



# SHERIFF DAN WALSH CHAMPAIGN COUNTY SHERIFF'S OFFICE

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## Champaign County Local Emergency Planning Committee (LEPC) Special Meeting Agenda

March 18th, 2014

Location: ILEAS Boardroom  
1701 E. Main St.  
Urbana, IL 61802  
Time: 10:30 AM

- I. Welcome and Purpose
- II. Discussion on Champaign County Regional Planning Commission Scope of Services for the Hazardous Materials and Commodity Flow Study (HMCFS) for Champaign County
- III. Open Discussion
- IV. Designate Steering Committee Members for the Study
- V. Adjournment



# **Scope of Services for the Hazardous Materials and Commodity Flow Study (HMCFS) for Champaign County**

**October, 2013**

## **1.0 Introduction**

Information on the types, quantities, and locations of hazardous materials (hazmat) originating, or moving through the regional corridors are of utmost importance for local and regional governments for preparing appropriate emergency response plans. The biggest challenge for the local agencies preparing such plans is the lack of reliable and comprehensive data on the transportation of hazmat within their jurisdictions. Hazmat transportation is typically multimodal. According to data from the 2007 Commodity Flow Survey (CFS), 53.9 percent of hazmat were moved by trucks, 28.2 percent by pipelines, 6.7 percent by water, and 5.8 percent by rail.<sup>1</sup> However, existing data sources are too broad and typically cover flows at the national and/or state level. Local and regional governments need detailed data involving hazmat flow with all modes of transportation for their regions to make informed decisions on hazardous materials training and emergency response preparedness.

## **2.0 Needs for Such Study**

Hazmat transportation by different modes is common in almost every region. Although hazmat shipments follow federal safety and security guidelines, the threat of hazmat transportation incident remains prevalent. Nationally, on average, there are at least two incidents related to hazmat transportation per hour or more than 50 per day.<sup>2</sup> There were 850 incidents (more than 3 incidents per month) involving hazmat in Champaign County over the last 20 years.<sup>3</sup>

As per the Emergency Planning and Community Right-to-know Act (EPCRA), Local Emergency Planning Committees (LEPCs) need to be established.<sup>3</sup> LEPCs are responsible for local emergency planning and they develop emergency response plans for dealing with hazmat. A Hazardous Material and Commodity Flow Study (HMCFS) would provide critical information to the emergency planning process. An HMCFS would provide the following major benefits for a region:<sup>2</sup>

- An HMCFS applies to hazard-specific plan annexes focused on hazmat, and also to the basic plan and emergency support functions/functional annexes.
- HMCFS information can be used under the National Incident Management System (NIMS) framework, the Incident Command System (ICS), and the National Response Framework (NRF).
- Under 49 CFR Part 110, LEPCs that conduct an HMCFS are eligible for hazmat risk assessment grant funding, administered through the Pipeline and Hazardous Materials Safety Administration's (PHMSA) Hazardous Materials Emergency Preparedness (HMEP) Grant Program.

## **3.0 Study Objectives**

The objectives of the HMCFS study are the following:

- Identify hazardous materials most frequently transported through Champaign County.
- Identify facilities within Champaign County that store and/or use hazardous materials that, should they be released into the environment, pose a threat to First Responders and the community.

- Identify the routes most frequently used, and the modes of transportation that hazardous commodities are shipped.
- Identify major highways, railroads, and pipelines and survey the amounts of hazardous commodities transported.
- Identify existing routes which are designated as hazmat routes.
- Assess the regional transportation network for safe routing of hazardous materials and designate the most appropriate routes for hazmat transportation.

#### **4.0 Study Steps**

The study steps will follow the guidelines specified in the PHMSA's *Guidebook for Conducting Local Hazardous Materials Commodity Flow Studies*. The study steps include the following:

##### **4.1 Step 1: Selecting HMCFS steering committee**

Champaign County's Local Emergency Planning Committee will act as the steering committee of the study.

##### **4.2 Step 2: Finalizing Objectives and Defining Data Requirements**

Study objectives mentioned in Section 3.0 will be finalized and data requirements of the HMCFS based on the study objectives will be determined. Typical data requirements include:

- Sampling (where, when, and how often data are collected)
- Precision (characterization of hazmat flows and flow mechanisms by type and quantity)

##### **4.3 Step 3: Collecting Baseline Information and Identifying Extent of Data Needs**

The study team will collect and review readily available local information about hazmat transportation, including previous studies (completed by local, state, and federal agencies), transportation modes and routes, incidents and accidents, and population locations. The study team will identify the extent of additional information required for the HMCFS and resources need to obtain them.

Deliverable #1: Deliverable #1 will be a compilation of existing local information about hazmat transportation, incidents and accidents and literature review of previous studies.

##### **4.4 Step 4: Collecting and Validating New HMCFS Data**

The study team will collect and validate new HMCFS data. The team will interview key stakeholders and collect field data. Field data would include vehicle, placard, or shipping manifest surveys along various major transportation corridors within the County.

##### **4.5 Step 5: Analyzing the HMCFS Data**

The study team will analyze existing and new HMCFS data to complete a comprehensive analysis of hazmat flow estimates. Spatial and temporal analysis will also be conducted. Critical locations within

proximity of higher hazmat flow corridors will be identified. Population exposure to hazmat transportation will be documented. A few scenarios with possible hazmat incidents/accidents along major transportation corridors will be evaluated.

#### **4.6 Step 6: Findings and Recommendations**

The study team will summarize the findings from the study and document accordingly. The study team will recommend appropriate routes for hazmat transportation through Champaign County and discuss the next steps.

Deliverable #2: Deliverable #2 will show the analysis of hazmat flow estimates through the Champaign County roadway network based on all the data collected in Step 3 and Step 4. It will also list the findings of the study and summarize the recommendations.

#### **4.7 Step 7: Implementation**

The study team will list implementation steps for the study. Implementation steps would include disseminating information to stakeholders, communicating with different stakeholders regarding possible risks and updating the emergency preparedness/management plan based on the study recommendations.

#### **5.0 Final Report**

The study team will prepare a comprehensive report of the HMCFS to the study steering committee based on the study steps discussed in Section 4.

#### **6.0 Intended Benefits**

The HMCFS for Champaign County will provide the following intended benefits:

- The study will create identify hazmat flow details for Champaign County.
- The study will help raise public awareness on hazmat flows related incidents and possible consequences.
- The study will help the LEPCs better prepare for emergency responses for hazmat related incidents/accidents.
- The study will create designated hazmat flow corridors for the Champaign County transportation network.
- The study will help in updating the regional emergency preparedness/response plan.

#### **7.0 Study Transferability**

The HMCFS study will be transferable to other counties and regions in Illinois. Forms and templates created as part of the study will be very helpful in conducting similar studies for other municipalities.



## REFERENCE

- 1 Bureau of Transportation Statistics, Special Report: Hazardous Materials Highlights – 2007 Commodity Flow Survey, US Department of Transportation, January 2011.
- 2 Hazardous Materials Cooperative Research Program, Report 3: Guidebook for Conducting Local Hazardous Materials and Commodity Flow Studies, Pipeline and Hazardous Materials Safety Administration, Transportation Research Board, 2011.
- 3 Accessed from the <https://data.illinois.gov>. Accessed on October 22<sup>nd</sup>, 2013.