II Reports

Tier II reports require facilities manufacturing, using and storing hazardous materials to provide basic facility information, employee contact information for both emergencies and non-emergencies, and information about chemicals stored or used at the facility. The Tier II chemical information reported by the facility includes:

- The chemical name or the common name as indicated on the SDS.
- An estimate of the maximum amount of the chemical present at any time during the preceding calendar year and the average daily amount.
- A brief description of the manner of storage of the chemical.
- The location of the chemical at the facility.
- An indication of whether the owner of the facility elects to withhold location information from disclosure to the public.

3.3.2 Safety Data Sheets (SDS)

Facilities that produce or import hazardous chemicals are required to create or obtain an SDS for the material. The information contained in the SDS includes the chemical and common name(s); physical and chemical characteristics of the hazardous chemical; physical hazards of the hazardous chemical, protective measures, etc. For any hazardous chemical used or stored in the workplace, facilities are responsible for the following to comply with the Hazard Communication Standard (HCS) Right-to-Know provisions:

- Maintaining SDS and make them available to employees.
- Maintaining a hazard communication program detailing the plans in place for the safe handling of chemicals.
- Maintaining a written chemical inventory of every hazardous chemical in the facility to which employees are exposed.
- Maintaining proper labels and warning signs associated with said chemicals.
- Training employees on chemical hazards and necessary precautions.

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After the implementation of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) in June 2015, all SDS should be replaced with GHS formatted SDS information. By June 1, 2016, all facilities should be fully compliant with “HazCom 2012” (the law that requires GHS labeling). This includes making any necessary updates to HazCom programs, training employees on any newly identified chemical hazards (identification of new hazards is likely during the reclassification process chemical manufacturers to undertake) and updating safety data sheets libraries and secondary labels.

Many companies now utilize web-based reporting systems to comply with GHS requirements. This type of cloud-based reporting system gives easy access to SDS information and tools for managing them; flags SDS in the GHS format. These systems can also develop inventory reports for state and federal forms, offers container tracking across the facility with mobile barcode scanning, checks chemicals and ingredients against various hazardous substance lists; provides chemical banning and approval tools. Some of these online tools can be used to search or find SDS data sheets as well as create online SDS binders with the capability of sharing the information with employees, state and federal agencies, and other appropriate entities.

3.3.3 Written Follow-Up Notices of Emergency Chemical Releases

Following accidental releases above reportable quantities (RQ) of substances listed on the EHS and/or CERCLA Hazardous Sub (40 CFR 302.4) (except for a release during transportation or from storage incident to transportation) covered facilities are required to make immediate (voice) and written follow-up reports. The State of Kansas’ “Form A” and the State of Missouri’s “Hazardous Material Release Form” are follow-up report templates and available in Appendix G. Written follow-up reports are to be submitted to the LEPC and appropriate state entity, and supplement the immediate report with information regarding:

- Actions taken to respond and contain the release.
- Any known or anticipated acute or chronic health risks associated with the release.
- Where appropriate, advice regarding medical attention necessary for exposed individuals (40 CFR Part, § 355.40 - 355.43).

3.3.4 Other Information

The Mid-America LEPC, during emergency planning, may request additional information from facility owners or operators to aid in its planning efforts. When this information is not otherwise protected, it may be made available to the public.

3.4 PROCESS TO REQUEST COMMUNITY RIGHT TO KNOW INFORMATION

Any person may request hazardous materials information held by the LEPC. All requests shall be in writing (email, fax, letter) and include the name of the requestor, contact information and the specific information requested. Requests for Tier II information shall be made with respect to a specific facility by name and address. If the Mid-America LEPC has the information, it will provide the information as requested. If the information is not on hand, the Mid-America LEPC may request the information from the appropriate entity (provided the information is not otherwise protected).
The LEPC will not generate specialized lists or sort existing electronic databases to meet the specific needs of a requestor unless the requestor can demonstrate a valid public need and the request does not create an undue burden. Such requests will be considered on a case-by-case basis with final disposition determined jointly by the LEPC Chair and a MARC official (Executive Director or Director of Financial Affairs). An EPCRA requestor may also arrange a date and time to meet with Mid-America LEPC representatives during normal business hours to inspect records held by the LEPC.

The Mid-America LEPC will reply to all requests within three days with either the requested information or with a timeline to provide the requested information. Federal law allows for up to 45 days to produce Tier II information, depending on the information’s availability.

Public information requests shall be submitted to MARC’s Custodian of Records, via letter, email or fax:

Mid-America Regional Council c/o Kerry Kudron
600 Broadway, Suite 200
Kansas City, Missouri 64105-1659
Phone: (816) 474-4240 Fax: (816) 421-7758 E-mail: kkudron@marc.org

The public may also request information from their respective states and are encouraged to contact their appropriate state agency for methods and procedures of requesting information.

### 3.5 Hazardous Materials Information Available from Other Agencies

#### 3.5.1 Toxics Release Inventory

EPCRA Section 313 requires the EPA and the states to annually collect and make available Toxics Release Inventory (TRI) data on releases and transfers of certain toxic chemicals from industrial facilities. The goal of TRI is to empower citizens through information and to hold companies and local governments accountable in terms of how toxic chemicals are managed. TRI data is not reported directly to the Mid-America LEPC. Facilities and citizens in the Mid-America LEPC region can access information on TRI data reporting and reports online.21

#### 3.5.2 EPA National Library Network

The EPA National Library Network is composed of libraries throughout the country and contains a wide range of general information on environmental protection and management; basic sciences; applied sciences; and extensive coverage of topics featured in legislative mandates such as hazardous waste. The Library Network provides online access to its collections.22

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3.6 **AVAILABILITY OF EMERGENCY PLANS**

3.6.1 **Regional Hazardous Materials Emergency Preparedness Plan**

The Mid-America LEPC annually publishes a notice in local newspapers regarding the availability of the Regional Hazardous Materials Emergency Preparedness Plan. Additionally, the Plan is available on the MARC website.\(^2\)

3.6.2 **Local Hazardous Materials and Emergency Operations Plans**

Each political subdivision in Missouri and Kansas is required to develop a local emergency operations plan (LEOP) that includes an annex specific to hazardous materials incidents.

- In Kansas, authority and responsibility for emergency planning normally lie at the county level, except when the governor determines a city needs a disaster agency of its own; (K.S.A 48-929). For specific local information, the requester may be referred to a local governmental agency or facility and provided with the appropriate contact information. Each agency will follow its own internal procedures for release of information and viewing (including, but not limited to, applicable limitations, costs for copying, etc.).
- In Missouri, authority and responsibility for emergency planning are at the county and local jurisdictional level. Missouri law requires that all political subdivisions must establish a local emergency management organization which is generally a city or county emergency manager supported by city and county government agencies. This organization is responsible for all aspects of emergency preparedness, including mitigation, planning, response, and recovery. The planning requirements for hazardous materials are included in "Missouri All-Hazard Emergency Planning Guidance" available online.\(^2\)

Citizens interested in reviewing their jurisdiction’s plans are encouraged to contact their local emergency manager for plan availability or restrictions.

3.7 **REQUIREMENTS AND GUIDANCE FOR FACILITIES**

Highlighted in this subsection are EPCRA requirements and guidance for facilities to consider when developing their own procedures for responding to a hazardous materials incident. Facilities that handle hazardous materials are encouraged to contact regulatory authorities, attorneys or professional consultants for legal and hazardous material reporting requirements and should develop their own procedures for responding to a hazardous materials incident. The following graphic describes the process for the flow of information and legal requirements for facilities housing hazardous materials.

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Figure 26: EPCRA Major Information Flow/Requirements for Facilities Housing Hazardous Planning
3.7.1 Reporting Requirements

3.7.1.1 EPCRA Section 302 — Emergency Planning

Any facility, business, or individual that has an “extremely hazardous substance” in an amount exceeding the “threshold planning quantity” should complete a Tier II form listing the extremely hazardous substances at the facility within 60 days of the material being on site. Tier II forms are required to be sent to the State Emergency Response Commission, LEPC, and the local fire department.

Organizations in Kansas shall submit a Tier II form to the following:

- Kansas Department of Health and Environment online via [http://kansas.tier2online.com](http://kansas.tier2online.com)
- Their local fire department using appropriate means available
- Their respective County Emergency Management Agency using the following means:
  - Johnson County
    - Email to TierII@jocogov.org
  - Wyandotte County
    - Email to tier2@wycokck.org
  - Leavenworth County
    - Mail hard copy to: Leavenworth County Courthouse, Attn. Emergency Management, 300 Walnut, Leavenworth, KS 66048

After receiving the Tier II form, the counties will submit copies to the Mid-America LEPC.

Organizations in Missouri shall submit a Tier II form to the following:

- MERC via [https://hazmat.dps.mo.gov](https://hazmat.dps.mo.gov)
- Mid-America LEPC, elynch@marc.org or fax to (816) 421-7758
- Their local fire department using appropriate means available

Refer to Appendix D and Appendix G for additional reporting processes, forms, and information.

3.7.1.2 EPCRA Section 303 — Facility Coordinators

Any facility, business, or individual that has an extremely hazardous substance in an amount exceeding the threshold planning quantity should provide a completed Tier II form listing the extremely hazardous substances at the facility. The owner or operator of the facility shall designate a facility representative who will participate in the local planning process as a facility emergency response coordinator and note this individual on the Tier II form.

3.7.1.3 EPCRA Sections 311 and 312 — Chemical Inventory/Tier II

All facilities that have more than 10,000 pounds of hazardous chemicals for which an SDS is required under the OSHA hazard communication standard; or facilities that have more than 500 pounds or the threshold planning quantity of the EPCRA extremely hazardous substances; and/or 100 pounds of explosive or blasting agents are required to submit a Tier II report by March 1 of each reporting year.

3.7.1.4 EPCRA Section 313 — Toxic Emissions

Facilities in Standard Industrial Classification Codes 20-39, with more than 10 employees, that have manufactured, processed, or otherwise used toxic chemicals more than the threshold quantities are
required to submit a Toxics Release Inventory (Form “R”) report to the EPA and state agencies by July 1 of each reporting year, using the following addresses:

US EPA, EPCRA Reporting Center, Toxic Chemical Release Inventory
P. O. Box 3348
Merrifield, VA 22116-3348

Missouri Department of Natural Resources, Technical Assistance Program
P.O. Box 176
Jefferson City, MO 65102

Kansas Department of Health and Environment, Bureau of Air and Radiation
1000 Jackson, Suite 310
Topeka, KS 66612-1366

3.7.2 CERCLA and EPCRA Notification Requirements

As per EPCRA Section 304 (Accidental Releases), any facility where an extremely hazardous substance is released in more than the reportable quantity and/or any facility where a hazardous substance on the CERCLA list is released in more than the reportable quantity, should immediately evaluate its requirements to make timely notification of the release to the appropriate authorities and stakeholders.

The following graphic describes the reporting requirements, based on CERCLA and EPRCA, for hazardous facilities in the region. Additional notification guidance is provided in sections 3.7.2.1 and 3.7.2.2. Facilities should also review 40 CFR 302 and 40 CFR 355 for specific notification requirements.

The National Response Center (NRC) and/or the State Emergency Response Commission (SERC) and the LEPC must be notified when there is a release of an RQ of a hazardous substance or EHS into the environment according to CERCLA §103(a) and EPCRA §304. The purpose of the notification is to alert government officials that an emergency response may be needed to protect human health and the environment. The decision to respond to a reported release is made on a case-by case basis. Reporting a release does not free the responsible party from liability for cleanup costs (50 FR 13459; April 4, 1985). The following sections detail the CERCLA and EPCRA-specific notification triggers and notification requirements.

3.7.2.1 CERCLA Notification Triggers and Reporting Requirements

The conditions that trigger notification to the NRC under CERCLA dictate that there must be a:

- Release
- Of a hazardous substance
- That equals or exceeds a reportable quantity
- From a vessel or facility
- Within a 24-hour period.

To fulfill the requirements under CERCLA §103(a), the person in charge of the vessel or facility must report the release of a hazardous substance to the NRC, as soon as it is determined that an RQ has been released into the environment within a 24-hour period (40 CFR §302.6). Upon receipt of the report, the NRC will

25 In Missouri, contacting the Missouri Department of Natural Resources constitutes notification to the SERC and in Kansas, contacting the Kansas Division of Emergency Management and/or the Kansas Department of Health and Environment constitutes notification to the SERC.
notify the on-scene coordinator (OSC) at the appropriate EPA Regional office or U.S. Coast Guard district office. The OSC informs state and local officials and decides on the federal government's response.

3.7.2.2 EPCRA Notification Triggers and Reporting Requirements

The conditions that trigger notification to the SERC and LEPC under EPCRA dictate that there must be a:

- Release with the potential to affect off-site persons
- Of a hazardous substance or extremely hazardous substance
- That equals or exceeds a reportable quantity
- From a facility at which a hazardous substance or extremely hazardous substance is produced, used, or stored
- Within a 24-hour period.

In order to meet the requirements under EPCRA §304, the owner or operator of a facility must report releases of hazardous substances and EHSs to the SERC and LEPC immediately. The notice to the SERC and LEPC must include (40 CFR §355.40(b)(2)):

- The chemical name or identity of any substance involved in the release,
- An indication of whether the substance is an EHS,
- An estimate of the quantity released into the environment,
- The time and duration of the release,
- The medium or media into which the release occurred,
- Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals,
- Proper precautions to take as a result of the release, including evacuation (unless such information is readily available to the community emergency coordinator pursuant to the emergency plan),
- The names and telephone numbers of the person or persons to be contacted for further information.

In Missouri, a “Hazardous Materials Release Form” follow-up report should be sent to the MERC and Mid-America LEPC via fax to (816) 421-7758 or email to elynch@marc.org. The Hazardous Materials Release Form is found in Appendix G.

In Kansas, submit “Form A” to the Kansas Division of Emergency Management within 7 days. Form A can be completed online at https://kansas.webeocasp.com/kansas/ or faxed to (785) 274-1426. Please note if Form A is submitted online to Kansas, the LEPC is not automatically notified. Facilities must also submit a copy of Form A to Mid-America LEPC via fax to (816) 421-7758 or email to elynch@marc.org. Form A is included in Appendix G.

3.7.3 Chemical Facility Anti-Terrorism Standards (CFATS)

CFATS is the Nation’s first regulatory program focused specifically on security at high-risk chemical facilities. The Cybersecurity and Infrastructure Security Agency (CISA) manages the CFATS program by working with facilities to ensure they have security measures in place to reduce the risks associated with certain hazardous chemicals and prevent them from being exploited in a terrorist attack. If you have questions about the CFATS program, please send them to Rodney Lockett, Chief of Regulatory Compliance at Rodney.lockett@hq.dhs.gov.

• Appendix A: Chemicals of Interest (COI): - https://www.cisa.gov/appendix-chemicals-interest
• 6 CFR Part 27 Appendix to Chemical Facility Anti-Terrorism Standards; Final Rule
• CFATS Resources: - https://www.cisa.gov/cfats-resources
4. ORGANIZATION AND RESPONSIBILITIES

4.1 In Preparedness

4.1.1 Mid-America LEPC

The Mid-America LEPC is a planning organization that convenes key stakeholders in the community to coordinate preparedness activities related to hazardous materials incidents. It is not a response agency. Specific requirements of the LEPC are as follows:

- Appoint a chairperson and establish committee rules.
- Distribute, review, and update this plan annually.
- Submit a copy of this plan and any revisions to the MERC and CEPR.
- Evaluate the need for resources to develop, implement, and exercise the plan, including making recommendations with respect to additional resources that may be required and the means for providing such additional resources.
- Establish procedures for receiving information and responding to public comments and designate an information coordinator.
- Establish procedures for processing requests from the public under community right-to-know provisions, including LEPC meeting minutes and notification of committee activities.
- Receive information and communications from facilities and/or transporters related to:
  - Notifications of chemical releases (EPCRA 304).
  - Tier II forms (EPCRA 312) which contain information on materials including average amount onsite, the location of chemicals, etc.
  - Chemical Safety information notices on materials requiring SDS (EPCRA 311).
- Publish notice annually to inform the public where, when, and how information available through the LEPC is available for review.
- Provide a forum for the post-incident analysis of Level II and III hazardous materials incidents, when requested by involved jurisdictions and agencies.
- Make recommendations to local governments on additional resources that may be required and potential means for acquiring such resources.
- Assist local agencies in developing and conducting hazardous materials exercises and training.

4.1.2 Local Emergency Service Agencies

- Develop plans and procedures for response to hazardous materials incident.
- Use this plan as guidance for local planning documents.
- Maintain awareness of industry within the jurisdiction and any known hazards.
- Commitment to maintaining resources (equipment, training, etc.)
- Participate in training, exercises, and after-action reviews.
- Community outreach and education on risks and protective actions.

4.1.3 Private Industry

- Designate facility Emergency Coordinator.
- Maintain posted Safety Data Sheets (SDS).
- Develop emergency plans.
- Report information to LEPC (per government requirements).
4.1.4 State, Federal, and Non-Governmental Organizations
- Support planning efforts by facilities and response agencies as needed.
- Communicate capabilities and resources available to support local response efforts.
- Participate in training, exercises, and after-action reviews.

4.2 IN RESPONSE

4.2.1 Mid-America LEPC
- Calling 911 constitutes notification of accidental release to the LEPC.
- May be able to help locate resources for a local emergency response agency during a protracted or large incident.

4.2.2 Local Emergency Service Agencies
- Establish command of the incident scene, and ensure the Incident Command System (ICS) is being followed. Determine resources needed for response operations.
- Perform core functions to ensure life safety and protection of property while minimizing impact on the environment.
- Local Fire Departments are identified as the Community Emergency Coordinators within their respective fire protection districts and jurisdictions.

4.2.3 Private Industry
- Notify appropriate authorities of the incident immediately.
- Support Incident Command with resources and technical expertise.
- Participate in investigation to determine causation.
- Facilitate clean-up and restoration effort as appropriate (e.g. remediation services, heavy-duty tow services, technical expertise).

4.2.4 Federal Agencies

4.2.4.1 General Federal Agencies
- Support response activities with additional resources (equipment, technical expertise, etc.) as requested.
- All organizations will advise command staff of available resources.
- State and federal agencies will operate under their own response plans and will integrate into the ICS structure.

4.2.4.2 United States Environmental Protection Agency
- Supports, through the Federal On-Scene Coordinator (as needed or as requested), local and state jurisdictions during hazardous materials and oil release incidents.
• Coordinates, integrates, and manages the overall federal effort to detect, identify, contain, decontaminate, clean up, dispose, or minimize discharges of oil or releases of hazardous materials, or prevent, mitigate, or minimize the threat of potential releases.
• Provides expertise on the environmental effects of oil discharges or releases of hazardous materials, and environmental pollution control technique.
• Manages EPA special teams under the National Contingency Plan, including the Environmental Response Team, National Decontamination Team, and Radiological Emergency Response Team, which provide specialized technical advice and assistance to responders.
• Coordinates, integrates, and provides investigative support, intelligence analysis, and legal expertise on environmental statutes related to oil and hazardous materials incidents, including regarding criminal cases, in support of responders.
• Serves as the primary federal agency under ESF #10 of the National Response Framework.

4.2.5 Nongovernmental Organizations / Other
• May provide information, food, sheltering, medical assistance, and other essential services to persons impacted by the incident.
• Hospitals will treat patients and support decontamination of affected individuals, as needed.

4.2.6 State Agencies

4.2.6.1 Missouri Department of Natural Resources/Division of Environmental Quality
• The Division of Environmental Quality is to be notified by the party responsible for a spill, leak or discharge of hazardous materials.
• Respond to hazardous materials incidents, if necessary.
• Control public water supplies in contaminated areas to ensure safety for human consumption.
• Provide sampling support and analysis to determine if private water supplies in contaminated areas are safe for human consumption.
• Provide sampling support and analysis to determine if food supplies in contaminated areas meet health standards for human consumption.
• Provide sampling support and analysis to determine if sport fisheries, wildlife, and game birds in contaminated areas meet health standards for human consumption.
• Coordinate solid waste variances and services, burn permits, and other services as needed.
• Coordinate procedures for temporary storage of stabilized hazardous materials and manage their legal disposal.
• Coordinate and liaise with the U.S. Environmental Protection Agency (EPA) Region VII and Kansas City, Kansas.

4.2.6.2 Kansas Department of Health and Environment
• Provide staff members, as necessary, for emergency operations center (EOC) functions including requesting assistance and coordinating with support agencies, managing mission assignments, working with private sector organizations for resource support, ensuring financial accountability for ESF #10.
• Provide an analytical laboratory for incident support.
• Coordinate initial assistance from other state and federal agencies.
• Respond, as needed, to incidents involving oil and Hazmat.
- Coordinate with ESF #8 to provide health and safety guidance in response to an oil or Hazmat incident, identify medical waste, and help with the investigation of biomedical waste incidents.
- Assist with sampling water supplies when they are suspected of being contaminated by a hazardous substance.
- Implement the CHEMPACK Program through the Bureau of Public Health Preparedness.
- Provide operational radiological emergency response, including conducting radiological and air monitoring, performing dose assessment, support, and guidance for monitoring and decontamination of the public, and making recommendations on the need to institute protective actions in accordance with the Nuclear/Radiological Incident Annex.
- Review, evaluate, and maintain all radiation dose records for non-licensee emergency workers and other affected individuals.

The above responsibilities are intended to be illustrative and not complete. For more information on responsibilities related to a hazardous materials response, please reference the ESF #10 Annex of the RCG.
5. CONCEPT OF OPERATIONS

5.1 INCIDENT MANAGEMENT

Jurisdictions’ response to hazardous material incidents should be consistent with the National Incident Management System (NIMS) Incident Command System (ICS), which provide a consistent framework for standardizing incident management practices and procedures. This ensures that federal, state, and local governments can work effectively, efficiently, and cooperatively to mitigate and prepare for, respond to, and recover from incidents regardless of cause, size, or complexity.

ICS provides a useful and flexible management system, particularly adaptable to incidents involving multi-jurisdictional and multi-agency response, due to its standardized organizational structure and common terminology. The ICS organizational structure develops in a modular fashion based on the type and size of incident. The organizational structure is to be staffed from the top down starting with leadership, with four distinct sections that can be further broken down into more manageable groups and units to accomplish specific missions.

The specific organizational structure established for any given emergency will be based on the management and resource needs of the incident. ICS leadership (Command and General Staff) performs similar functions regardless of the type of emergency. Additional information relating to ICS positions and responsibilities can be found on the FEMA Emergency Management Institute website and training courses.26

5.1.1 Hazardous Material Response ICS Positions

Additional information is provided for the roles that have specific responsibilities related to hazardous materials response. Commonly, a Hazardous Materials Group is formed under the Operations Section in the ICS structure, as outlined below.

**Figure 27: Hazardous Material Response ICS Positions**

The sample incident command structure above is a model that is scalable according to the needs of the incident and the varying capabilities of jurisdictions.

The following graphic illustrates an example of dynamic, scaling nature of a response to a major hazardous materials incident.
**Figure 28: Hazmat Response Operation Timeline**

**LEVEL 1: INITIAL RESPONSE UNITS**
- Fire Department Personnel
- Incident Command Chief and Command Post
- HazMat Unit

**LEVEL 2: ORGANIZATION OF ON-SCENE OPERATION**
- 1 Incident Safety Officer removed from Staging Area
- Hazardous Materials Sector
- Hot, warm, and cold Control Zones
- Police
- Emergency Medical Services

**LEVEL 3: ROBUST LONG-TERM OPERATION**
- Additional HazMat units under the HazMat sector
- Private Sector
- Voluntary Agencies
- Emergency Operations Center (EOC) /
- Regional Coordination Guide
5.1.1.1 Hazardous Materials Group Supervisor

The Hazardous Materials Group Supervisor reports to the Operations Section Chief. The Hazardous Materials Group Supervisor is responsible for the implementation of the phases of the Incident Action Plan dealing with the Hazardous Materials Group operations. The Hazardous Materials Group Supervisor is responsible for the assignment of resources within the Hazardous Materials Group, reporting on the progress of control operations and the status of resources within the group. The Hazardous Materials Group Supervisor directs the overall operations of the Hazardous Materials Group. Duties include:

- Ensure the development of Control Zones and Access Control Points and the placement of appropriate control lines.
- Evaluate and recommend public protection action options to the Operations Chief or Branch Director (if activated).
- Ensure that current weather data and future weather predictions are obtained.
- Establish environmental monitoring of the hazard site for contaminants.
- Ensure that a Site Safety and Control Plan (ICS Form 208) is developed and implemented.
- Conduct safety meetings with the Hazardous Materials Group.
- Participate, when requested, in the development of the Incident Action Plan.
- Ensure that recommended safe operational procedures are followed.
- Ensure that the proper Personal Protective Equipment (PPE) is selected and used.
- Ensure that the appropriate agencies are notified through the Incident Commander.
- Maintain Unit/Activity Log (ICS Form 214).

5.1.1.2 Hazardous Materials Branch Director

For incidents requiring an expanded ICS organizational structure, such as a major, complex emergency, the Incident Commander may elect to establish a Hazardous Materials Branch to effectively manage operations. The Branch Director reports to the Operations Section Chief.

The Branch Director is responsible for organizing and directing hazardous material incident response activities, including detection and monitoring; spill response; victim, technical, and emergency decontamination; and facility and equipment decontamination.

5.1.1.3 Entry Leader

Reports to the Hazardous Materials Group Supervisor. The Entry Leader is responsible for the overall entry operations of assigned personnel within the Exclusion Zone. Duties include:

- Supervise entry operations.
- Recommend actions to mitigate the situation within the Exclusion Zone.
- Carry out actions, as directed by the Hazardous Materials Group Supervisor, to mitigate the hazardous materials release or threatened release.
- Maintain communications and coordinate operations with the Decontamination Leader.
- Maintain communications and coordinate operations with the Site Access Control Leader and the Safe Refuge Area Manager (if activated).
- Maintain communications and coordinate operations with Technical Specialist-Hazardous Materials Reference.
- Maintain control of the movement of people and equipment within the Exclusion Zone, including contaminated victims.
- Direct rescue operations, as needed, in the Exclusion Zone.
- Maintain Unit/Activity Log (ICS Form 214).

5.1.1.4 Decontamination Leader

Reports to the Hazardous Materials Group Supervisor. The Decontamination Leader is responsible for the operations of the decontamination element, providing decontamination as required by the Incident Action Plan (IAP). Duties include:

- Establish the Contamination Reduction Corridor(s).
- Identify the contaminated people and equipment.
- Supervise the operations of the decontamination element in the process of decontaminating people and equipment.
- Control the movement of people and equipment within the Contamination Reduction Zone.
- Maintain communications and coordinate operations with the Entry Leader.
- Maintain communications and coordinate operations with the Site Access Control Leader and the Safe Refuge Area Manager (if activated).
- Coordinate the transfer of contaminated patients requiring medical attention (after decontamination) to the Medical Group.
- Coordinate handling, storage, and transfer of contaminants within the Contamination Reduction Zone.
- Maintain Unit/Activity Log (ICS Form 214).

5.1.1.5 Site Access Control Leader

Reports to the Hazardous Materials Group Supervisor. The Site Access Control Leader is responsible for the control of the movement of all people and equipment through appropriate access routes at the hazard site, ensures that contaminants are controlled and records are maintained. Duties include:

- Organize and supervise assigned personnel to control access to the hazard site.
- Oversee the placement of the Exclusion Control Line and the Contamination Control Line.
- Ensure that appropriate action is taken to prevent the spread of contamination.
- Establish the Safe Refuge Area within the Contamination Reduction Zone. Appoint a Safe Refuge Area Manager (as needed).
- Ensure that injured or exposed individuals are decontaminated prior to departure from the hazard site.
- Track the movement of persons passing through the Contamination Control Line to ensure that long-term observations are provided.
- Coordinate with the Medical Group for proper separation and tracking of potentially contaminated individuals needing medical attention.
- Maintain observations of any changes in climatic conditions or other circumstances external to the hazard site.
- Maintain communications and coordinate operations with the Entry Leader.
- Maintain communications and coordinate operations with the Decontamination Leader.
- Maintain Unit/Activity Log (ICS Form 214).

5.1.1.6 Assistant Safety Officer — Hazardous Materials

Reports to the incident Safety Officer as an Assistant Safety Officer and coordinates with the Hazardous Materials Group Supervisor or Hazardous Materials Branch Director, if activated. The Assistant Safety Officer-Hazardous Materials coordinates safety-related activities directly relating to the Hazardous Materials Group operations as mandated by 29 CFR Part 1910.120 and applicable state and local laws.
This position advises the Hazardous Materials Group Supervisor (or Hazardous Materials Branch Director) on all aspects of health and safety and has the authority to stop or prevent unsafe acts. It is mandatory that an Assistant Safety Officer-Hazardous Materials be appointed at all hazardous materials incidents. Duties include:

- Obtain briefing from the Hazardous Materials Group Supervisor.
- Participate in the preparation of and implement the Site Safety and Control Plan (ICS Form 208).
- Advise the Hazardous Materials Group Supervisor (or Hazardous Materials Branch Director) of deviations from the Site Safety and Control Plan (ICS Form 208) or any dangerous situations.
- Has the authority to alter, suspend, or terminate any activity that may be judged to be unsafe.
- Ensure the protection of the Hazardous Materials Group personnel from physical, environmental, and chemical hazards/exposures.
- Ensure the provision of required emergency medical services for assigned personnel and coordinate with the Medical Unit Leader.
- Ensure that medically related records for the Hazardous Materials Group personnel are maintained.
- Maintain Unit/Activity Log (ICS Form 214).

5.1.1.7 Technical Specialist — Hazardous Materials Reference

Reports to the Hazardous Materials Group Supervisor (or Hazardous Materials Branch Director, if activated). This position provides technical information and assistance to the Hazardous Materials Group using various reference sources such as computer databases, technical journals, CHEMTREC, and phone contact with facility representatives. The Technical Specialist-Hazardous Materials Reference may provide product identification using hazardous categorization tests and/or any other means of identifying unknown materials. Duties include:

- Obtain briefing from the Planning Section Chief or assigned supervisor.
- Provide technical support to the Hazardous Materials Group Supervisor.
- Maintain communications and coordinate operations with the Entry Leader.
- Provide and interpret environmental monitoring information.
- Provide analysis of the hazardous material sample.
- Determine PPE compatibility to hazardous material.
- Provide technical information on the incident for documentation.
- Provide technical information management with public and private agencies (i.e., Poison Control Center, Toxicology Center, CHEMTREC, state department of food and agriculture, National Response Team).
- Assist Planning Section with projecting the potential environmental effects of the release.
- Maintain Unit/Activity Log (ICS Form 214).

5.1.1.8 Safe Refuge Area Manager

Reports to the Site Access Control Leader and coordinates with the Decontamination Leader and the Entry Leader. The Safe Refuge Area Manager is responsible for evaluating and prioritizing victims for treatment, collecting information from the victims, and preventing the spread of contamination by these victims. If there is a need for the Safe Refuge Area Manager to enter the Contamination Reduction Zone in order to fulfill assigned responsibilities, then the appropriate personal protective equipment (PPE) shall be worn. Duties include:
- Establish the Safe Refuge Area within the Contamination Reduction Zone, in coordination with the Site Access Control Leader, adjacent to the Contamination Reduction Corridor and the Exclusion Control Line.
- Monitor the hazardous materials release to ensure that the Safe Refuge Area is not subject to exposure.
- Assist the Site Access Control Leader by ensuring the victims are evaluated for contamination.
- Manage the Safe Refuge Area for the holding and evaluation of victims who may have information about the incident, or if suspected of having contamination.
- Maintain communications with the Entry Leader to coordinate the movement of victims from the Refuge Area(s) in the Exclusion Zone to the Safe Refuge Area.
- Maintain communications with the Decontamination Leader to coordinate the movement of victims from the Safe Refuge Area into the Contamination Reduction Corridor, if needed.
- Maintain Unit/Activity Log (ICS Form 214).

### 5.1.1.9 Federal On-Scene Coordinator

The EPA On-Scene Coordinator (OSC) is the federal official responsible for monitoring or directing responses to all oil spills and hazardous substance releases reported to the federal government. OSCs coordinate all federal efforts with, and provide support and information to, local, state, and regional response communities. In general, an OSC is responsible for assessment, monitoring, response assistance, and evaluation during and after an incident.

### 5.2 Release Identification

The procedures that govern whether a hazardous material release has occurred and the identification of potential/actual impacted areas will vary based on the location in which the release occurs (e.g. geography, infrastructure, hazardous contents) and qualifications of on-scene personnel to determine and identify the nature and extent of the hazardous material release. Facilities may have their own release identification criteria in the local emergency operations plans. In general, the following criteria will be used to determine if a release has occurred.

- Report from facility and/or 911 caller.
- Observation of a breach to containment (note hazard placards and other identifiable information).
- Confirmation of injury, death, or significant damage.

First responders operating within the MARC LEPC region may have specialized hazardous material training and qualifications that can be used to identify if a hazardous material release has occurred (e.g. awareness, operations, technician) and determine the scope of the release. The Emergency Response Guide (ERG) main includes the Regional Resource Annex, a comprehensive document that identifies critical information and resources, such as contacts, equipment, reference material, etc., to help determine the scope of the incident along with population, transportation, and other helpful reference material in the Situation section and in Appendix C. 27

### 5.3 Notification

The initial notification that a hazardous material release has occurred may originate from multiple sources (e.g. public, regulated-facility personnel, emergency responders). Any individual, including but

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27 Due to federal exceptions, not all transported hazardous materials are placarded.
not limited to the facility/community emergency coordinator, that identifies or reasonably suspects that a hazardous material release has occurred will notify 911 to initiate the response process, which includes necessary public notification.

For hazardous material releases that occur at regulated facilities (i.e. Risk Management Program, Tier II, and Extremely Hazardous Substances), the facility coordinator (or their designee) will notify 911 and/or the local fire department and activate facility emergency response procedures as appropriate. Additionally, the facility emergency coordinator (or their designee) will also notify the individuals and entities as designated in their local emergency operations plan. Notifications outside of federal and state requirements may be made by the lead response agency or designee. Notification may include communications with particular entities as part of a resource request, or other persons listed in Appendix A.

Upon receipt of the initial notification that an actual or suspected hazardous material release has occurred, the 911 operator will collect pertinent information related to the incident (e.g. chemical, quantity, safe routes of entry, injuries) and dispatch emergency response resources to the incident site.

After receiving the initial dispatch, the local fire department having jurisdiction will coordinate with the responding hazardous material team (if dispatched) and will collect the following information to determine the incident severity level (see for information on incident severity levels).

- Characteristics of the release.
- Nature of the release.
- Affected area/population (e.g. homes, businesses, sensitive ecosystems, waterways, transportation routes).
- The extent of multi-agency and multi-jurisdictional involvement.
- Implementation of protective actions (e.g. evacuation, shelter-in-place).
- Injuries and/or fatalities.
- Technical expertise and equipment required to safely mitigate the incident.
- Duration of the incident.

Based on the severity of the incident, the local fire department having jurisdiction in coordination with the responding hazardous material team (if dispatched) and the local EOC (if activated) will initiate notification procedures to the requisite stakeholders based on the appropriate Regional Coordination Level (1 – Local, 2 – Expanded, 3 – Significant Regional Incident) or as stated in their local emergency operations plan. The RCG Regional Coordination Levels section details the triggers and actions for each Coordination Level.

Coordination may be initiated at a regional level due to a recognized need for:

- Exchange and/or clarify information regarding the incident;
- Disseminate common emergency messaging;
- Share resources or provide assistance to impacted jurisdictions.

Upon notification and activation of hazardous material response stakeholders, agencies and organizations will conduct inter/intra-agency communications in accordance with agency/organization-specific policies and procedures and the concepts outlined in the ESF 2: Communication Annex of the Regional Coordination Guide.

Guidance related to the dissemination of initial incident notifications and follow-on messaging to community stakeholders (e.g. affected residential areas, local businesses, schools, hospitals, media) and the public is outlined in part in Appendix I.

For incidents occurring at regulated facilities that may or may not require local emergency response services, but do require notification to regulatory agencies/organizations, please see the Emergency Notification section.

5.4 EMERGENCY RESPONSE

In response to an actual or suspected hazardous material release, emergency response personnel, including regulated-facility personnel with the appropriate training, will implement emergency response procedures in accordance with local and facility-specific emergency response plans and the ESF #10 - Oil and Hazardous Material Annex29 of the Regional Coordination Guide to execute the following overarching objectives:

- Identify, assess, and evaluate the risks involved with the hazardous substance or CBRNE agent,
- Activate and direct weapons of mass destruction (WMD)/hazardous material response tactical operations,
- Conduct rescue and decontamination activities,
- Take appropriate mitigation actions,
- Request additional resources and personnel to assist with the event.

Incidents that do not require an emergency response are outside the scope of this Plan. Some facilities may not need emergency response and would use their cleanup contractor for low-hazard, low-impact incidents.

5.4.1 Incident Assessment

Once local emergency response plans have been activated for a confirmed or reported hazardous material release, the Incident Commander will coordinate the collection of pertinent incident information to inform protective action decisions, resource and informational requests, and communications / notifications to pertinent stakeholders. Critical information that may be collected during a hazardous material release to support decision making can include:

- Who is leading the response or investigation.
- The estimated damages to or status of critical infrastructures (transportation, power, medical, water).
- Connectivity with activated Emergency Operations Centers (EOC) and the WebEOC Regional Board.

In addition to the information elements identified above, emergency response personnel should also reference local emergency response plans and the Regional Coordination Guide Base Plan30 and associated Annexes for additional all-hazard information requirements.


5.4.2 Protective Actions

Protective actions, including evacuation and shelter-in-place, may be implemented to protect the public and emergency response personnel from the adverse effects of a hazardous material release. The decision to initiate protective actions will be made in accordance with local emergency plans. For additional information relating to jurisdiction-specific policies and procedures on evacuation and shelter-in-place, interested parties should contact their local emergency management agency.

Recognizing that evacuation is a massive, complex measure, the decision to order an evacuation must be carefully considered. The decision to evacuate or shelter-in-place will be made by the Incident Commander in close consultation with supporting agencies and/or governing bodies. Exposure risk to citizens already in an exposed area could be increased by requiring them to go outdoors into a contaminated environment, so the option to shelter-in-place should also be considered.

The choice between evacuation and shelter-in-place is not mutually exclusive for a single emergency. In a given emergency, it may be most effective to evacuate one portion of the threatened population and instruct others to shelter-in-place. For selection criteria to aid in protective action decision-making, see Appendix F.

5.4.2.1 Evacuation

The following table outlines the triggers, considerations, and risks that emergency response personnel should consider when considering ordering an evacuation in response to a hazardous material release.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triggers</td>
<td>Precautionary Evacuation</td>
</tr>
<tr>
<td></td>
<td>• Possible boiling liquid expanding vapor explosion (BLEVE) or condition that could cause an explosion.</td>
</tr>
<tr>
<td></td>
<td>• Conditions or reactions that could lead to increased toxicity of a hazardous material.</td>
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<tr>
<td></td>
<td>• The potential for release of an acutely toxic substance.</td>
</tr>
<tr>
<td></td>
<td>• A change in wind direction or other atmospheric conditions.</td>
</tr>
<tr>
<td></td>
<td>Immediate Evacuation</td>
</tr>
<tr>
<td></td>
<td>• Explosion appears imminent.</td>
</tr>
<tr>
<td></td>
<td>• Current or forecasted atmospheric conditions.</td>
</tr>
<tr>
<td></td>
<td>• Alterations in the properties of the hazardous material, increasing toxicity or environmental damage.</td>
</tr>
<tr>
<td></td>
<td>• Uncontrollable fire, or threat of the fire spreading or becoming uncontrollable, resulting in surrounding facilities catching fire or compounding the hazard.</td>
</tr>
<tr>
<td></td>
<td>• Inherently unstable material is likely to explode or ignite without warning.</td>
</tr>
<tr>
<td>Considerations</td>
<td>• Specific area(s) affected (i.e. commercial, residential, industrial, rural, etc.)</td>
</tr>
<tr>
<td></td>
<td>• Population affected or threatened, including groups with access and functional needs (i.e. people with disabilities, pets, institutionalized, schools, hospitals, etc.)</td>
</tr>
<tr>
<td></td>
<td>• Evacuation, response, and egress routes.</td>
</tr>
<tr>
<td></td>
<td>• Length of time required for evacuation.</td>
</tr>
<tr>
<td></td>
<td>• Anticipated duration of the emergency.</td>
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<tr>
<td></td>
<td>• Location and capacity of assembly areas and mass care facilities.</td>
</tr>
<tr>
<td></td>
<td>• Security of the evacuation area.</td>
</tr>
<tr>
<td></td>
<td>• Current and forecasted weather conditions.</td>
</tr>
</tbody>
</table>
### Risks
- Exposure of an evacuating population to a released hazardous material.
- Travel problems, particularly in adverse or severe weather.
- Economic costs to families, lost wages of evacuees, expenses or lost revenue to business and industry, emergency response personnel costs to government, and costs associated with the care and sheltering of evacuees.
- Managing those who do not wish to leave their homes or businesses.
- Traffic control problems.
- Difficulty in ensuring communications with the entire impact zone.

#### 5.4.2.2 Shelter-in-Place

The following table outlines the triggers, considerations, and risks that emergency response personnel should consider when considering implementing shelter-in-place protocols in response to a hazardous material release.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Triggers</strong></td>
<td>- Inadequate time to implement an evacuation.</td>
</tr>
<tr>
<td></td>
<td>- Severe weather conditions that preclude the movement of people.</td>
</tr>
<tr>
<td></td>
<td>- As a precautionary measure during the incident assessment.</td>
</tr>
<tr>
<td></td>
<td>- The significant threat of exposure to evacuating individuals.</td>
</tr>
<tr>
<td></td>
<td>- The release is short term and not continuous.</td>
</tr>
<tr>
<td><strong>Considerations</strong></td>
<td>The behavior of threatened people. They must be warned, believe the warning, recognize their risk, know what to do and act.</td>
</tr>
<tr>
<td></td>
<td>- The physical characteristics of a building or structure.</td>
</tr>
<tr>
<td></td>
<td>- Meteorological conditions (wind speed, wind direction, and air temperature).</td>
</tr>
<tr>
<td></td>
<td>- Surrounding terrain and vegetation.</td>
</tr>
<tr>
<td><strong>Risks</strong></td>
<td>- Difficulty in communicating a message with instructions to the impacted population.</td>
</tr>
<tr>
<td></td>
<td>- Improper technique or lack of action leaves some people vulnerable to exposure.</td>
</tr>
<tr>
<td></td>
<td>- Characteristics of hazard change and require immediate evacuation.</td>
</tr>
<tr>
<td></td>
<td>- People with disabilities or other access and functional needs and related facilities.</td>
</tr>
<tr>
<td></td>
<td>- Hospitals, nursing homes, and residential care facilities.</td>
</tr>
<tr>
<td></td>
<td>- Schools (public, private, nursery schools, and child care facilities).</td>
</tr>
<tr>
<td></td>
<td>- Persons lacking their own transportation.</td>
</tr>
</tbody>
</table>

#### 5.5 CONTROL AND DECONTAMINATION

Mitigating a hazardous materials release must involve controlling the material and decontaminating affected people and property. Control methods are divided into confinement and containment. Chemical, biological, and radiological incidents each have unique mitigation and decontamination considerations. Many of the mitigation methods (physical and chemical) require a high degree of specialized training and the use of sophisticated technical equipment (e.g. vent and burn techniques), whereas other methods might be carried out by personnel at the first responder operational level (e.g. diking liquid spills).

Law enforcement will likely be called upon to assist with evacuations and public messaging, and Emergency Medical Services (EMS) would assist medically at the incident/decontamination site(s) and in the surrounding community. The fire department/Hazmat teams would additionally provide rescue and initial medical assistance to patients in a hazardous area.
In addition to controlling the hazardous release, Hazmat teams will decontaminate people and address some or all contamination in the “hot” and “warm zones” in order to reduce the risk that the hazard poses through direct and cross-contamination. Hazmat teams may utilize technical decontamination or emergency decontamination techniques depending on the incident. Environmental decontamination may occur in the cleanup phase or begin with the hazmat team response.

5.5.1 Hospitals

The hospitals in the region have basic hazardous materials decontamination capabilities through procured equipment and training but may need assistance from Hazmat teams with decontamination activities.

Decontamination techniques at hospitals may include emergency decontamination, gross decontamination, technical decontamination, along with active drying. Additional considerations need to be made regarding triage, hospital operations and hospital incident management, communication and patient management, and patient treatment.

The hospitals in the metro region maintain emergency plans, as well as supporting protocols and SOGs for response to all-hazards potentially affecting their facilities. These plans detail establishment of the Hospital Incident Command System (HICS) and a Hospital Command Center (HCC). Standard operating procedures are maintained as appropriate for specific activities, such as decontamination and self-sustainment in compliance with Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) standards. There are a number of plans that healthcare and emergency response entities should reference in regard to decontamination, including:

Local Plans:
- Local emergency Operations Plans: ESF #8 – Public Health and Medical

Regional Plans:
- Regional Coordination Guide: ESF #8 – Public Health and Medical Annex

5.6 CLEANUP AND RECOVERY

Cleanup and recovery is the final stage of hazardous materials incident response. Since the shipper, spiller or owner is responsible for recovery and cleanup, hazardous materials teams and other emergency response personnel typically do not participate in this stage of an incident. Many times, contracted companies will conduct cleanup operations, including containment, disposal, and remediation activities.

While cleanup and recovery follow emergency response, it can often take time for a cleanup contractor to arrive on the scene with the proper resources. For that reason, it is critical for the Incident Commander to ensure that an appropriate cleanup company has been contacted as soon as possible, and to mitigate the impact of the spill as much as possible. If there is an identified responsible party, they hold legal responsibility for cleanup but may require the assistance of Incident Command to ensure the notification is made and to inform the contracted company of the capabilities required. Similarly, tow and vehicle recovery companies should be contacted as early as possible in order to render timely services.

31 https://www.marc.org/Emergency-Services-911/MEMC/Other-Resources/Regional-Coordination-Guide
Cleanup operations should be conducted under the supervision of the appropriate authority. Typically, city or county environmental departments will work with partner state agencies as needed to oversee clean-up efforts, chiefly the Kansas Department of Health & Environment (KDHE) and Missouri Department of Natural Resources (MDNR). Responsibility for declaring the area affected by a hazardous material “safe” or “clean” varies based on the scope of the incident. On small releases that are quickly managed, the Incident Commander may make this determination. Larger or more complex incidents will be declared clean by the jurisdiction’s environmental personnel or KDHE/MDNR representative.

5.6.1 Liability

Hazardous materials teams and/or other emergency response personnel shall not directly contact private cleanup/disposal companies. Responsible parties should be informed that they are financially responsible for the cleanup and disposal of hazardous materials.

If a responsible party cannot be identified or release was on public property, the Incident Commander typically contact the local jurisdiction to notify them of the need for clean-up operations.

5.6.2 Cost Recovery

In the aftermath of a hazardous materials release, publicly-managed emergency response agencies (e.g., local fire departments) are responsible for stabilizing and containing the incident to mitigate against further impacts to life, property, and the environment, even though compensation cannot be guaranteed. Certain direct costs associated with incident operations exceeding 48 hour may be eligible for reimbursement (e.g., labor, equipment rental or depreciation, insurance, material, fuel). After the incident has concluded, normal bidding procedures determined by the jurisdiction’s government administrative codes and procedures for construction and demolition of local government projects will be followed. A list of potential state and funding sources for hazardous material incidents that may be become available to local jurisdictions with thin the MARC LEPC Region are listed below.

In instances where the responsible party is identified as a non-publicly managed entity (e.g., regulated facility), the responsible party or their designee will be responsible for assuming the costs associated with cleanup/remediation of the hazardous materials release.

5.6.2.1 State Funding Sources

- Missouri “Spill Bill” – local fire departments and hazardous materials teams often respond to events involving the release of a hazardous substance. Sections 260.500 through 260.550 (“Spill Bill”) of the Revised Statutes of Missouri, provide provisions for emergency responding agencies to recover cleanup costs associated with hazardous substance spills. The State of Missouri Spill Bill can be accessed online.\(^{32}\)
- The State of Kansas does not have a similar legislative mechanism in place.

5.6.2.2 Federal Funding Sources

- Oil Pollution Prevention, Response, Liability, and Compensation Act of 1990, Oil Spill Liability Trust Fund. This fund provides assistance for oil spill cleanup. The National Pollution Funds Center, managed by the U.S. Coast Guard, and the Federal On-Scene Coordinator will determine

eligibility for this fund. Funds are generally available to federal On-Scene Coordinators for oil
removal actions, including:
  o Containing and removing discharged oil from water and shorelines.
  o Preventing or mitigating a substantial threat of discharge of oil to water and shorelines.
  o Other actions as may be necessary to prevent, minimize, or mitigate damage to the
    public health and welfare.
  
  ▪ Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)
    Hazardous Substances Response Trust Fund (Superfund). This fund provides assistance for
    cleanup of hazardous materials in general. Federal On-Scene Coordinators will determine
    eligibility for this fund.

5.6.2.3 Limitations

  ▪ Responsible party must be unknown, unwilling, or unable to adequately clean up release.
  ▪ Funds are available only for federally managed responses.
  ▪ Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as
    o Stafford Act funding may be available when the President declares an Emergency or
      Major Disaster in a given event.
    o Funding requests flow from the state through FEMA. FEMA determines the eligibility of
      such requests, which includes a determination that state/local resources cannot fulfill
      the given mission. Where ESF #10 assets/resources are requested, EPA is the primary
      agency for fulfilling such requests.
  ▪ ESF #10 funding typically includes a state cost share and may include a local cost share as well.

5.6.3 Reporting

5.6.3.1 After-Action Reports

Local agencies should develop after-action reports to document their activities during hazardous
materials emergency response and recovery operations. Reports should evaluate incident response and
management areas including initial notification, dispatch, initial assessment, containment measures,
scene management, hazardous materials operations, resource allocation, public warning and
information, protective actions, and communications.

LEPC meetings serve as a forum to review actual incidents and discuss areas for improvement and
share best practices for Level II and III incidents.

5.6.3.2 Follow-up Reporting

In accordance with the Superfund Amendments and Reauthorization Act (SARA), Title III, Section 11004
and 11 CSR 10-11.230 any facility required to report the release of a hazardous substance or extremely
hazardous substance under the above codes shall also send a written follow-up notice(s) to the Missouri
Emergency Response Commission (MERC) or the Kansas Commission on Emergency Planning and
Response (CEPR) and the Mid-America LEPC.

Federal, state, and local agencies with regulatory, investigative or prosecutor responsibilities should
compile information concerning the incident and its cause in an investigative report.
5.7 HAZARD MITIGATION

Hazard mitigation is an ongoing process to reduce or prevent the risk to human life, property, and the environment from natural, human-caused or technological hazards. Effective hazard mitigation actions must be taken before an emergency.

The Missouri counties of Cass, Clay, Jackson, Platte, and Ray developed a Regional Multi-Hazard Mitigation Plan\(^{33}\) which provides local governments and emergency responders with an analysis of current conditions in each county, an assessment of hazards and a description of mitigation strategies participating jurisdictions have undertaken.

The Kansas counties of Johnson, Leavenworth, and Wyandotte have coordinated to develop a regional mitigation plan, the Region L Multi-Jurisdictional Hazard Mitigation Plan, 2013-2018 and can be found in all three county’s respective websites.

- Johnson County Kansas Mitigation Plan\(^{34}\)
- Wyandotte County Hazard Mitigation Plan\(^{35}\)
- Leavenworth County Kansas Hazard Mitigation Plan\(^{36}\)

Mitigation actions can occur as a single-purpose project undertaken within a limited time frame, as incremental actions over an extended period, or as part of a repair and restoration process following a disaster occurrence. Mitigation actions tend to be policy-oriented, and therefore involve elected officials to formulate local policy and enact appropriate ordinances and regulations that result in effective mitigation measures. Examples of mitigation activities include:

- Adoption of legislation or ordinances.
- Improvement of facilities at risk.
- Identification of hazard-prone areas and development of standards for prohibited/restricted use.
- Development of warning systems and population protection measures.

5.8 PLAN MAINTENANCE

For mitigation efforts to be fully incorporated into regional planning efforts for the Kansas City Metropolitan area, the responsibility for tracking the Hazard Mitigation Plan update process will be included in the annual work plan for the Metropolitan Emergency Management Committee (MEMC). The MEMC, a committee coordinated by Mid-America Regional Council, serves as a forum for local emergency managers to discuss and resolve regional issues, problems, projects, and activities related to all-hazards emergency management.

The RHMEPP will also be updated regularly to reflect vulnerability and hazard changes occurring in the region. Completion or updates to the RHMEPP will be submitted to the respective Kansas and Missouri departments of emergency management for their review. Moreover, plan review results and any


subsequent updates, along with LEPC meeting minutes that document plan review, are to be submitted to the Kansas Department of Emergency Management (detailed LEPC meeting minutes may be submitted in lieu of written review results). The LEPC will also submit a copy of the Plan to the MERC.

During this coordinated review, mitigation goals and actions for both plans will be reevaluated and updated to reflect current status, as appropriate. The annual review process shall include an evaluation of compatibility between the plan’s effectiveness for the area. Criteria used to evaluate the plans should include:

- The plan’s goals and objectives express current and expected risk and vulnerabilities.
- The nature, magnitude and/or types of hazardous materials risk are appropriate.
- The current resources are coordinated between each plan.
- Review any implementation problems between the plans, such as technical, political, or legal or if there are coordination issues with other agencies.
- Update of Tier II, RMP, EHS and spill data used by each plan.
6. RESOURCE MANAGEMENT

Additional details on available resources can be found in Appendix H.

6.1 GENERAL RESOURCE REQUEST PROCESS

Initial emergency response is dispatched and coordinated through the local Public Safety Answering Point (PSAP) or local dispatch center. These initial first responders may include primary jurisdiction and mutual-aid fire department resources, hazardous material team(s), law enforcement, and emergency medical services. If the need for additional mutual aid increases, the established Incident Command Post facilitates the resource request process according to their local procedures (i.e. communication with the PSAP). Additionally, some jurisdictions may activate their local or area emergency operations center (EOC) to assist with resource management and other functions.

The region’s emergency management officials utilize the software application, WebEOC, to increase awareness and facilitation of available regional resources. Many local jurisdictions and counties within the Mid-America LEPC Region located in Missouri utilize the WebEOC system operated by the Missouri State Emergency Management Agency. The City of Kansas City, Missouri (KCMO) operates its own individual WebEOC system. The Missouri State and KCMO systems are integrated together and can be utilized to request, process and track resources during a disastersituation. The State of Kansas Emergency Management Agency also operates a statewide WebEOC system, as do several other counties and jurisdictions within the Mid-America LEPC area. Leavenworth, Johnson, and Wyandotte Counties all operate individual WebEOC systems; the Johnson County WebEOC software is also utilized as a regional system for all jurisdictions and counties within the MARC area, which includes 119 cities and 9 counties.

All local Kansas WebEOC systems are integrated with the Kansas statewide system. Both the Kansas and Missouri statewide WebEOC systems are also fused together. All these systems can be utilized to request, process and track resources during a disaster situation.

There is recognition by all jurisdictions that being able to access current information on resources collectively would be of benefit to ensure resources are managed efficiently and effectively during a large-scale emergency.

Another resource tracking asset is the “Rapid Tag” system. This is a regional system that can develop tags for specific equipment and has a database to track the information. These systems are located in the following jurisdictions:

- Independence Missouri Office of Emergency Preparedness
- Kansas City Fire Department
- Johnson County Kansas Communications Center

Hospitals in the Mid-America LEPC area use the EMResource system to track the availability of hospital beds and emergency room capacity.

6.2 PLAN BULLDOZER RESOURCE REQUEST PROCESS

Plan Bulldozer is a regional mutual aid agreement with the heavy constructors/contractors in the metropolitan area. Plan Bulldozer describes the types of heavy equipment resources potentially available to local jurisdictions and provides 24-hour contact information for accessing these resources. The plan’s Emergency Resource Catalog is compiled and published by the Heavy Constructors
To utilize “Plan Bulldozer,” the following steps must be completed:

- Establish a Memorandum of Understanding between the local jurisdiction and the Heavy Constructors Association of Greater Kansas City (Association).
- Requesting (governmental agency) must notify the Heavy Constructors Association of the Greater Kansas City Area that a disaster has occurred indicating the jurisdiction does not have the specialized equipment necessary to alleviate the situation.
- As soon as practicable, an Association Command Center will be established to process a request for aid. In turn, the jurisdiction will collect, evaluate, and prioritize all requests and disseminate them in writing to the Association’s Command Center, from its Emergency Operations Center or any other location designated for the collection and processing of requests.
- Upon receipt of the information by the Association’s Command Center, the requests for assistance will be given to the participating contractors.
- Depending upon the situation, communications will be established between the responsible jurisdiction’s Departments or Divisions and the participating contractor to exchange all pertinent information for the fulfillment and coordination of specific projects.
- This process will continue until the crisis phase of a “disaster” has passed, as determined by the jurisdiction in writing.
- After the crisis has passed, the Association will no longer need to maintain the Communications Center and all requests for construction and demolition work will be made through the normal “sample jurisdiction” contractual bidding procedures.
- After the termination of the crisis and as soon as practicable, the participating contractors will provide the jurisdiction that made the request for aid with all cost information incurred during response operations.

37 https://www.marc.org/Emergency-Services-911/Plans
7. PUBLIC INFORMATION

Upon receipt of the initial notification that an actual or suspected hazardous material release has occurred, the local fire department will assess the need for and coordinate with the local EOC (if activated), other emergency response agencies/organizations to develop and disseminate pertinent information to community stakeholders (e.g. local businesses, schools, hospitals, media), as well as the public in accordance with the concepts outlined in the respective local Emergency Public Information plans and the ESF #15 Emergency Public Information Annex of the Regional Coordination Guide. Additional hazardous material-specific public information can be found in the ESF #10 Oil and Hazardous Materials Annex of the Regional Coordination Guide.

To facilitate effective public information dissemination during a hazardous material release, the following guiding principles will be instituted:

- A well-informed public is better prepared to take appropriate actions during hazardous materials emergencies.
- As the incident progresses beyond the warning stage, the public shall be regularly informed as to the status of the emergency and its continued impact.
- Whenever possible, a joint public information effort including government agencies, nongovernmental organizations and the affected facility will be utilized for consistency and clarity of information released to the public. A Joint Information Center (JIC) may be activated, if required.

Like other response functions, public information should be conducted within ICS and as detailed in LEOPs. Each jurisdiction may establish public information capabilities differently depending on resource capabilities and requirements, but all provide the same core functions:

- Rapid dissemination of accurate information,
- Rumor control,
- Response to media and citizen inquiries.

Pre-scripted sample public announcements for Hazardous Materials Incidents can be found in Appendix I.

7.1 REGIONAL ASSOCIATION OF PUBLIC INFORMATION OFFICERS

In 2000, MARC formed the Regional Association of Public Information Officers (RAPIO), an organization that allows local Public Information Officers the opportunity to share information, work cooperatively on regional issues, and network with their peers during emergencies. For communities that require supplemental resources, public information officers operate in other cities and counties, as well as state and federal partner agencies, private agencies, utilities, and special districts.

7.2 Media Access

7.2.1 Ground Access

In the event of a hazardous materials incident, the media’s access to the scene will be dictated by the event and will be at the discretion of the Incident Commander. The media will be provided access in a safe location and informed by scheduled briefings.

7.2.2 Air Access

Federal Aviation Administration Regulation (FAR) 91.137 covers temporary flight restrictions during incidents/disasters and sets forth procedures which pilots of media and other aircraft must follow. Permission to fly over incident sites may be denied if such flights will pose a significant safety hazard to the general public or compromise management of the event.

Local officials may request temporary flight restrictions by contacting the FAA Regional Operations Center at (816) 426-4600.

7.2.3 Local Public Information Officers

- The local government PIO organization may rely on several different communication methods for dissemination of information to the media and for responding to direct public inquiry. The size and scope of the incident, as well as the capabilities of the jurisdiction, will be factors in determining what methods are utilized to alert the public. Possible methods include, but are not limited to:
  - All available media (broadcast radio, television, and cable access)
  - Social media
  - Activation of the Emergency Alert Systems (EAS) and/or IPAWS (Integrated Public Alert and Warning System)
  - Mobile public address systems
  - Mass electronic notification systems
  - Devices and methods for individuals with disabilities
  - Door-to-door notification
- The PIO should ensure that adequate equipment resources are available to handle the number of inquiries (i.e., activate a call center, if needed).
- The PIO should anticipate that primary forms of communication may be inoperable due to the nature of the emergency. Redundant sources of communication should be considered, such as Amateur Radio Emergency Service (ARES).
- The local government may activate, or request activation of, local EAS stations following established EAS procedures.
- Local commercial radio is a rapid means of communicating emergency information to the public. However as modes of communication evolve, agencies may need to consider additional ways to transmit key messages. Other methods include regional radio stations, television, newspapers and special emergency information supplements to newspapers, social media, websites, leaflets, public address systems, and personal contact.
- Some incidents may require the establishment of hotlines or toll-free numbers to provide information to the public. 3-1-1 (Kansas City, Missouri), United Way 2-1-1 or other government established hotlines may be used.
8. TRAINING AND EXERCISE

8.1 TRAINING

The Mid-America LEPC has an active training subcommittee that meets regularly, establishes a training budget, and maintains a calendar of hazardous materials courses. The subcommittee works with local agencies to ensure their personnel are trained to a level commensurate with their emergency responsibilities. The training offered focuses primarily on the region’s hazardous materials teams, but the subcommittee works to provide courses pertinent to smaller local departments and those with volunteer personnel.

The subcommittee coordinates efforts on a regional level with the Training and Exercise Subcommittee of the Regional Homeland Security Coordinating Committee (RHSCC). Courses from FEMA and the Department of Homeland Security on chemical, biological, radiological, nuclear, and explosive (CBRNE)-related courses are offered by this committee. The committee also works closely with state training partners to ensure duplication is minimized and limited resources are used prudently. The types and number of training courses sponsored by the Mid-America LEPC may vary each year depending on available resources and must be allowable as identified by KDEM/MERC if federal funds are used.

The LEPC training subcommittee develops an annual work plan/schedule that focuses on providing training opportunities on various subjects over the course of the calendar year. The LEPC in conjunction with the Heart of America Fire Chiefs develops the plan for hazardous materials training for the entire region. The Regional Training and Exercise Program calendar of courses is available online.40

The training subcommittee promotes training on the National Incident Management System (NIMS) to support local jurisdictions and community partners in meeting compliance requirements. NIMS training is incorporated on the yearly calendar at the website listed above.

All hazardous materials training courses sponsored by the Mid-America LEPC comply with the requirements of CFR 1910.120, NFPA 471 and 472, and/or other federal and state training requirements.

Training partners include:

- Missouri State of Emergency Management Agency (SEMA)
- Kansas Division of Emergency Management (KDEM)
- Federal Emergency Management Agency (FEMA)
- The University of Missouri Fire and Rescue Training Institute
- Kansas Fire & Rescue Training Institute

8.2 EXERCISE

The Mid-America LEPC participates in at least one exercise each year. The LEPC meets its annual requirement to exercise this plan and the response to a hazardous materials incident by supporting its member agencies in planning and executing a hazardous materials exercise and/or by hosting its own exercise.

It is recognized that local jurisdictions have varying exercise requirements. To maximize limited funding and allow for maximum participation, the LEPC works closely with the Regional Homeland Security

Training and Exercise Subcommittee to achieve regional exercise goals and objectives while avoiding duplication of efforts. In the past, the LEPC has worked with local agencies to design, conduct and evaluate large, full-scale exercises that tested regional response plans and capabilities, including hazardous materials teams, SWAT teams, bomb squads, and others.

Exercises supported by the LEPC may be discussion based and/or operational exercises. Exercises are designed to test applicable local emergency response plans and facility response plans as appropriate. Lessons learned from the after-action reports from these exercises help identify areas of improvement. Additionally, recognizing the benefits of lessons learned from actual incidents, the LEPC provides a forum for operational reviews of real events.

Questions regarding training and exercises supported by the Mid-America LEPC should be directed to the Emergency Services Training and Exercise Program Manager, Mid-America Regional Council, 600 Broadway, Suite 200, Kansas City, MO 64105 or (816) 474-4240.
9. PLAN MAINTENANCE

The Mid-America LEPC Plans Subcommittee is responsible for updating and maintaining the Regional Hazardous Materials Emergency Preparedness Plan. It will be reviewed and updated on an annual basis, or more frequently as changed circumstances within the community or a facility require. Updates will be logged on the Record of Amendments located at the front of this document.

The Regional Hazardous Materials Emergency Preparedness Plan will be re-submitted to the MERC and the KCEPR each time it is revised. These state agencies will review the plan for consistency with SARA Title III, Section 303 and other plans, and may make recommendations to the Mid-America LEPC, as appropriate.
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Appendix A: Stakeholder Contact Info

[Work still in progress – will be added later] Please contact Vickie Phillips MARC Emergency Services (816) 474-4240 if you are looking for contact information.
Appendix B: Legal Authorities

STATUTES

Missouri

- Division 10, Chapter 11, Missouri Code of State Regulations. Division 24, Chapter 3, Missouri Code of State Regulations.
- Chapter 21, Joint committee on terrorism, bioterrorism, and homeland security.
- Revised Statutes of Missouri, Chapter 44. Revised Statutes of Missouri, sections 292.600 to 292.625 (Missouri Emergency Planning and Community Right-to-Know Act) and Sections 260.500–260.550 (“Spill Bill”).
- Ordinances and regulations of local jurisdictions as documented in emergency plans.
- Missouri Mutual Aid, MO 44.15; State Emergency Management.
- Missouri Mutual Aid – Law Enforcement, MO 44.098; KS-OK law enforcement mutual aid.
- Missouri EMS, MO 190.107, 190.900-939.
- Missouri Mutual Aid, MO 320.090, 44-095, 44-090, 44-105, 44-045; fire services, Kansas/State EM mutual aid, inter/intrastate mutual aid without declaration requirement and license reciprocity recognition.

Kansas

- KSA Chapter 48, Article 9, Established CEPR under The Kansas Emergency Management Act; responsible for implementing federal EPCRA provisions in Kansas.
- Ordinances and regulations of local jurisdictions as documented in emergency plans.
- Kansas Mutual Aid System, Statutes 48-950-958; political/multi-jurisdiction agencies.
- Municipal Mutual Aid, KS 12-16, 117; municipal mutual aid (counties/cities).
- Public Agencies, KS 12-2904.
- Kansas Mutual Aid, KS 12-2904, 80-1517, 65-6158, 48-3602; mutual aid for fire, public health/medical, law enforcement agencies.
- Kansas EMS, KS 65-6158.
- Kansas Wildfire, KW 31-801; forest fire preservation.
- Kansas Emergency Management Compact, KS 48-9a01; KSW Interstate EM Compact.

Federal

- Public Law 93-288, as amended by Public Law 100-707, The Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 6121 et seq.) provides authority for response assistance under the Federal Response Plan, empowers the President to direct federal agencies to utilize their authority and resources to support state and local assistance programs, and provides a system for joint all hazard capability building at the federal, state, and local levels.
- Public Law 99-499, Superfund Amendments and Reauthorization Act of 1986, which governs hazardous materials planning and community right-to-know.
- Title 42, of the United States Government Code, Section 11001 et seq., the Superfund Amendments and Reauthorization Act of 1986, (SARA), Title III; also known as the "Emergency Planning and Community Right-to-Know Act of 1986."
Title 40 of the Code of Federal Regulations, Part 68 (Risk Management Plan) and Parts 300, 310, 350, 355, 370, and 372 (RCRA).

Public Law 101-615, Hazardous Materials Transportation Uniform Safety Act (HMTUSA), which provides funding to improve capability to respond to hazardous materials incidents.

Public Law 96-510, Comprehensive Environmental Response, Compensation, and Liability Act of 1980, Section 104(i), 2 USC 9604(i). More popularly known as "Superfund", CERCLA was passed to provide the needed general authority for federal and state governments to respond directly to hazardous substances incidents.


Stafford Act: 44 CFR Section 206; emergency response.

Emergency Management Assistance Compact (EMAC), Public Law 104-321; intrastate mutual aid.


Pandemic and All Hazards Preparedness Act, Public Law No. 109-417, 78-410; public health preparedness and response (HHS/CDC), public health emergency declaration.

Public Readiness and Emergency Preparedness Act; declaration of immunity for claims related to medical countermeasures (HHS).

Emergency Medical Service Compact National Agreement; EMS licensure reciprocity recognition.

Nurse Licensure Compact National Agreement; Nurse licensure reciprocity recognition.

**EXECUTIVE ORDERS AND DIRECTIVES**

**Missouri**

- 87-5 – Establishing the Missouri Emergency Response Commission according to Title III of the Superfund Amendments and Reauthorization Act of 1986, and the responsibilities of the Commission.

**Kansas**

- Executive Reorganization Order No. 29, and K.S.A. sections 65-5703, 65-5704, and 057-0021-K. The Kansas EPCRA provisions are found in Kansas Administrative Regulations (K.A.R.) 28.65.1 to 28.65.4.

**Federal**

- Homeland Security Presidential Directive (HSPD) – 5 required the creation of a National Response Plan (NRP) including the concept of the National Incident Management System (NIMS).
- Homeland Security Presidential Directive (HSPD) – 8 required a national domestic preparedness goal, standardized mechanisms for delivery of Federal assistance to local jurisdictions, and measurable actions to improve preparedness capabilities at all levels of government.
- Presidential Policy Directive (PPD) – 8; national emergency preparedness.
- National Incident Management System (NIMS); incident organization and management.
• National Response Framework (NRF) 3rd Edition; national all-hazards approach to coordinate emergency response through ESFs.

**Mutual Aid Agreement**

Local communities have various mutual aid agreements in place to ensure resources are available for incidents that may exhaust any one jurisdiction’s capabilities. Fire departments across the region have mutual aid and automatic aid agreements with their local neighboring jurisdictions. Some resources, such as fire department Hazmat teams, are available to provide regional response coverage as needed.

Law enforcement agencies may have existing mutual aid policies in place for local and regional responses, and municipalities may have agreements for emergency coordination, resource management, and specialty resources (e.g., heavy machinery or traffic control).

Hospitals often have agreements to share resources and personnel during emergencies, including through regional assets and coordinating bodies. Mutual aid agreements may be in place through the Regional Health Care Coordination System (RHCS) Guide, Region A Healthcare Emergency Response Guide (HERG), Kansas City Metropolitan Medical Response System (KCMRSMRS) Plan, MARCER Mass Casualty Incident (MCI) Plan, and Kansas Regional Hospital Plan — Northeast Kansas Region and Kansas City Metro Region.

Jurisdictions should refer to the Regional Coordination Guide, Emergency Support Function Annexes, and additional plans available on the MARC website at [www.marc.org/Emergency-Services-9-1-1/Plans](http://www.marc.org/Emergency-Services-9-1-1/Plans) for guidance and assistance.

**Documents and References**

**Missouri**

• Missouri Hazard Analysis, SEMA, September 2010.
• Missouri State Emergency Operation Plan, November 2008.

**Kansas**

• Kansas Response Plan, 2011.
• Kansas LEPC Handbook, September 2011.

**Federal**


**Other**

Appendix C: Risk Maps

This section includes maps displaying social vulnerability by geographic area with the locations of regulated hazardous materials facilities. The social vulnerability data was obtained from the Center for Disease Control and Prevention (CDC) Social Vulnerability Index, https://svi.cdc.gov/, with data from the 2016 census.

The Centers for Disease Control and Prevention's (CDC) Social Vulnerability Index (SVI) was developed in partnership with The Agency for Toxic Substances and Disease Registry's (ATSDR) Geospatial Research, Analysis & Services Program (GRASP). The SVI was created to help public health officials and emergency response planners identify and map the communities that will most likely need support before, during, and after a hazardous event. The Centers for Disease Control's (CDC) SVI indicates the relative vulnerability of every U.S. Census tract. Data source: U.S. Census Bureau, American Community Survey (ACS), 2012-2016 (5-year) tract data. Hazard data represented is for all 2019 Risk Management Plan (RMP) facilities and 2018 Tier II, Extremely Hazardous Substances (EHS) reporting facilities. RMP data source: EPA Region VII. Tier II data source: Missouri Department of Public Safety, SEMA and Kansas Department of Health & Environment.

Figure C-1: Regional Social Vulnerability and Hazardous Sites
Figure C-2: Cass County Social Vulnerability and Hazardous Sites

The Centers for Disease Control's (CDC) Social Vulnerability Index (SVI) was developed in partnership with the Agency for Toxic Substances and Disease Registry’s (ATSDR) Geospatial Research, Analysis & Services Program (GRASP). The Centers for Disease Control's (CDC) SVI indicates the relative vulnerability of every U.S. Census tract. Data source: U.S. Census Bureau, American Community Survey (ACS), 2012-2016 (5-year) tract data. Hazard data represented is for all 2019 Risk Management Plan (RMP) facilities and 2018 Tier II, Extremely hazardous substances (EHS) reporting facilities. RMP data source: EPA Region VII. Tier II data source: Missouri Department of Public Safety, SEMA and Kansas Department of Health & Environment.
Figure C-3: Clay County Social Vulnerability and Hazardous Sites

The Centers for Disease Control’s (CDC) Social Vulnerability Index (SVI) was developed in partnership with The Agency for Toxic Substances and Disease Registry's (ATSDR) Geospatial Research, Analysis & Services Program (GRASP). The Centers for Disease Control’s (CDC) SVI indicates the relative vulnerability of every U.S. Census tract. Data source: U.S. Census Bureau, American Community Survey (ACS), 2012-2016 (5-year) tract data. Hazard data represented is for all 2019 Risk Management Plan (RMP) facilities and 2018 Tier II, Extremely hazardous substances (EHS) reporting facilities. RMP data source: EPA Region VII. Tier II data source: Missouri Department of Public Safety, SEMA and Kansas Department of Health & Environment.
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Figure C-4: Jackson County Social Vulnerability and Hazardous Sites
Figure C-5: Platte County Social Vulnerability and Hazardous Sites

The Centers for Disease Control's (CDC) Social Vulnerability Index (SVI) was developed in partnership with The Agency for Toxic Substances and Disease Registry's (ATSDR) Geospatial Research, Analysis & Services Program (GRASP). The Centers for Disease Control's (CDC) SVI indicates the relative vulnerability of every U.S. Census tract. Data source: U.S. Census Bureau, American Community Survey (ACS), 2012-2016 (5-year) tract data. Hazard data represented is for all 2019 RiskManagement Plan (RMP) facilities and 2018 Tier II, Extremely hazardous substances (EHS) reporting facilities. RMP data source: EPA Region VII. Tier II data source: Missouri Department of Public Safety, SEMA and Kansas Department of Health & Environment.
The Centers for Disease Control's (CDC) Social Vulnerability Index (SVI) was developed in partnership with The Agency for Toxic Substances and Disease Registry's (ATSDR) Geospatial Research, Analysis & Services Program (GRASP). The Centers for Disease Control's (CDC) SVI indicates the relative vulnerability of every U.S. Census tract. Data source: U.S. Census Bureau, American Community Survey (ACS), 2012-2016 (5-year) tract data. Hazard data represented is for all 2019 Risk Management Plan (RMP) facilities and 2018 Tier II, Extremely Hazardous Substances (EHS) reporting facilities. RMP data source: EPA Region VII. Tier II data source: Missouri Department of Public Safety, SEMA and Kansas Department of Health & Environment.

Figure C-6: Ray County Social Vulnerability and Hazardous Sites
The Centers for Disease Control’s (CDC) Social Vulnerability Index (SVI) was developed in partnership with The Agency for Toxic Substances and Disease Registry’s (ATSDR) Geospatial Research, Analysis & Services Program (GRASP). The Centers for Disease Control’s (CDC) SVI indicates the relative vulnerability of every U.S. Census tract. Data source: U.S. Census Bureau, American Community Survey (ACS), 2012-2016 (5-year) tract data. Hazard data represented is for all 2019 RiskManagement Plan (RMP) facilities and 2018 Tier II, Extremely hazardous substances (EHS) reporting facilities. RMP data source: EPA Region VII. Tier II data source: Missouri Department of Public Safety, SEMA and Kansas Department of Health & Environment.

Figure C-7: Johnson County Social Vulnerability and Hazardous Sites
The Centers for Disease Control's (CDC) Social Vulnerability Index (SVI) was developed in partnership with The Agency for Toxic Substances and Disease Registry's (ATSDR) Geospatial Research, Analysis & Services Program (GRASP). The SVI was created to help public health officials and emergency response planners identify and map the communities that will most likely need support before, during, and after a hazardous event. The Centers for Disease Control’s (CDC) SVI indicates the relative vulnerability of every U.S. Census tract. Data source: U.S. Census Bureau, American Community Survey (ACS), 2012-2016 (5-year) tract data. Hazard data represented is for all 2019 Risk Management Plan (RMP) facilities and 2018 Tier II, Extremely Hazardous Substances (EHS) reporting facilities. RMP data source: EPA Region VII. Tier II data source: Missouri Department of Public Safety, SEMA and Kansas Department of Health & Environment.

Figure C-8: Leavenworth County Social Vulnerability and Hazardous Sites
Figure C-9: Wyandotte County Social Vulnerability and Hazardous Sites
Figure C-10: Kansas City, Missouri, Social Vulnerability and Hazardous Sites

The Centers for Disease Control’s (CDC) Social Vulnerability Index (SVI) was developed in partnership with The Agency for Toxic Substances and Disease Registry’s (ATSDR) Geospatial Research, Analysis & Services Program (GRASP). The Centers for Disease Control’s (CDC) SVI indicates the relative vulnerability of every U.S. Census tract. Data source: U.S. Census Bureau, American Community Survey (ACS), 2012-2016 (5-year) tract data. Hazard data represented is for all 2019 Risk Management Plan (RMP) facilities and 2018 Tier II, Extremely hazardous substances (EHS) reporting facilities. RMP data source: EPA Region VII. Tier II data source: Missouri Department of Public Safety, SEMA and Kansas Department of Health & Environment.
Appendix D: Tier II Reporting Process

KANSAS TIER II REPORTING PROCESS

Tier II Reporting Information

The Section 312 Tier II form and appropriate fees are due March 1 every year. Following are the two different options available to file the annual Tier II report in the State of Kansas.

Option 1: Web Reporting


Users can use any computer that has access to the internet once a user ID and password have been generated. User IDs and passwords will only be issued to facilities (not consultants) and will be limited to just one representative of the facility.

To obtain a User ID and Password, mail requests on company letterhead to the Kansas Department of Health and Environment, Right-to-Know Program, 1000 SW Jackson, Suite 330, Topeka KS 66612-1365. Email requests can be sent from the company’s home domain to kdhe.rtk@ks.gov or Marla.Oestreich@ks.gov. User IDs and passwords cannot be issued over the phone. Include the following:

- Company Name
- Company Mailing Address (if different than facility address)
- Company Contact Person Name
- Contact Person Email Address
- Telephone Number

THE SAME USER ID AND PASSWORD ISSUED WILL WORK FOR EACH YEAR.

Passwords can be changed at the facility’s request. (i.e. a change in personnel)

The website will also allow the generation of fee calculation worksheets (for each facility) and a certification letter, which must be mailed to our office with accompanying fees to complete reporting. Make checks or money order payable to the Kansas Department of Health and Environment.

Local emergency planning committees and fire departments may need to receive a hard copy to fulfill your reporting obligations. The web application will generate hard copies of the Kansas Tier II reports for submission to local agencies. The list of LEPCs is available on the internet at http://kansastag.gov/KDEM.asp?PageID=158. Fire department addresses can be obtained by contacting the LEPC Chair or Emergency Manager in the county the facility is located.

Option 2: Hard Copy Report

Facilities may report using KDHE’s hard copy form.

Go to http://www.kdhks.gov/radiation/indexRTK.html to download blank copies of the Kansas Tier II form, the fee worksheet, and instructions.

Items to Note:
Facilities must use our state specific form, or a reasonable facsimile of the state form. If unsure if your form is acceptable, then please obtain approval by emailing kdhe.rtk@ks.gov.

Facilities must report their chemical inventory in actual pounds, not range codes.

Latitude and longitude is required. Use the decimal degree format (i.e. 99.9999, -99.9999).

Contact Marla Oestreich at 785/296-1688 or marla.oestreich@ks.gov if you have any questions.

Kansas EPCRA Tier Emergency & Hazardous Chemical Inventory Forms

An electronic, fillable copy of the Tier II form is available online at http://www.kdheks.gov/asbestos/download/Tier_II_form.pdf. (See sample below.)

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![Sample Kansas Tier II Form, Page 1](http://www.kdheks.gov/asbestos/download/Tier_II_form.pdf)

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Figure D-1: Sample Kansas Tier II Form, Page 1
### Regional Hazardous Materials Emergency Preparedness Plan

Figure D-2: Sample Kansas Tier II Form, Page 2

<table>
<thead>
<tr>
<th>Chemical Description</th>
<th>Physical Hazards</th>
<th>Health Hazards</th>
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<td>DSHS CAS #: (if applicable)</td>
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<tr>
<td>Environmental:</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure D-3: Sample Kansas Tier II Form, Page 3
MISSOURI TIER II REPORTING PROCESS

Who Must Submit This Form

The owner or operator of a facility where hazardous chemicals are used, produced, or stored must submit a Tier II Form if the quantity of hazardous chemicals on hand exceeds specific thresholds (see below). The Missouri Tier II Form is required instead of the Tier I form.

What Chemicals Must Be Reported

Any substance for which your facility must keep a Safety Data Sheet (SDS) under OSHA’s Hazard Communication Standard is classified as a “hazardous chemical.” Any “hazardous chemical” that your facility has more than ten thousand (10,000) pounds of on hand at any one time during the calendar year must be reported on the Missouri Tier II form. A partial list of hazardous chemicals may be found on the internet at "List of List for Extremely Hazardous Substances" but the simplest way to determine if a chemical is required to be reported is (1) OSHA required SDS and (2) 10,000 pounds on hand.

Extremely Hazardous Substances (EHS) as specified in 40 CFR Part 355 must be reported on the Tier II form if a facility has on hand at any one time during the calendar year more than five hundred (500) pounds or the threshold planning quantity (TPQ), whichever is lower. To obtain a list of extremely hazardous substances, contact the Missouri Department of Public Safety, Missouri Emergency Response Commission at (800) 780-1014 or go to Missouri Emergency Response Commission’s Website.

Under Missouri law, explosives and blasting agents in excess of one hundred (100) pounds must be reported to the fire department within 24 hours of being present at a facility. If storage is longer than 15 days, these substances must be reported to the fire department, the LEPC, and the MERC using the Missouri Tier II form. This requirement does not apply to materials in transit provided that the transporter is in compliance with U.S. Department of Transportation regulations.

What Chemicals Are Excluded

Section 311(e) of Title III EPCRA excludes the following substances:

- Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration.
- Any substance present as a solid in a manufactured item to the extent exposure to the substance does not occur under normal conditions of use.
- Any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public.
- Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual.
- Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer. (This exclusion does not apply to the one time reporting of extremely hazardous substances under Section 302 of EPCRA.)

When to Submit This Form

Owners or operators of facilities that have hazardous chemicals on hand in quantities equal to or greater than set threshold levels must submit Missouri Tier II forms by March 1st of each year. The information required must be reported to the MERC and the LEPC within sixty (60) days of a new extremely
hazardous substance being present at the facility at or above the threshold planning quantity (TPQ) (11 CSR40-4.040 (1)). If any new hazardous chemical or extremely hazardous substance comes onto the site in a quantity sufficient to require reporting, an updated Missouri Tier II form must be provided within three (3) month (11 CSR40-4.040 (1)(D)(2)).

**Where to Send Your Completed Tier II**

Send (via email, fax or hardcopy) a completed, signed Missouri Tier II form to each of the following organizations:

- Missouri Emergency Response Commission at: https://hazmat.dps.mo.gov,
- The Mid-America LEPC at elynch@marc.org or fax at (816) 421-7758,
- Local fire department.

**Penalties**

Any owner or operator who violates any Tier II reporting requirements shall be liable to the United States for civil penalty of up to $27,500 per day for each such violation. Each day a violation continues shall constitute a separate violation. Under Missouri law, there is also a penalty of up to $5,000 per day for failure to provide the type of information required on the Missouri Tier II form.
Appendix E:
Hazardous Materials Incident Levels

**LEVEL I**

A minor situation within the capabilities of first responders trained at the “operational” level. A Level I incident involves a release or possible release, of a small amount of gas, liquid or solid of a known (identified) hazardous material. In addition, the agency on-scene has the expertise and proper equipment to safely mitigate the incident.

At a minimum, a command post and an exclusion zone should be established with all incidents. The Emergency Response Guide should be referenced for initial isolation and protective action distances. The incident commander should restrict movement of personnel into the exclusion zone. Only personnel entering for a specific reason and in the proper level of protective equipment should be allowed.

An incident should be immediately upgraded to Level II for a release or potential release of an unknown hazardous material or suspected hazardous material.

Typical Level I incidents include:

- Minor leaks or spills from a 55-gallon drum, cylinders up to one-ton capacity, bags or packages.
- Minor leaks or spills which can be handled with absorbent materials and resources readily available on-site.
- Release of chemicals which do not produce an environment which is immediately dangerous to life and health (IDLH) or above the Lower Explosion Limit (LEL) of a product.
- Containers that are involved in an accident that have no visible damage.
- Chemical releases that have minimal environmental impact that do not require outside resources.
- Leaking valves on containers which do not require the product to be immediately off-loaded.
- Evacuations limited to a single intersection or building.
- No life-threatening situation from materials involved.
- Suspicious packages that the threat and substance are considered non-hazardous.

**LEVEL II**

These are incidents that are beyond the capabilities of an agency with jurisdictional responsibility and that require mitigation by a hazardous materials team. This can range from a small incident involving any amount of an unknown substance to a large incident involving multiple agencies and jurisdictions.

A Level II incident should be declared by the Incident Commander and the Initial Response Team if the incident involves a sufficient quantity of gas, liquid or solid of a known hazardous substance or any quantity of an unknown material that has been released or offers the potential for release.

A Level II incident should be declared for the release of any quantity of a known solid or liquid toxic material in a critical public area or for the release or potential release of any quantity of an unknown solid, liquid or gaseous toxic material or suspected toxic material (all gases other than natural gas are considered toxic).
In a Level II incident, a formal and properly identified Command Post with a removed staging area, an Incident Safety Officer, and a Hazardous Materials Sector should be established. Control zones must be established and maintained as early as possible and evaluated and monitored throughout the incident. Localized evacuation may need to be implemented and outside agencies should be notified.

Typical Level II incidents include:

- One or more 55-gallon drums, one-ton cylinders, nurse tanks, totes, portable containers that are leaking considerable amounts of a known substance.
- A major, liquefied gas leak due to puncture, crack or crease of a large tank where ignition sources are a real threat.
- Leaking containers, tank trucks or railroad tank cars with a hazardous material on board whose structural integrity is in question.
- Train derailments involving railroad tank cars filled with hazardous materials with leaks that can be controlled by local hazardous materials teams.
- A vehicle or train fire involving hazardous materials or hazardous wastes that pose a serious threat of a boiling liquid expanding vapor explosion (BLEVE).
- Incidents involving a fatality or serious injury attributed to the hazardous substance.
- Evacuations consisting of an apartment complex, city block or large facility with many employees.
- Chemical releases that pose a moderate threat to the environment that requires state agency involvement.
- Suspicious package(s) that has an unknown material but due to location is considered a credible threat. When the substance is identified and declared a WMD agent, the incident should be upgraded to a Level III incident. Incidents that involved non-hazardous substances should be downgraded to a Level I incident.

**LEVEL III**

This includes any incident beyond the capabilities of the hazardous materials team and local resources. The incident may be quite lengthy in duration and may necessitate large-scale evacuations. It is likely a Level III incident will involve multiple agencies and jurisdictions, as well as resources from the private sector (including chemical manufacturers) and voluntary organizations.

Examples of Level III incidents include:

- Large releases from tank cars, tank trucks, stationary tanks or multiple medium containers.
- Incidents involving large-scale evacuations that may extend beyond jurisdictional boundaries.
- Any spill, leak or fire involving hazardous materials that has gone to greater alarms.
- Any incident beyond local capabilities and resources (including the hazardous materials team) to safely identify, contain and mitigate.
- Train derailments involving railroad tank cars containing hazardous materials that require specialized resources to mitigate.
- Major leaks of compressed or liquefied gas cargo tanks or railroad tank cars caused by puncture or major structural damage.
- Suspicious packages that due to location, identification of material as WMD agent, or verbal threat that requires state and federal resources.
- Large-scale or catastrophic releases of hazardous materials (e.g. radiation, biological agents) that would likely include a Stafford Act ESF #10 activation.
Appendix F. Protective Action Checklist

This checklist is intended as reference only in determining the appropriateness of evacuation and/or sheltering-in-place during a hazardous materials emergency.

The information contained in this checklist is from the National Institute for Chemical Studies, *Protecting the Public in a Hazardous Material Emergency (Final Project Report)* (Charleston, WV: University of Charleston, 1988, pp. 10-12). This information is used with the permission of the National Institute for Chemical Studies.

**INITIAL ASSESSMENT**

Is this incident an actual or potential threat to public health and safety? If "Yes" or "Uncertain," continue to evaluate the incident using this checklist.

___Yes_______ No_______ Uncertain

**Required Information**

The following is necessary to properly evaluate the appropriateness of evacuation and/or shelter-in-place actions:

- Material(s) involved _____________________________________
- Population threatened ____________________________________
- Time factors involved ____________________________________
- Current and forecast weather conditions __________________________________________
- Ability to disseminate warnings and emergency public information ______Yes _______No
- Capabilities of emergency response organizations to contain, stabilize and mitigate the emergency

---

**Technical Assistance**

Have technical experts (i.e. hazardous materials technicians/specialists, environmental health personnel, CHEMTREC, the manufacturer, facility representatives, etc.) been consulted and/or recommended actions?

_______Yes _______No

**FACTORS IMPORTANT TO THE DECISION**

Evaluate factors related to the hazardous material(s) involved including characteristics, quantity, condition, configuration and location:

**Physical characteristics:**

- State: _______ Solid _______ Dust _______ Liquid _______ Gas
- Density: _______ High _______ Low
- Vapor pressure: _______ High _______ Low
Water soluble? _____ Yes ___ No
Explosive or flammable? _____ Yes ___ No
Characteristics unknown? _____ Yes ______ No

**Health characteristics:**
Toxicity: _____ High _______ Low _______ Irritant
Type of hazard: ___ Inhalation _______ Ingestion _______ Dermal
Hazard is: _____ Immediate (acute) ___ Long-term (chronic)
Hazardous residue? _______ Yes ___ No
Toxic combustion product? _____ Yes ___ No
Unknown hazard? _____ Yes ___ No

**Quantity:**

**Release factors:**
Contained, but offers potential for release. _____ Yes _______ No
Uncontained: _______ Controlled _____ Uncontrolled
Type of release: _____ Continuous ___ Cloud _______ Pool
_____ Vapor _______ Dust _______ Elevated _______ Ground-hugging
Vapor is: _____ Heated _______ Cool _______ Caused by fire_____

**Location:**
Accessible? ___ Yes ___ No
Distance to public: _____ feet/miles
Material relative to public: _____ Above _______ Below _______ Same level
Vapor enhancements or obstructions: _____
Nearby hazards? _____ Yes ______ No

**Population Considerations**

**Population characteristics:**
Type: _______ Residential ___ Institutional _______ Commercial ___ Industrial _______ Transient
Density: _____ High _______ Low _______ Mixed
People are: ___ Indoors _______ Outdoors ____ Near structures
Population groups: ____ Families _____ Groups _______ Individuals
Different languages spoken? _______ Yes ______ No
Time Considerations

Time of incident:

Day of week/time of day: ______/____
Season: ______ Holiday ______ Tourist
Rate of escalation or de-escalation of emergency: ___
Release: ______ Over ________ Occurring ______ Predicted
Release is unknown or unlikely? _____ Yes _____ No
Rate of release: ___ Rapid ___ Slow
Likely duration of release: ___ minutes/hours

Rate of movement of hazardous material:

Rate is: ______ Known _____ Predicted _____ Uncertain
Movement of material is: ___ Enhanced _____ Obstructed
Time until contact with populated area: _______ minutes/hours

Estimated time needed for protective action:

Deploy emergency response personnel: _________ minutes
Provide warning and emergency public information: _________ minutes

Evacuation Considerations

Likely public mobilization and travel time: ___________ minutes/hours
Mobilization and travel time for special populations (handicapped, institutional, commercial, industrial, recreational): _________ minutes/hours

In-Place Sheltering Considerations

Public response: ________ minutes/hours
Response time for special populations: _____________ minutes/hours
Likely duration: ________ minutes/hours
Time required for environmental monitoring, termination, and building egress: ______ minutes/hours

Meteorological Considerations

Impact on hazardous material(s) movement:

Wind direction: _______ (from N, E, etc.)
Wind speed: _______ mph
Wind gusty? _________ Yes _____ No
Rain? _________ Yes _____ No
Weather expected to change? ______ Yes ___ No

**Impact on emergency response capability:**
- Roads: ________________ Open _____________ Blocked ______ Traffic delayed
- Travel: ________________ Safe ______ Dangerous
- Difference between outdoor and indoor temperatures: __________

**Communication Considerations**

**Communication with the public:**
- Able to warn public, handicapped, institutions, transients, etc.? ______ Yes ___ No
- Able to instruct public? ______ Yes ___ No
- Able to update public and terminate response? ______ Yes ___ No

**Communication with emergency responders:**
- Able to notify and deploy emergency responders? __ Yes ____ No
- Able to activate Emergency Alert System and/or contact media? ______ Yes ___ No
- Total coverage of area? ______ Yes ___ No
- Able to contact mutual aid? Yes _____ No

**Resource Considerations**
- Mobilize available or required specialized personnel and resources? ______ Yes ___ No
- Able to mobilize existing or additional resources and personnel? __Yes___ No
- Able to obtain specialized resources or control equipment? ______ Yes No

**Control the hazardous materials:**
- Able to prevent, limit, contain, direct and/or neutralize the release? _Yes____ No

**Control an evacuation:**
- Evacuation plan available? __ Yes___ No
- Road capacity adequate? ___ Yes _____ No
- Enough personnel and vehicles? __ Yes___ No
- Able to move handicapped, institutionalized and/or transient people? _____ Yes____ No
- Are reception and care facilities available for evacuees? ___ Yes _____ No

**Control in-place sheltering:**
- Structures available? ______ Yes ___ No
- Is public knowledgeable and willing to accept instructions? _Yes _____ No
- Able to initiate and terminate? ______ Yes _____ No
- Are institutions, commercial buildings, and industries prepared? ______ Yes _____ No
PROTECTIVE ACTION SELECTION AND IMPLEMENTATION

Review the items marked on this checklist, noting the factors involved in this emergency (some factors are more important than others).

- Determine if evacuation, sheltering-in-place or a combination of the two is appropriate.
  - Evacuation
  - Shelter-in-Place
  - Both

- Implement evacuation and/or in-place sheltering actions.
- When appropriate, terminate evacuation and/or in-place sheltering actions.
Appendix G. Notification of Release Form

KANSAS NOTIFICATION OF RELEASE FORM

Figure G-1: Sample Kansas Notification of Release Form, Page 1
### Regional Hazardous Materials Emergency Preparedness Plan

#### Mid-America LEPC

**Figure G-2: Sample Kansas Notification of Release Form, Page 2**

<table>
<thead>
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<th>INCIDENT INFORMATION</th>
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<tbody>
<tr>
<td>DESCRIBE WHAT HAPPENED:</td>
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</tr>
<tr>
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<tr>
<td>☐ RAIN ☐ FOG ☐ SNOW ☐ SLEET ☐ OTHER:</td>
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<td>RESIDENTS WITHIN 1/4 MILE: ☐ NO ☐ YES, APPROXIMATE NUMBER:</td>
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<tr>
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<td>IS THE INCIDENT AREA SECURED: ☐ YES ☐ NO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMODITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME OF CHEMICAL/COMMODITY:</td>
</tr>
<tr>
<td>NAME OF PLACARD (UN NUMBER): ☐ CAS NUMBER:</td>
</tr>
<tr>
<td>CARRIER NAME: ☐ TRUCK/TRAIN #: ☐ TRAILER/RAIL CAR #:</td>
</tr>
<tr>
<td>QUANTITY RELEASED: ☐ QTY. IN WATER: ☐ CONTAINER CAPACITY: ☐ UNITS:</td>
</tr>
<tr>
<td>PHYSICAL FORM (CHECK ALL THAT APPLY): ☐ LIQUID ☐ SOLID ☐ GAS</td>
</tr>
<tr>
<td>MEDIUM AFFECTED (CHECK ALL THAT APPLY): ☐ AIR ☐ SOIL ☐ WATER ☐ GROUNDWATER ☐ NONE</td>
</tr>
<tr>
<td>☐ WITHIN FACILITY ☐ OTHER:</td>
</tr>
<tr>
<td>IF RELEASED TO WATER: TYPE OF WATERWAY: ☐ NAME:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIONS TAKEN TO REMEDIATE THE INCIDENT:</td>
</tr>
<tr>
<td>DID EVACUATIONS OCCUR: ☐ NO ☐ YES, NUMBER EVACUATED: ☐ FACILITY: ☐ PUBLIC:</td>
</tr>
<tr>
<td>DID SHELTER IN PLACE OCCUR: ☐ NO ☐ YES, NUMBER SHELTERED IN PLACE:</td>
</tr>
<tr>
<td>BOUNDARIES OF EVACUATION OR SHELTER IN PLACE AREA:</td>
</tr>
<tr>
<td>OTHER PROTECTIVE ACTIONS RECOMMENDED:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HEALTH RISKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNOWN OR ANTICIPATED ACUTE HEALTH RISKS: ☐ NO ☐ YES</td>
</tr>
<tr>
<td>KNOWN OR ANTICIPATED CHRONIC HEALTH RISKS: ☐ NO ☐ YES</td>
</tr>
<tr>
<td>IDENTIFY MEDICAL ATTENTION NECESSARY FOR EXPOSED INDIVIDUALS:</td>
</tr>
</tbody>
</table>

REVISED 10/13
MISSOURI NOTIFICATION OF RELEASE FORM

HAZARDOUS MATERIALS RELEASE FORM

Locally Dial 911
NRC Dial 1-800-424-8802
Missouri Department of Natural Resources 1-573-634-2436

Caller Name: ____________________________  Call Date: __________________
Affiliation: ____________________________  Time: __________________
Telephone: ______________________________
Ref #: _______ Yes / No
Material Released: ________________________  EHS: ___________
DOT#: / CAS #: __________________________
Amount Released: _________________________  Gal/Lbs: __________
Date of Release: _________________________  Time: __________________
Duration: ___________ Hrs ________ Min

Release Medium: __________________________  Air ______  Water ______  Land ______
(includes height and direction of plume) (________________________describe terrain__________________)

Weather Conditions:
(Direction, MPH, Temperature, etc.)

Location of Release:
(Address – street, building #, City, County, etc.)

Facility Name: ____________________________  Address: ____________________________
Facility Emergency Contact Name: ________________  Address: ________________

Incident Description: ____________________________
(Color, odor, solid, liquid, gas)

Nearby Populations:

Other Hazardous Materials Nearby:

Additional Notifications Made:

Local Fire Department Yes / No  Time: __________
Community Emergency Coordinator Yes / No  Time: __________
MO DEPT OF NATURAL RESOURCES Yes / No  Time: __________
Federal National Response Center Yes / No  Time: __________

Number of Dead / Injured: ________________
Dead / Injured taken to: ________________
Action Taken: ____________________________
__________________________
__________________________

Form Completed by: ________________________  ________________________
(Print Name and Title)  (Signature)

Figure G-3: Missouri Notification of Release Form
# Reporting Spills in Missouri

This serves as a guide and does not cover all spill reporting requirements. Refer to the regulations or the resources and contacts listed on the back of this sheet for additional information. Always remember to call your local responders first.

## Reporting Chemical Spills in Missouri

|------------------|-----------------|-------------|----------------|---------------------------|--------------------|
| EPCRA extremely hazardous substance or CERCLA hazardous substance at or above its reportable quantity | Owner/operator | For any potentially impacted:  
**Locality** - LEPC/local responders (typically 911)  
**State** - SERC Information Coordinator  
MO - MDNR: (573) 634-2436  
AR - ADEM: (800) 322-4012  
IA - IDNR: (515) 725-8694  
IL - IEEMA: (217) 782-7860  
KS - State Spill Line: (515) 725-8694  
KY - KEM: (502) 564-2380  
NE - NDEE: (402) 471-2186 from 8am-8pm M-F, if after hours/weekend/holiday, call NSP: (402) 479-4921  
OK - ODEQ: (800) 522-0206  
TN - TEMAC (615) 741-0001 | Call within 15 minutes | | | | EPCRA: 40 CFR 355 Subpart C |
| CERCLA or Clean Water Act hazardous substance at or above its reportable quantity | Person in charge of vessel or facility | NRC: (800) 424-8802 | Call within 15 minutes | No | CERCLA: 40 CFR 302.6(a)  
Clean Water Act: 40 CFR 117.21 |
| Any release of hazardous substance resulting in a hazardous substance emergency* | Person having control of hazardous substance | MDNR: (573) 634-2436 or NRC: (800) 424-8802 | Earliest practical moment upon discovery | Upon request from a State of Missouri agency | RSMO 260.500.6.b  
260.505.4 |
| ANY accident meeting 40 CFR 68.42 criteria, regardless of amount released | Risk Management Program facilities | Risk Management Program facilities | No required calls | Update 5-year accident history section of RMP | Clean Air Act 112(r)(7); 40 CFR 68.195 |

*Hazardous substance emergencies include (RSMO 260.500.6.b):  
- Any release of hazardous substances at or above its reportable quantity, per CERCLA 103 or EPCRA 304  
- Any petroleum product mentioned in the oil spill reporting table  
- Any release of a hazardous waste reportable pursuant to sections RSMO 260.350 to 260.430  
- Any release of a hazardous substance requiring immediate notice pursuant to 49 CFR 171 (Department of Transportation regulations)

Revised October 1, 2019

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**Figure G-4: Reporting Spills in Missouri, Page 1**
## Reporting Oil Spills in Missouri

<table>
<thead>
<tr>
<th>Spills to Report</th>
<th>Who Must Report</th>
<th>Who to Call</th>
<th>When to Report</th>
<th>Written Follow-Up Required</th>
<th>Laws &amp; Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any oil reaching or threatening to reach waters of the U.S.</td>
<td>Any person in charge of a vessel or facility</td>
<td>NRC: (800) 424-8802 or EPA Region 7 Spill Line: (913) 281-0991</td>
<td>Immediately</td>
<td>Only required for qualifying SPCC discharges; see SPCC in resources below for details</td>
<td>Clean Water Act: 40 CFR 110 40 CFR 112.4(a)</td>
</tr>
<tr>
<td>Any release of petroleum including crude oil or any fraction thereof, natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas) in excess of 50 gallons for liquids or 300 cubic feet for gases</td>
<td>Person having control of hazardous substance</td>
<td>MDNR: (573) 634-2436 or NRC: (800) 424-8802</td>
<td>Earliest practical moment upon discovery</td>
<td>Upon request from a State of Missouri agency</td>
<td>RSMO 260.500.6.b 260.505.4</td>
</tr>
<tr>
<td></td>
<td>Person having control of intrastate pipeline containing natural gas/natural gas mixtures</td>
<td>Public Service Commission: (573) 751-3456</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Person having control of interstate pipeline containing natural gas/natural gas mixtures</td>
<td>MDNR: (573) 634-2436 and NRC: (800) 424-8802</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Resources and Terms Used in Tables

- **CERCLA** - Comprehensive Environmental Response, Compensation and Liability Act
- **EPA** - Comprehensive Environmental Response, Compensation and Liability Act (CERCLA/EPICRA reportable quantities can be found on EPA’s “List of Lists”: www.epa.gov/epicra/consolidated-list-lists
- **MDNR** - Missouri Department of Natural Resources
- **NRC** - National Response Center: http://nrc.uscg.mil
- **RMP** - Risk Management Plan. For more information on the Risk Management Program, see: www.epa.gov/rmp
- **RSMO** - Revised Statutes of Missouri: www.moga.mo.gov/statutes/c260.htm
- **SERC** - State Emergency Response Commission
- **SEMA** - Missouri State Emergency Management Agency: http://sema.dps.mo.gov. Send spill follow-up reports to: Missouri State Emergency Management Agency; Attn: EPCRA Specialist, 2302 Militia Dr., Jefferson City, MO 65101
- **SPCC** - Spill Prevention, Control and Countermeasures. Follow-up reports are only required for SPCC facilities if there is a single discharge of >1,000 U.S. gallons, or two or more discharges each >24 U.S. gallons within 12 months. Send written report to the EPA Region 7 Administrator within 60 days of incident. For more information see: www.epa.gov/oil-spills

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Figure G-5: Reporting Spills in Missouri, Page 2
### Reporting Spills in Kansas

This serves as a guide and does not cover all spill reporting requirements. Refer to the regulations or the resources and contacts listed on the back of this sheet for additional information. *Always remember to call your local responders first.*

#### Reporting Chemical Spills in Kansas

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EPCRA extremely hazardous substance or CERCLA hazardous substance at or above its reportable quantity</td>
<td>Owner/operator</td>
<td>For any potentially impacted: <strong>Locality</strong> - LEPC/local responders (typically 911) <strong>State</strong> - SERC Information Coordinator <strong>KS</strong> - State Spill Line: (785) 291-3333 <strong>CO</strong> - CDHFE: (877) 518-5608 <strong>IL</strong> - IEMA: (217) 782-7860 <strong>MO</strong> - MDNR: (573) 634-2436 <strong>NE</strong> - NDEE: (402) 471-2186 from 8am-8pm M-F. If after hours/weekend/holiday, call <strong>NSP</strong>: (402) 479-4921 <strong>OK</strong> - ODEQ: (800) 522-0206</td>
<td>Call within 15 minutes</td>
<td>Send to any potentially impacted LEPC and SERC within 7 calendar days for non-transportation related releases, per Kansas law</td>
<td>EPCRA: 40 CFR 355 Subpart C Kansas: K.A.R. 28-48 K.A.R. 28.69-3</td>
</tr>
<tr>
<td>CERCLA or Clean Water Act hazardous substance at or above its reportable quantity</td>
<td>Person in charge of vessel or facility</td>
<td>NRC: (800) 424-8802</td>
<td>Call within 15 minutes</td>
<td>No</td>
<td>CERCLA: 40 CFR 302.6(c) Clean Water Act: 40 CFR 117.21</td>
</tr>
<tr>
<td>ANY amount of substances, materials or wastes reaching soil or waters of Kansas</td>
<td>Owner/operator</td>
<td>State Spill Line: (785) 291-3333</td>
<td>Immediately</td>
<td>No</td>
<td>K.A.R. 28-48</td>
</tr>
<tr>
<td>ANY accident meeting 40 CFR 68.42 criteria, regardless of amount released</td>
<td>Risk Management Program facilities</td>
<td>No required calls</td>
<td>Within 6 months</td>
<td>Update 5-year accident history section of Risk Management Plan</td>
<td>Clean Air Act 112(r)(7): 40 CFR 68.195</td>
</tr>
</tbody>
</table>

*Revised July 23, 2019*
Reporting Oil Spills in Kansas

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Any oil reaching or threatening to reach waters of the U.S.</td>
<td>Any person in charge of a vessel or facility</td>
<td>NRC: (800) 424-8802 or EPA Region 7 Spill Line: (913) 281-9991</td>
<td>Immediately</td>
<td>Only required for qualifying SPCC discharges; see SPCC in resources below for details</td>
<td>Clean Water Act: 40 CFR 110 40 CFR 112.4(a)</td>
</tr>
<tr>
<td>ANY amount of substances, materials or wastes reaching soil or waters of Kansas</td>
<td>Owner/operator (for facilities that are not oil exploration/production wells)</td>
<td>State Spill Line: (785) 291-3333</td>
<td>Immediately</td>
<td>No</td>
<td>K.A.R. 28-48</td>
</tr>
<tr>
<td>Any spill of saltwater, oil or refuse that has reached/threatens to reach surface or ground water</td>
<td>Operator of oil exploration or production well</td>
<td>State Spill Line (785) 291-3333 or Call KCC District Office in Impacted Area: District 1: (620) 225-8888 District 2: (316) 630-4000 District 3: (620) 452-2300 District 4: (785) 625-0550</td>
<td>Immediately</td>
<td>No</td>
<td>K.A.R. 82-3-603</td>
</tr>
</tbody>
</table>

Resources and Terms Used in Tables

CERCLA - Comprehensive Environmental Response, Compensation and Liability Act
- CERCLA/EPCRA reportable quantities can be found on EPA’s “List of Lists”: [www.epa.gov/eepcr consolidated list lists](www.epa.gov/eepcr consolidated list lists)
- For more information on the Continuous Release Rule, which provides a reduced reporting option for facilities that release hazardous substances in a manner that is continuous and stable in quantity, see: [www.epa.gov/sites/production/files/2015-11/documents/reporting_requirements_for_continuous_releases_of_hazardous_substances_part_1.pdf](www.epa.gov/sites/production/files/2015-11/documents/reporting_requirements_for_continuous_releases_of_hazardous_substances_part_1.pdf)
- For more information on the Risk Management Program, see: [www.epa.gov/rmp](www.epa.gov/rmp)

EPCRA - Emergency Planning and Community Right-to-Know Act: [www.epa.gov/eepcr]


KBI - Kansas Bureau of Investigation: [www.kansas.gov/kbi. Suspected methamphetamine lab reporting: (800) 572-7463](www.kansas.gov/kbi. Suspected methamphetamine lab reporting: (800) 572-7463)

KCC - Kansas Corporation Commission, Oil and Gas Production Related Spills: [www.kcc.ks.gov/conservation/coms_tr_091615.pdf](www.kcc.ks.gov/conservation/coms_tr_091615.pdf)

For map of counties in each district office, visit: [www.kcc.ks.gov/conservation/district_map.htm](www.kcc.ks.gov/conservation/district_map.htm)

KDEM - Kansas Division of Emergency Management: [www.kansastag.gov/spill. Designated Information coordinator for the Kansas SERC](www.kansastag.gov/spill. Designated Information coordinator for the Kansas SERC)

KDHE - Kansas Department of Health and the Environment. For more information on reporting spills, visit: [www.kdheks.gov/spill](www.kdheks.gov/spill)


K.S.A. - Kansas Statutes Annotated: [www.krevisor.org/ksa.html](www.krevisor.org/ksa.html)


NRC - National Resource Center: [http://nrc.uscg.mil](http://nrc.uscg.mil)


SPCC - Spill Prevention, Control, and Countermeasures. Follow-up reports are only required for SPCC facilities if there is a single discharge of >1,000 U.S. gallons, or two or more discharges each >42 U.S. gallons within 12 months. Send written report to the EPA Region 7 Administrator within 60 days of incident. For more information, see: [www.epa.gov/oil-spills](www.epa.gov/oil-spills)

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**Figure G-7: Reporting Spills in Kansas, Page 2**
Appendix H: Hazardous Materials Resources

It may be necessary for responding agencies to use specialized resources (e.g., equipment or personnel) to handle a hazardous materials incident. These resources may be maintained by regulated facilities and other responsible parties, provided through local emergency response agencies or local mutual aid agreements, procured, or contracted through private vendors, or made available through state/federal agencies or through the statewide mutual aid systems. Additional information can be found in the Regional Coordination Guide Resource Annex.

EPCRA REGULATED FACILITIES

A survey of EHS facilities in the region was conducted to assess their capabilities of providing resources such as technical staff, equipment, or disposable assets to emergency service agencies. Some larger RMP/EHS facilities within the Mid-America LEPC area indicated they could support off-site responses with technical consulting services, spill response equipment, leak kits, etc., but would require some type of agreement outlining workers compensation, equipment insurance, and methods of reimbursement to cover the cost.

Although no formal agreements or resource sharing plans have been established with these facilities by public safety agencies, prior knowledge of these potential resources will lead to future development of these agreements outlining activation, deployment, cost, and availability of these resources in the community before they are needed. The following in-house response capabilities, equipment, and service were indicated as available by some EPCRA facilities within the Mid-America LEPC region should use agreements be developed.

Table H-1: EPCRA Facility Hazardous Material Resources

<table>
<thead>
<tr>
<th>Resource Category</th>
<th>Resource Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>• SCBAs</td>
</tr>
<tr>
<td></td>
<td>• Chemical Protective Suits</td>
</tr>
<tr>
<td></td>
<td>• Unmanned Fire Monitors</td>
</tr>
<tr>
<td></td>
<td>• Foam Deployment Systems</td>
</tr>
<tr>
<td></td>
<td>• Leak Mitigation Kits (conventional and specialized)</td>
</tr>
<tr>
<td></td>
<td>• Firefighter Gear (bunker gear)</td>
</tr>
<tr>
<td></td>
<td>• Portable Gas Detectors</td>
</tr>
<tr>
<td></td>
<td>• Booms &amp; Pigs</td>
</tr>
<tr>
<td></td>
<td>• Chemical Storage (above and underground tanks)</td>
</tr>
<tr>
<td></td>
<td>• Chemical Transport Equipment</td>
</tr>
<tr>
<td></td>
<td>• Portable Generators</td>
</tr>
<tr>
<td></td>
<td>• Chemical Pumps and Hoses</td>
</tr>
<tr>
<td></td>
<td>• Foam Bank</td>
</tr>
<tr>
<td></td>
<td>• Decontamination Solutions</td>
</tr>
<tr>
<td></td>
<td>• Peatsorb and Bulk Floor Dry</td>
</tr>
<tr>
<td></td>
<td>• Firefighting Equipment</td>
</tr>
<tr>
<td></td>
<td>• Radios</td>
</tr>
<tr>
<td></td>
<td>• Computers</td>
</tr>
<tr>
<td></td>
<td>• WebEOC Software</td>
</tr>
</tbody>
</table>
Within the MARC LEPC region, various local emergency service agencies/organizations (e.g. law enforcement, fire, emergency medical services) can provide specialized equipment and personnel to support hazardous material response operations. The following table outlines the types of resources that may be available through the local emergency service agencies.

### Table H-2: Local Emergency Service Hazardous Material Resources

<table>
<thead>
<tr>
<th>Resource Location/Agency</th>
<th>Resource Type</th>
<th>Resource Capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas City Fire Department (Missouri)</td>
<td>Hazmat Entry Team</td>
<td>▪ FEMA Type-2&lt;br&gt;▪ (Equipped and trained to handle all unknown industrial chemical hazards in liquid, aerosol, powder, solids and vapor/gas forms.)&lt;br&gt;▪ Weapons of Mass Destruction (WMD)</td>
</tr>
<tr>
<td>Lee’s Summit Fire Department (Missouri)</td>
<td>Hazmat Entry Team</td>
<td>▪ FEMA Type-2&lt;br&gt;▪ WMD</td>
</tr>
<tr>
<td>Tri-District Hazardous Materials Response Team (HMRT) - Central Jackson County, Fort Osage, Sni Valley Fire Protection Districts (Missouri)</td>
<td>Hazmat Entry Team</td>
<td>▪ FEMA Type-2&lt;br&gt;▪ WMD/CBRNE&lt;br&gt;▪ Metropolitan Medical Response System (MMRS) MCI-WMD Trailer</td>
</tr>
<tr>
<td>Independence Fire Department (Missouri)</td>
<td>Hazmat Entry Team</td>
<td>▪ FEMA Type-2&lt;br&gt;▪ WMD</td>
</tr>
</tbody>
</table>
Local EMAs and the Hazardous Materials Teams in the region maintain information regarding the resources available in their individual jurisdictions. This information is included in local EOPs and in the supporting documents (i.e. procedures, checklists, guidelines, operating manuals, etc.) maintained by first responders.

### Hazardous Materials Teams

Eight hazardous materials response teams are available in the Mid-America LEPC region, including seven with enhanced WMD capabilities.

The enhanced Hazmat teams meet the Department of Homeland Security Type 2 Hazmat Entry Team standards. Each team has the ability to perform field-testing, air sampling and collection of known or suspected WMD agents or other chemicals; to detect and monitor for radiation sources; capable of stopping the release of WMD agents and other hazardous substances; to decontaminate equipment, personnel and citizens; and personnel are trained to applicable standards associated with Hazmat response activities.

Additionally, the Federal Bureau of Investigation (FBI) regional office(s) maintain a Hazmat response team, as well as the Civil Support Teams (CST) from the Missouri National Guard (7th CST) and Kansas National Guard (73rd CST).

Hazmat teams can be requested through mutual aid. The process for accessing hazard material team resources are outlined in ESF #10 Oil and Hazardous Material Annex of the Regional Coordination Guide.

### REGION VII RESOURCES

**Region VII Cybersecurity and Infrastructure Security Agency** (CISA) has improved the delivery of services to critical infrastructure owners and operators and state, local, tribal and territorial partners, and enhancing support to existing Infrastructure Security Division (ISD) field staff by relocating administrative, logistical, and regional operations capabilities to Region VII. The functions include efforts such as coordinating training and exercises for regional stakeholders; developing internal IP regional plans and participating in external planning with regional partners; providing advice and expertise to regional stakeholders on information protection, ISD data tools, sector specialties, resilience and recovery; and providing mission support during steady-state, special events, and incident response. When fully implemented, the regional offices will also host space for local **Infrastructure Security Division Protective Security Advisors** (PSAs), **Chemical Facility Anti-Terrorism Standards Chemical Security Inspectors** (CSIs), **Cybersecurity Division Cyber Security Advisors** (CSAs), **Emergency**
Communications Division Coordinators, and visiting Cybersecurity and Infrastructure Security Agency personnel.

- For Region VII office specific information, please contact CISA Regional Office CISARRegion7@hq.dhs.gov.

OTHER PUBLIC RESOURCES

In addition to the Hazmat Teams in the region, other regional resources include specialized equipment and teams for response to a variety of emergency events. These regionally available resources include communications equipment, command vehicles, heavy rescue teams, WMD mass-casualty incident (MCI) medical trailers, and others. For more information on the all-hazard resources and capabilities available in the region, see the ESF 7 Logistics Management & Resource Support Resource Management Annex\(^\text{42}\) of the Regional Coordination Guide. A variety of state and federal resources and technical assistance may be available to local officials from agencies tasked with responsibilities in state and federal plans.

The following is a list of selected state and federal Hazmat response special teams/resources that may be available through the Federal On-Scene Coordinator (OSC):

- Agency for Toxic Substances and Disease Registry (ATSDR) Emergency Response Teams
- Department of Energy Nuclear Emergency Support Team (DOE NEST)
- United States Environmental Protection Agency (EPA)
  - Environmental Response Team (ERT)
  - Regional Response Teams (RRT)
  - Office of Enforcement, Compliance, and Assurance (OECA), National Counter-terrorism Evidence Response Team (NCERT)
  - Radiological Emergency Response Team (EPA RERT)
  - Diving Program
  - Emergency Communications and Outreach Team (ECOT)
  - Emergency Response Peer Support and Critical Incident Stress Management (Peer Support/CISM) Team
    - Ocean Survey Vessel, Peter W. Anderson
- Federal Bureau of Investigation (FBI)
  - Omaha, Nebraska Regional Office, Hazmat/WMD Expert
  - Kansas City, Kansas Regional Office
  - Laboratory Division, Hazardous Materials Response Unit (HMRU)
- National Oceanic and Atmospheric Administration Office of Response and Restoration (NOAA OR&R) Hazardous Materials Response Division (HAZMAT)
- Occupational Safety and Health Administration Health Response Team (OSHA HRT)
- Department of Defense (DOD)
  - Joint Director of Military Support (JDOMS)
  - United States Navy Supervisor of Salvage and Diving (SUPSALV)
  - United States Army Corps of Engineers Rapid Response Program (USACE RR)
  - U.S. Marine Corps Chemical Biological Incident Response Force (CBIRF)

- Department of Homeland Security
  - Federal Emergency Management Agency, Metropolitan Medical Response System (MMRS)
  - United States Coast Guard
    - National Pollution Funds Center (USCG NPFC)
    - United States Coast Guard National Strike Force (USCG NSF) – Atlantic Strike Team (AST)
- United States National Guard Civil Support Teams (USNG CST)
  - Missouri National Guard (7th CST)
  - Kansas National Guard (73rd CST)

**Mutual Aid**

Mutual aid is designed to ensure adequate resources; facilities and other support are provided to jurisdictions whenever their own resources prove inadequate to cope with the problems of rescue, relief, evacuation, rehabilitation and/or recovery associated with an emergency or disaster. Mutual aid agreements should be in place before an incident occurs. Several are in place within the region between response partners and neighboring jurisdictions.

**Missouri**

The Missouri Mutual Aid System for resources is authorized under section 44.090.1 of the Revised Statutes of the State of Missouri (RSMo). This statute describes participation by local jurisdictions in a statewide mutual aid system. This statewide fire mutual aid system is called the Missouri Systems Concept of Operational Planning for Emergencies (MoSCOPE). MoSCOPE provides a basis for command and management for any type of response. The use of MoSCOPE provides common principals giving local responders reasonable expectations, whether requesting or lending assistance.

**Kansas**

Kansas mutual aid assistance (including the provision of firefighting capabilities) is authorized by the Kansas Statutes and Authorities (KSA) 48-950. The Kansas mutual aid system allows all political subdivisions in the state to lend mutual aid assistance upon request. All political subdivisions in the state are automatically a part of the Kansas mutual aid system unless they elect not to participate or to later withdraw from the system by the adoption of an appropriate resolution by its governing body.

**National**

The Emergency Management Assistance Compact (EMAC) is a national interstate mutual aid agreement that enables states to share resources during times of disaster. EMAC acts as a complement to the federal disaster response system, providing timely and cost-effective relief to states requesting assistance from assisting member states who understand the needs of jurisdictions that are struggling to preserve life, the economy, and the environment. EMAC can be used either in lieu of federal assistance or in conjunction with federal assistance, thus providing a "seamless" flow of needed goods and services to an impacted state. EMAC further provides another venue for mitigating resource deficiencies by ensuring maximum use of all available resources within member states' inventories. EMAC is activated at the state level and requests are made through the state’s emergency management agency.
PRIVATE SECTOR

Within the MARC LEPC region, various private sector organizations can provide specialized equipment and personnel to support hazardous material response and recovery operations. The following table outlines the types of resources that may be available through private sector organizations.

Table H-3: Private Sector Hazardous Material Resources

<table>
<thead>
<tr>
<th>Resource Location/Agency</th>
<th>Resource Type</th>
<th>Resource Capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESI Contracting Corps.</td>
<td>Hazardous Materials Containment</td>
<td>Emergency response for vacuum trucks, frac tanks, heavy</td>
</tr>
<tr>
<td>(Kansas City, MO)</td>
<td>and Remediation</td>
<td>equipment, and tankers with personnel</td>
</tr>
<tr>
<td>Haz-Mat Response, Inc.</td>
<td>Hazardous Materials Containment</td>
<td>Emergency response for spill response, confined space,</td>
</tr>
<tr>
<td>(Olathe, KS)</td>
<td>and Remediation</td>
<td>air monitoring, soil remediation, heavy equipment and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>vacuum trucks, Hazmat waste, portable liquid storage</td>
</tr>
</tbody>
</table>

CHEMTREC

CHEMTREC is a 24/7 emergency call center that provides immediate critical response information during emergency incidents involving chemicals, hazardous materials, and dangerous goods.

CHEMTREC administers the CHEMNET program, which is a network of for-hire contractors for CHEMTREC registrants who may need the services of an emergency response contractor at the scene of an incident involving their product. CHEMNET is also for industry offering mutual-aid to another chemical company through emergency and technical information. The CHEMNET list is a resource for shippers, carriers, and others that require the services of a contractor for response to an incident involving hazardous materials. Upon request, CHEMTREC can link the shipper with the CHEMNET contractor closest to the incident site. CHEMTREC can also link medical personnel at the emergency room with medical specialists from the shipper or PROSAR, an information company providing health, safety and toxicology consulting with 24-hour access.

Additionally, several contract emergency response companies may be available to provide assistance and resources (e.g. Haz-Mat Response Inc., Heritage, Veolia, Clean Harbors).

Plan Bulldozer

Greater Kansas City Heavy Constructors Association (HCA) Emergency Resources Catalog (“Plan Bulldozer”) lists categories of equipment available and 24-hour contact information to augment local government capabilities. As a public service to the community, the HCA has developed the "Plan Bulldozer" program which makes contractor personnel and equipment available in instances of natural or man-made disasters and emergencies. In conjunction with this program, the HCA annually publishes and distributes the plan to area law enforcement, emergency personnel, and governmental agencies so they may quickly obtain specialized equipment to catastrophic situations including hazardous materials releases.
Appendix I: Pre-Scripted Messaging

**UNIDENTIFIED HAZARDOUS MATERIALS INCIDENT**

“This is (name of agency). An unidentified substance which may be hazardous has been (spilled/released) at (location). Please avoid the area, if possible, while crews are responding. The best alternate routes are (list routes). If you are already in the area, please be patient and follow the directions of emergency response personnel. The substance will be evaluated by specially trained personnel and further information will be released as soon as possible. Thank you for your cooperation.”

**LOW-RISK HAZARDOUS MATERIALS INCIDENT**

“This is (name of agency). A small amount of (name of chemical or material), a hazardous material, has been (spilled/released) at (location). Streets are blocked, traffic is restricted, and authorities have asked residents in the immediate area to evacuate or shelter-in-place. Please avoid the area. The material is (slightly/highly) toxic to humans and can cause the following symptoms: (symptoms). If you think you may have come in contact with this material, you should (provide health instructions and hotline number, if available). For your safety, please avoid the area. Alternate routes are (routes) and traffic is being diverted. If you are now near the spill/release area, please follow the directions of emergency response personnel. Clean-up crews are on the scene. Thank you for your cooperation.”

**HIGH-RISK HAZARDOUS MATERIALS INCIDENT (EVACUATION MANDATORY)**

“This is (name of agency). A (large/small) amount of (name of chemical or material), a highly hazardous substance, has been (spilled/released) at (location). Because of the potential health hazards, authorities are (requesting/requiring) all residents within (number of blocks/miles) of the area to evacuate. If you are within (evacuation zone boundaries), you and your family (should/must) leave (as soon as possible/now). Go immediately to the home of a friend or relative outside the evacuation area or to (indicate shelters). If you can drive a neighbor who has no transportation, please do so. If you need transportation, call (provide telephone number). Children attending the following schools: (list schools) will be evacuated to (location). Please do not drive to your child’s school. Pick your child up from school authorities at the evacuation center. Listen to this station for further instructions. The material is highly toxic to humans and can cause the following symptoms: (symptoms). If you are experiencing any of these symptoms, seek help at a hospital outside the evacuation area, or at the evacuation center at (location). To repeat, if you are in the area of (location/boundaries), you (should/must) leave for your own safety. Do not use your telephone unless you need emergency assistance. Thank you for your cooperation.”

**HAZARDOUS MATERIAL INCIDENT – SUMMARY STATEMENT FOR MEDIA:**

“At approximately (time a.m./p.m.) today, a (spill/release) of potentially hazardous material was reported to this office. Emergency services personnel were immediately dispatched to cordon off
the area and direct traffic. The material was later determined to be (name of chemical or material), a (hazardous/harmless) (chemical/material/gas) which, upon contact, may produce symptoms of (list symptoms). A precautionary evacuation of the (location) area surrounding the spill was (requested/required). Approximately (number) of persons were evacuated. Clean-up crews from (agency/company) were dispatched to the scene, and normal traffic had resumed by (time), at which time residents could return to their homes. There were no injuries reported – OR – (number) persons, including (number) of emergency personnel, were treated at area hospitals for (injuries/symptoms) and (all/number) were later released. Those remaining in the hospital are in (condition, i.e., serious, critical, etc.) condition. Response agencies involved were (list agencies).”