



2015 ANNUAL REPORT

**Presented by Mike Phelps, Hazmat Coordinator
And
Stacy French, Chairman Hazmat Executive Board
for
KALAMAZOO COUNTY HAZARDOUS MATERIALS RESPONSE TEAM**

KALAMAZOO COUNTY HAZARDOUS MATERIALS TEAM

2015 Annual Report

Table of Contents

I. EXECUTIVE SUMMARY 3

II. MISSION STATEMENT and BACKGROUND 4

 Mission Statement 4

 Demographics..... 4

 Capabilities 5

 Background 5

 Significant Responses..... 6

III. 2014 RESPONSE ACTIVITY SUMMARY 6

IV. 2014 TRAINING SUMMARY 7

 Off-Site Training 8

 Recruit Training and Orientation 8

 Multi- Jurisdiction Training 8

 Projects & Procedural Updates..... 8

V. SPECIAL PROJECTS and RESPONSES 9

VI. BUDGET SUMMARY 9

VII. EQUIPMENT SUMMARY 10

I. EXECUTIVE SUMMARY

Please accept the 2015 annual report of activities for the Kalamazoo County Hazardous Materials Response Team (KCHMRT). We believe you will find the information contained in this report to be informative related to the exceptional resource we have available for our county.

The average annual response has been nine incidents per year since the inception of the team in 2004. Fortunately, there were no hazardous materials incidents that the entire team responded to in 2015. However, there were three consultations provided by the Team Coordinator or Team Leader.

In 2010, with the adoption of the Intergovernmental Hazardous Materials Response Agreement, including the dues structure for member agencies, a budget with a predictable income source was developed to manage anticipated expenses. Due to an increase in costs associated with disposable materials and the periodic calibration or service of the team's monitors and surveying equipment, the team will be recommending an increase in the annual dues from the current \$600 to \$1,200 for each agency.

In 2015 the team continued to look at various grant opportunities for additional forms of revenue. The Kalamazoo Department of Public Safety has graciously offered to write a regional grant on behalf of the hazmat team for the purchase of a new monitor in the 2015 Assistance to Firefighters Grant (AFG). Other grants are being sought this year to assist with initial training expenses and the replacement of some capital items such as the 1993 tow vehicle (a retired fire truck) and other monitors that are nearing the end of their service life. Each of these capital items are in excess of \$50,000.

The team continues to assess the role in which they participate in both locally and regionally. Many communities are struggling to provide enough qualified emergency response personnel to adequately manage an incident. In addition, they often lack the highly specialized and expensive equipment. This has resulted in the increased use of initial and mutual-aid from departments both within and just outside Kalamazoo County. To address the need for these additional resources, 14 of the 15 Fire departments within our county have become members of Mutual Aid Box Alarm System (MABAS). This system provides a broad based approach to address compensation and legal concerns which result when no mutual-aid agreements are available. As an executive board, we continue to look at where the team will fit into MABAS and what it will take to acquire the equipment that is required to be a part of a MABAS group.

The team continues to train on a variety of topics making this team very diverse in the capabilities it provides. Some of the response personnel on the team are sworn law enforcement officers. This aspect along with the completion of the FBI Sampling class allows many of our team to collect evidentiary samples which is essential when dealing with potential criminal activity.

In 2015 the team continues to have a very robust medical surveillance program. Part of the normal response to an incident includes a Medical Doctor, typically an emergency resident physician from Kalamazoo County Medical Control to provide oversight and advanced medical

care should that be required on-site. This is in addition to the paramedics that provide monitoring of vital signs, fluid replenishment and care for other medically related items during the event.

The team is comprised of members from 12 agencies and 1 private industry partner. The number of members includes Haz Mat Technicians, Executive Board members and members of our Medical Team. The numbers in parenthesis indicate the number of members each agency has on the team as of December 31st, 2015.

- Kalamazoo Department of Public Safety (9)
- Kalamazoo County Emergency Management (1)
- Portage Department of Public Safety (3)
- Kalamazoo Township Fire Department (6)
- Comstock Township Fire Department (7)
- Oshtemo Township Fire Department (2)
- South Kalamazoo County Fire Authority (2)
- Pfizer Corporation Fire Department (1)
- Kalamazoo County Medical Control (1)
- Life EMS Ambulance (5)
- Cooper Township Fire Department (2)
- Parchment Fire Department (2)
- Texas Township Fire Department (2)



II. MISSION STATEMENT and BACKGROUND

Mission Statement

The mission of the Kalamazoo County Hazardous Materials Response Team (KCHMRT) is to protect the residents of Kalamazoo County from natural and man-made hazardous materials disasters and to protect our citizens from water, air, land and general environment from contamination. Internally, our mission is to provide relevant training and instruction that is mandated by law, required by departmental policy, or needed by individuals to maximize their potential to provide Hazardous Materials Response Services and to promote safety in the community we serve.

Demographics

Kalamazoo County Michigan comprises 576 square miles with 18.3 square miles of that being water area, and is made up of 15 townships and 4 cities. Within the Townships are 5 smaller villages that maintain their own governance. The County has, as of 2013, a population of 256,725 with 80% living in urban/suburban areas and 20% in rural areas. The population density is around 446 people per square mile. Educational, health and social services provides 24.1% of the employment, manufacturing 20.4%, and retail trade 11.7%. The County is home to 2 large teaching hospitals, one State University, one Community College, one private arts college, banking and service companies, a major pharmaceutical manufacturer, and many major industrial product manufacturers including chemical producers. The county has over 40 miles of freeways including the major intersection of U.S. 131 connecting Indiana to Michigan and Interstate – 94, the major thoroughfare between Chicago and Detroit.

Roads and Rail (rounded to the nearest mile)

I-94	26 miles		
I-94 BL	10 miles	Amtrak	30 miles
US-131	25 miles	CN	34 miles
US-131BL	6 miles	Grand Elk	26 miles
'M' routes	57 miles total		
County 266 primary miles			

Capabilities

Members of the team are trained to the minimum of “technician” level. Most of the team members have also attended several additional specialized training sessions including but not limited to:

- FBI public safety sampling
- Advanced Nuclear/Radiological
- Railcar emergencies
- Advanced Biological and “Small Labs”
- Industrial spills/fires
- Weapons of Mass Destruction (WMD); radiological, nuclear, chemical, and biological

Background

The response team members are strategically located around the county. The team, when activated, operates under the direction of the Team Coordinator or a Team Leader and within the Incident Management System. The team intends to respond to acute hazardous chemical releases in the county. The primary objective is to protect human life and incident mitigation during the early stages of an emergency.

The KCHMRT recognizes that local fire departments have primary responsibility for the mitigation of hazardous materials emergencies as directed by P.A. 207. For those incidents where the local officials ask the KCHMRT for assistance, the local team will provide emergency hazardous materials incident response under the direction of the Intergovernmental Hazardous Materials Response Agreement.

The KCHMRT is designed as a support unit to provide 24-hour coverage seven days a week. As a support unit, the team operates under the direct authority of the on-scene Incident Commander. If requested, the team may provide technical guidance to an on-scene Incident Commander by phone or in person.

The team is governed by an Executive Board, comprised of Chief Officers or senior administrators of the departments that have members on the team, a Team Coordinator and four Team Leaders. The Executive Board manages the finances, member appointments and dismissals, and oversees the general administrative operations of the team as directed by the Intergovernmental Response Agreement and the Executive Board By-Laws. The Board also represents the team at official functions and is the liaison to the elected boards of the member agencies. The team has one Team Coordinator and four Team Leaders that manage the tactical responses and operations of the team. They also coordinate and conduct the specialized training the team receives. The Team Coordinator reports directly to the Executive Board with the Team Leaders reporting to the Team Coordinator.

Significant Responses

The team routinely responds to small spills, leaks and ruptures of various types throughout the year. The following are significant responses the team has been involved with since the inception of the team:

- Texas Township; Assisted FBI on suspicious powder found in letter (2005)
- Texas Township; Assisted EPA on Superfund Site (2008)
- City of Portage; Acid reaction and leak (2008)
- Bronson Hospital; Suspicious package (2009)
- Kalamazoo Township; Suspicious “small lab” (2009)
- Kalamazoo Valley Community College; Radiological response (2010)
- Western Michigan University; Provide hazmat coverage for Presidential visit (2010)
- Comstock; Fuel Spill into Kalamazoo River (2014)
- I-94 Multi-vehicle pileup (2015)

III. 2015 RESPONSE ACTIVITY SUMMARY



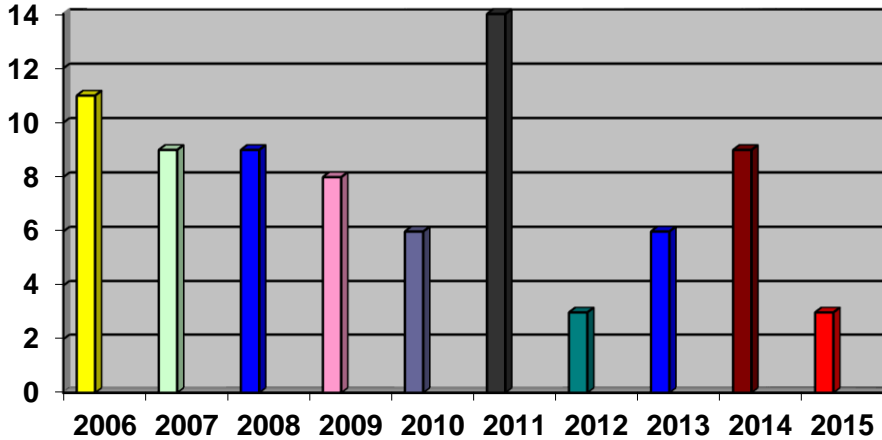
1. January 2015, I94 Galesburg Township. The team was notified of a multiple vehicle crash on I94 that involved a semi truck suspected of carrying Formic Acid. We were also advised that the tank was leaking.

Team Coordinator Phelps responded to the scene and made contact with the Incident Commander. It was learned that the tank leaking the Formic Acid was in the middle

of several semis that were still burning. The carrier notified a cleanup contractor who was on site shortly after Phelps arrived. Team Coordinator Phelps remained on scene for several hours and supervised the clean up and containment efforts of the private contractor. Team Coordinator Phelps was relieved by Board Chair French who was on scene for many hours before being relieved by Team Leader Everett who remained until the scene was totally stabilized by the private contractors. The team was on the scene providing supervision and support for a total of approximately 34 hours.

2. November 2015 Oshtemo Township. Team Leader Everett and Team Coordinator Phelps responded to assist the Kalamazoo County Sheriff's Department regarding unmarked barrels that were found on a vacant lot in a residential area. It was determined that the barrels were not leaking and Deputies were going to handle the criminal case as well as getting the land owner to remove the barrels.

- November 2015 City of Kalamazoo. Team Leader Mox responded to vehicle that struck debris in the roadway and ruptured the fuel tank. Team Leader Mox was able to assist Kalamazoo Department of Public Safety (KDPS) Officers in stopping the flow of gasoline from the tank.



The average length of team involvement per incident for the 2015 calendar year was approximately 12 hours. Because our 2015 responses were for consultation, the average number of team members responding was 1 person.

IV. 2014 TRAINING SUMMARY

The purpose of Kalamazoo County Hazardous Materials Training Team is to present a comprehensive inter-departmental network of professional, relevant, and accurate training in order to maintain and enhance the knowledge and performance for the personnel working with the KCHMRT.

The Training Team also provides training services to other private and governmental agencies that assist the KCHMRT.



The mission of the Training Team is to:

- Promote ethical and courteous behavior as an integral component in all of the training presented;
- Promote a training environment that enhances professional performance of duty;
- Promote an appreciation for the diversity of our organization and the community we serve in all Hazardous Material Response services;
- Maintain a data bank that will provide our colleagues with information to be utilized in Hazmat mitigation.

In-service refresher training is provided to all team personnel and is intended to maintain and improve basic skills and knowledge in the fields of Hazmat response and mitigation. New laws, community issues, liability concerns, and recommended standards are considered when developing instruction.

During 2015, the Training Team decided to implement quarterly training in an attempt to increase attendance at training sessions. There were additional training opportunities that came up throughout the year that were also available to team members to attend.

In-service Hazmat Training for 2015

- Hazmat Health and Safety – Respirator fit testing and physical exams
- Year-end basic competency skills examination
- National Incident Management System (NIMS)
- PPE / Decontamination
- Confinement and Containment Techniques
- Public Safety Sampling for Weapons of Mass Destruction
- Survey and identification of chemicals/substances
- MIOSHA Review



Off-Site Training

Arrangements for personnel to attend training at off-site locations or for outside instructors to conduct training locally are administered by the Training Team. During 2015, several personnel attended the following training:

- NFPA 472 Technician Training in Colorado

Recruit Training and Orientation

In 2015, the Training Team had no new members join KCHMRT. As a result of various issues, mostly moving on to different jobs, lack of time to devote to the team, retirement and leaving the area, the team member roster is declining. This necessitates the need for additional recruiting practices from the area departments.

Multi- Jurisdiction Training

The Training Team instructed courses, seminars, and classes with Kalamazoo County Police, Fire, and EMS jurisdictions during 2015. Below lists a summary of these training events:

- Training with the U.S. Army National Guard 51st Civil Support Team on air monitoring
- Hazmat training to KVCC Police Academy and Fire Academy

Projects & Procedural Updates

The Training Team maintains a high level of subject matter proficiency and stays on the cutting edge of new information. Consequently, the division is tasked with assisting other departments and specialty units with procedural and informational updates.

The Training Team accomplished the following in 2015:

- Working on revising and updating our hazmat Emergency Response Guide including several response guides and communications procedures for use during responses

V. SPECIAL PROJECTS and RESPONSES

The KCHMT is often called to assist State and Federal agencies due to the extensive training and experience our team members possess, as well as the type of specialized equipment our team has on inventory.

In addition, the team maintains a positive relationship with private firms and other response agencies. In 2015, the team completed the following projects:



- Continued National Incident Management System training
- Revised forms and guidelines for the team
- Participated in community events
- Worked on policies and procedures for assisting surrounding jurisdictions should the need arise for a Haz Mat response
- Worked on the possibility and feasibility of becoming part of MABAS

VI. BUDGET SUMMARY

In 2010 and prior years, the team was supported by donations from Kalamazoo Department of Public Safety, Portage Department of Public Safety- Fire Division, Kalamazoo County Emergency Management, Pfizer Corporation and the Kalamazoo County Fire Chief's Association.

When supplies or repairs were needed, these agencies were solicited for funds. Without a specific and reliable budget, many items were not being addressed. Calibrations of monitoring and detection devices were in particular need of attention.

The team gained its own source of funding for 2011 and beyond with the implementation of the Intergovernmental Hazardous Materials Response Agreement. This allows the team to develop an annual budget and track expenditures. It also allows for better strategic planning for maintenance and replacement of equipment. This budget is for the operation of the team only and it does not address the capital improvement items such as vehicles, trailers and some of the larger equipment used.

The team continues to look at different funding ideas as many of our large ticket items are nearing the end of their recommended service lives. Many of these items are beyond the reach of short term funding numbers and will have to be addressed in the near future. We are exploring grant options as well as partnerships with private industry.

Budget Summary

Revenue	(Actual) 2015	(Budget) 2016
Annual Countywide FD Dues	\$9,600.00	\$9,600.00
Team Response Reimbursement	\$0.00	
Expenditures		
Fuel and Oil	\$0.00	\$1,200.00
Equipment Maintenance	\$2,487.45	\$1,800.00
Truck/Trailer Maintenance	\$1,018.37	\$3,000.00
New Equipment	\$4,340.02	\$600.00
Training	\$0.00	\$1,000.00
Miscellaneous	\$911.24	\$1,000.00
Contractual Services	\$0.00	\$1,000.00
	\$8,757.08	\$9,600.00

All budget expenditures must be reviewed and approved by the Executive Board. Personnel costs for responses, training and medical surveillance are borne by the agency employing the team member.

Although expenses this last year were relatively light, the upcoming fiscal year 2016 is expected to have several large expenses including replacement of suits, gloves, boots and other disposable items. Included with those expenses will be additional costs in the replacement of sensors and tubes utilized in the teams various survey equipment. Due to this and other projected additional costs in years to come, the Executive Board is recommending an increase in the annual dues from \$600 to \$1,200 per year. This is the first increase since the formal intergovernmental agreement was signed in 2011. This increase will only cover the maintenance costs associated with support of this team. Due to the age of both the haul vehicle and some survey equipment these capital items will need to be funded outside those dues either through acquired grants or donations.

In addition, this budget will not support a large scale long duration event. The KCHMT will rely on the host agency / jurisdiction to implement its hazardous materials cost recovery ordinance for reimbursement of operational expenses.

VII. EQUIPMENT SUMMARY

- HazMat 1 1993 Chevrolet 2500 “Top Kick” crew cab utility truck (former KDPS Rescue unit)
- HazMat 2 2006 25-foot enclosed equipment trailer with interior office space

Listed is a brief highlight and description of major equipment or monitors that the team uses to handle the various incidents that we are tasked to handle.

5 complete Self Contained Breathing Apparatus (SCBA). Used in our suits to provide breathing air. Total cost for 5 SCBA is \$25,000.

20 Level A entry suits. These suits are the highest level of protection available when it comes to hazardous materials. These suits protect against vapors, liquids as well as solids. The cost for 20 suits is \$40,000.

18 portable radios valued at \$8100.

Radiation detection equipment valued at \$11,000.

Thermal imaging camera used to check the level of liquid containers that are leaking. This was donated by the Portage Department of Public Safety when they upgraded their cameras. The approximate value of the used camera is \$5000. The cost to replace this with a new camera is approximately \$10,000.

ResponderR is a monitor that uses laser technology to identify unknown liquids. The value of this used piece of equipment is approximately \$20,000. To replace this unit with a new version would cost approximately \$70,000. This piece of equipment is currently nearing the end of its service life and will need to be replaced in the near future.

HazMat ID utilizes infrared mass spectrometry to identify unknown solids and liquids. This monitor is 10 years old and has a current value of approximately \$40,000. To replace this instrument will cost approximately \$70,000. This instrument is also nearing the end of its service life and will need to be replaced.

Most of not all of these monitors or equipment need annual calibration or testing to keep them service ready in the event of a Hazardous Materials leak. The cost to test and/or calibrate all of this equipment is approximately \$3000 annually.

