

DEVELOPMENT OF A MANUAL FOR SMALL TOWNS AND RURAL AREAS
TO DEVELOP A HAZARDOUS MATERIALS EMERGENCY PLAN

by

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Phase II Final Report

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CHAPTER 1

Introduction

Scope of the Problem

The transportation of hazardous materials is a daily occurrence in the United States. Citizens are accustomed to seeing tank trucks carrying gasoline or propane and often do not perceive these to be hazardous until an accident occurs. Aircraft overhead usually do not attract much attention until one crashes and causes much personal and material loss. Likewise, barges and pipelines do not cause much notice until an oil slick is spotted. In contrast, the mere mention of the possible transport of radioactive materials through or near a community will likely cause much alarm.

These materials cannot be banned from our transportation routes because they are vital to our way of life. Gasoline and chemical fertilizers, among other substances, are in constant demand. Nevertheless, the environment and the populace must be protected from the risks posed by these materials. Hazardous materials, as

defined by the U.S. Department of Transportation, are "substances or materials, in a quantity or form, which may pose an unreasonable risk to health and safety or property when transported in commerce" (1:5).

A hazardous materials transportation emergency can happen anywhere in the United States at any time. Many people associate these accidents only with large cities but this is erroneous. For example, in 1984, Sedgwick County had more spills than any other county in Kansas. In December, 1984, Sedgwick County counted 14 spills while Wyandotte County, with a much larger population, only had one spill (2:11).

Many of these accidents happen in rural areas. These rural emergency departments are often volunteer with only rudimentary fire-fighting skills. They may be totally unaware of the responses that are needed to handle these emergencies. Or they may not have the necessary equipment. Reacting with inadequate knowledge or improvised approaches can complicate the incident and possibly result in injury or death.

Need for Contingency Plan

One way in which a city could mitigate the effects of a hazardous material transportation emergency is to have a contingency plan outlining what to do in the event of an accident. The concept of pre-disaster planning is a relatively new concept. In the past, the

emphasis was on identifying hazardous substances, defining physical hazards associated with the handling of these substances, and developing emergency first aid procedures. The population affected was seen as a helpless victim.

By now the philosophy has changed. Attention is now focused on the environmental effects of pollutants and the development of procedures to prevent and lessen the impact of an accident. The affected population is now seen as an active entity, one that can do much to control its fate.

Part of being an active participant in a community is planning one's future. The development of a comprehensive plan is a statement that a population does not believe that it is a victim of circumstances. Likewise, a good disaster plan is a significant part of an overall planning process. The pre-disaster or emergency planning section of a comprehensive plan will be influenced by the thoroughness of the comprehensive plan and the factors that were considered in its development. A disaster is an interface between an extreme physical event and a vulnerable population. Therefore, the comprehensive plan should strive to make the population less vulnerable so that the emergency plan can function most effectively. It has been found that effective planning may be the best way to avoid

some types of emergencies and disasters or to minimize their destructive effects.

Guides for Writing a Plan

Guides have been developed to aid cities in developing a contingency plan. These guides may assume resources and capabilities which do not exist in a small town or rural area. Therefore, a set of guidelines must be developed that are applicable to small towns and rural areas in order that they may develop a hazardous materials transportation emergency plan which is effective for them.

These guidelines must bring out the capabilities of the local area and force them to recognize their deficiencies. Once these deficiencies are noted, the community should look for ways to remedy them. This may involve seeking alliances with the state or federal government or it may involve developing pacts with neighboring governments.

The emergency planning process must be rooted in the process of coordinating services. This is the basis of IEMS, Integrated Emergency Management System. In this system, each emergency has similar needs and thus the same response may be called upon in different emergencies. For example, a major fire will require that the site be secured against intrusion by the general public. Another disaster, such as a tornado,

will also require this security. The same response is needed and so the plan would refer to this response and not duplicate all of the information on how to secure the site. This is also effective in the event that the standard operating procedure changes, the entire plan will not need to be re-written.

Emergency Planning as a Priority

This entire project is based on the premise that planning for emergencies should be done and should be a priority in both small towns and large urban areas. The process to be followed in writing a plan is similar in all areas but each has its peculiarities; therefore, the plan must be specifically tailored to the area involved.

Scope of the D.O.T. Project

The writer became involved in this research in the Fall of 1980. This research is part of a larger project sponsored by the U.S. Department of Transportation, "A Community Model for Handling Hazardous Materials Transportation Emergencies" (3). The first phase of the project covered an indepth state-of-the-art analysis of risk analysis literature, laws, data bases, training courses, and developed a rural risk model. As part of phase I, a users' manual was developed: Risk Assessment/Vulnerability Users Manual for Small Communities and Rural Areas.

While not involved in the development of the risk index, the writer became involved in the validation of the risk index. This involved applying the risk index to 11 communities in Kansas. This study concluded that the model gave reasonable results and had a high level of credibility among the local officials participating.

At this point the project returned to the task of developing a "how to" manual that small towns could follow in developing a hazardous materials emergency plan to reduce their vulnerability. In order to do this, other manuals were studied as to their applicability for use in a small town. They were found to be inadequate; therefore, a manual was developed. The manual was then applied to Riley County, Kansas and used to up-date the Riley County Emergency Plan. This plan was submitted to the affected public officials for comments and suggestions. Their comments were incorporated and revised three times. The final version is the Appendix of this report.

Throughout this project, an overriding concern was that the guide or manual developed would be useable in small towns or rural areas. To this end the manual has been presented to many groups throughout the State of Kansas. At each presentation, comments were solicited and incorporated into the final version. The manual developed could not be so difficult to use that it was

abandoned and the planning process abandoned along with it.

Scope of the Research

This report covers the laws and programs that are involved in hazardous materials transportation emergencies and planning for them. There are many federal programs involved and the coordination among them is important to the success of a planning effort.

Planning in small towns and rural areas is also covered. When working on the manual it became clear that small towns and rural areas have distinct needs in comparison to large urban areas. The manual that was developed had to take this into account.

The process used in writing the plan is covered in detail. This is included so that others may learn from the process and learn from the mistakes that were made. This same process may be applicable in writing any kind of manual to be used in a locality and not just an emergency planning manual.

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CHAPTER 2

Laws and Programs Relating to
Hazardous Materials Transportation

Many levels of government regulate the transportation of hazardous materials throughout the United States. A single shipment may have to meet city, county, state and federal regulations. These regulations are designed to insure the safety of the citizens. Historically, state and local governments have borne the primary responsibility for insuring the health and safety of their citizens. In the area of transportation, however, the federal government has been predominant with regard to interstate commerce. The Hazardous Materials Act of 1974 (HMTA) was enacted "to protect the nation adequately against the risks to life and property which are inherent in the transportation of hazardous materials in commerce" (1).

Federal Laws

Hazardous materials have been regulated during transportation for many years. In 1871 Congress passed

a law regulating the transportation of hazardous materials (Act of February 28, 1871, Ch. 100, Sec. 4, 16 Stat. 441). This law authorized the Secretary of the Treasury to issue safety regulations for the transportation of certain explosives, flammables, and acids on passenger-carrying vessels in navigable waters (2:13).

In 1908, Congress passed an act called the Transportation of Explosives Act of 1908 (2:13) or the Explosives and Other Dangerous Articles Act (3:4). This is the first law to regulate land shipments of hazardous materials.

In the intervening years, many other federal laws have been passed for regulatory purposes. Included among these laws are the Dangerous Cargo Act of 1940, the Transportation of Explosives Act, Sections 601(c) and 902(h)(1) of the Federal Aviation Act of 1958, the Tank Vessel Act of 1936, the Ports and Waterways Safety Act of 1972, the Natural Gas Pipeline Safety Act of 1968, the Federal Railroad Safety Act of 1970, Section 311 of the Federal Water Pollution Control Act Amendments of 1972, the Resource Conservation and Recovery Act of 1980, and Hazardous Liquid Pipeline Safety Act of 1979 (2:15-16).

The Secretary of Transportation created the Materials Transportation Bureau (MTB) and made it the

lead agency in the Department of Transportation's hazardous materials transportation safety program. The MTB was disbanded in 1986 and is now known as the "Office of Hazardous Materials Transportation". The Office of Hazardous Materials Transportation has the authority to issue all hazardous materials safety regulations, except those relating to bulk transportation by water. To insure coordination, the director is to consult with the U.S. Coast Guard, the Federal Aviation Administration, the Federal Highway Administration, and Federal Railroad Administration on matters affecting them, before issuing regulations (2:16).

The Office of Hazardous Materials Transportation is responsible for issuing regulations that cover the designation and classification of hazardous materials, container specifications and testing requirements, packaging, labeling, marking, placarding, handling, and shipping papers. These regulations are codified in Title 49, Transportation, Parts 100 to 179, of the Code of Federal Regulations, commonly referred to as CFR 49 (2:16). Two fundamental principles have guided the formulation of these regulations: first, that hazardous materials must be safely contained in their packages, and second, their hazards must be effectively

communicated to the carrier and any emergency responders (2:17).

State of Kansas Regulations

Federal laws govern the movement of materials by rail, air or water. Movement of hazardous materials by highway is more likely to be governed by the state. The State of Kansas has passed laws regulating the transportation of hazardous materials throughout the state. States are encouraged to adopt DOT's Hazardous Materials Regulations. The State of Kansas has adopted Parts 171, 172, 173, 177, and 178 of the Federal Hazardous Materials Regulations (2:109). Part 171 contains general information, regulations and definitions. Part 172 contains the hazardous materials table and hazardous materials communications regulations. Part 173 contains general requirements for shippers for shipments and packagings. Part 177 covers carriers by public highway. Part 178 contains shipping container specifications.

The Kansas State Statutes also set out the responsibilities of the governor and local officials during a disaster. The governor "shall issue a proclamation declaring a state of disaster emergency" (KSA 48-924). This proclamation will activate the disaster response and recovery aspects of the state

disaster plan. It also activates any applicable local emergency plans.

Section 48-929 states that:

each county within this state shall establish and maintain a disaster agency responsible for emergency preparedness and coordination of response to disasters or shall participate in an interjurisdictional arrangement for such purposes under an interjurisdictional disaster agency as provided in KSA 48-930. Except as otherwise provided in this act, each county or interjurisdictional disaster agency shall have jurisdiction over and serve all of each county included thereunder.

It further states that the city (when designated by the governor) or county "shall notify the division of emergency preparedness of the manner in which such city or county is providing disaster planning and emergency services" (KSA 48-929 (c)). Thus, the state can ensure that the residents of the State of Kansas are adequately protected in the event of a disaster. The state puts the responsibility for declaring a state of local disaster emergency on either the mayor or county commission (KSA 48-932). Each local government is responsible for their own citizens' safety.

Within these guidelines the local entities write and enact their emergency plans, usually at the county level. In the State of Kansas, the state publishes the State Disaster Emergency Plan (4) which sets out the procedures to be used in a number of disaster situations

that could affect the state. Any locally prepared plan should be able to meld with the state plan so that in the event of an emergency all applicable agencies can be coordinated.

Regional Response

The Region 7 Oil and Hazardous Substances Pollution Contingency Plan carries out the policy of the Congress (Federal Water Pollution Control Act) which declares that there should be no discharge of oil or hazardous substances into or upon the navigable waters of the U.S. (5:1). Region 7 covers the states of Kansas, Nebraska, Iowa, and Missouri. Region 7 publishes a Response Manual to be referred to in event of an emergency.

Federal Emergency Response

Most of the responsibility for responding to hazardous materials emergencies falls upon local emergency personnel. The Department of Transportation through the U.S. Coast Guard responds to releases of hazardous substances under the authority of the Federal Water Pollution Control Act and The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (3:49). This act significantly broadens the scope of spill reporting and response. Specifically, the Act requires that the National Response Center be notified of any release of a reportable quantity of a hazardous substance to the

environment (5:1).

The Resource Conservation and Recovery Act (RCRA) addresses the problems related to the generation, disposal, and management of waste materials in the U.S. Regulations have been promulgated by the United States Environmental Protection Agency (EPA) which will serve to identify hazardous waste both by characteristics and by sources. Manifest and tracking systems are also developed under this act. A permit system and facility standards for the treatment, storage, and disposal of hazardous wastes are included under this act (5:6).

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) outlines Federal responsibilities, organization, and procedures for response to discharge of oil into navigable waters and releases of hazardous substances into the environment (3:49). Within the NCP, the United States Coast Guard (USCG) is designated to act as the Federal On-Scene Coordinator (OSC) for the coastal zone, and EPA is designated as OSC for the inland zone. In some instances, the OSC may require a state or local agency to act in its behalf, and emergency response will be a local matter.

The United States Department of Transportation (DOT) has the responsibility to minimize the potential for accidents and enhance emergency response through

provision of readily available, accurate information. To this end they have enacted hazard identification numbers, developed DOT's Emergency Response Guidebook, prepared training programs for local police and fire responders, and supported the National Response Center (NRC) and CHEMTREC (the Chemical Transportation Emergency Center maintained by the Chemical Manufacturers Association) (3:50). CHEMTREC operates a toll free number that can be called in an emergency to gain information on how to handle a hazardous material. It also initiates communication with other concerned parties, such as the shipper or manufacturer, to facilitate response through use of their expertise in handling materials under emergency circumstances.

Since response to hazardous materials transportation accidents is but one element of a larger capability to respond to emergencies in general, the role of DOT is limited to one of providing technical resource support, leaving the broader Federal role to the Federal Emergency Management Agency (FEMA).

The Integrated Emergency Management System (IEMS)

The Integrated Emergency Management System (IEMS) was created by the Federal Emergency Management Agency (FEMA) because an integrated approach is the most effective way to accomplish FEMA's emergency management missions (6:1). The goal of the system is:

develop and maintain a credible emergency management capability nationwide by integrating activities along functional lines at all levels of government and to the fullest extent possible, across all hazards (6:4).

IEMS is an attempt to reduce the number of response plans needed by local jurisdictions. This is accomplished by increasing emphasis on developing the common and unique capabilities required to perform specific functions common to all hazards. The IEMS philosophy is contrary to the philosophy wherein responses are developed for each specific hazard. This is based on the premise that different hazards all have common characteristics and thus the need for common responses.

In order for State and local governments to utilize the IEMS process, three steps must be followed:

1. Determine the hazards and magnitude of risk;
2. Assess the existing and required capability with respect to these hazards; and
3. Establish realistic local and State plans that outline actions for closing the gap between existing and required levels of capability (6:5).

These steps must be followed sequentially in order to be effective. These steps will lead to the capability shortfall or gap. This is the gap between

the actions required and the existing capability to supply these actions. This shortfall, in turn, leads to the preparation of a multi-year development plan. This process is the means of improving capability and not an end in itself.

FEMA designed the IEMS process so that it could be used by jurisdictions that do not have the same hazards or capabilities. FEMA claims that the process is

logical and applicable to all jurisdictions regardless of their size, level of sophistication, potential hazards, or current capabilities (6:7).

In developing the manual it was recognized that various hazards have common responses. For example, both a tornado and a hazardous materials transportation emergency may require disposal of debris. Recognizing this, it is much more efficient and streamlined to write an emergency plan that recognizes these similarities. If these capabilities are present for use in a tornado they should also be available for use in another circumstance. To the contrary, if this capability is not present, the community can easily see how many times this capability will be lacking. Also, if the standard operating procedure changes for a necessary response it will change in all hazards without re-writing the plan. This integrated approach was used in writing the manual.

In conclusion, there are many laws, local, state and federal, that regulate the transportation of hazardous materials. In order to write an emergency plan one must be familiar with these laws. Implementing the laws are policies, such as IEMS, that must be followed. These also must be incorporated into the plan.

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CHAPTER 3

Rural and Small Town Planning

In order to understand the need for emergency planning in small towns it is important to become familiar with small towns. There is no typical small town. People from urban areas tend to lump all small towns together and assume all small towns are alike. But this is not true.

Small Towns Are Different From Urban Areas

Small towns are not merely "scaled down" large cities. They have different problems than the large cities. Lassey, in his book Planning in Rural Environments (1), set out a list of problems that plague small towns. There are the problems caused by aging population. This leads to an increasing need for public services that may not be available in small towns (1:31). There is an increasing influence of external forces on local decision making. This is caused by locally based businesses leaving and being replaced by non-local business.

In small towns the governmental structure is often based on the county. The county cannot adequately address the needs of the small towns (1:34). This is compounded by the urbanization of some small towns which adds to the strain of governance. As these areas urbanize, growth pains are felt because of the obsolescence of rural institutions such as health care and education (1:38). The educational system often does not fully meet the needs of those living in small towns. Advanced or continuing education may be non-existent or extremely limited.

There are ecological problems that face small towns. Natural resources are being depleted rapidly. There are problems of erosion of soils that are the life-blood of the farm. There are ecological problems that are forced on rural areas by the larger cities. The persons in large cities use the rural areas and small towns for recreation causing damage to the environment (1:41). This also can lead to problems caused by the seasonal nature of some recreational uses. There are large influxes of persons that incur costs to the small towns that they may not be able to recoup from the vacationers. Coupled with this is the impact on the aesthetic quality of the rural areas. To house these vacationers, there is often a proliferation of mobile

homes and/or motels that adversely impact the aesthetics of the area (1:22).

For this project we have determined that our audience includes areas with a population of less than 50,000, the approximate size of Riley County, Kansas. "Places" as defined by the U.S. Bureau of the Census includes cities, towns or other areas of 2500 or more persons. In 1960 there were 19,790 places with a population of 49,999 or less. This is 98.3% of the places in the U.S. By 1980 this number had grown to 22,529 places but they now account for 97.9% of the places in the U.S. (2:26) This indicates that the number of small towns is growing but the number of large cities is growing slightly faster.

When comparing the population in these areas, the number of persons in small towns is growing. In 1960, 63.8% of the population or 114,408,070 persons resided in places of less than 50,000. By 1980 this number had risen to 65.9% of the population or 149,293,810 persons. (2:26) It is significant to note that the number of people in small towns is growing and so the audience for this study is also growing. Small towns are not dying; they are increasing in number.

There are differences in the structure and operation of small towns as compared to larger cities. Due to limited resources, the services offered by small

towns are limited. It is recognized that most small towns do not have full-time staff for emergency or land planning functions. Even without the full-time staff that larger cities may have, there is much that can be done in small towns.

One of the basic services offered by a small town or rural area is fire protection. This may be in the form of a volunteer squad or a paid squad. In either case, it is imperative that the squad be trained to handle a variety of situations. Due to advances in science and developments in the chemical industry there are many more chemicals passing through rural areas than in the past. "Chemical reactions, airtight structures, and plastics represent new problems that require a new level of technical knowledge in a fireman's training."

(3:15) One of the ways that this problem can be tackled is in the area of prevention. A town should conduct a risk-vulnerability survey to determine which hazardous materials are stored and are transferred through the area. A good source for a model for a risk-vulnerability survey is "Risk Assessment/Vulnerability Users Manual for Small Communities and Rural Areas" by Russell et al (4). From the information gleaned from the survey, the town will know what they are being exposed to and so it is possible to determine what training would be needed in

the time of an emergency. In many rural and volunteer fire departments, this essential training in prevention is lacking, or not a major focus of the department. As is commonly said, "an ounce of prevention is worth a pound of cure". This is certainly true in the field of fire prevention. Once the disaster strikes, it is too late to seek training.

Problems Facing Rural Areas

In the past many disasters have affected small towns and rural areas. In many cases, the resulting damage is devastating to the future of the area. This may be due to the lack of facilities to deal with the emergency and lack of aid from outside of the disaster center. Geographic isolation compounds the problem. The situation is not entirely hopeless, though. It is possible to plan for these emergencies but it "is essential that those in local government understand the realities of emergency planning" (5:10). This includes understanding the limitations of emergency planning along with its capabilities.

Due to the limited resources of most jurisdictions, costs of operating the emergency services must be kept to a minimum. This is often seen most clearly in the number of volunteer fire departments. Part of the planning process involves evaluating resources and

assigning them to where the need is most critical. The results of a risk-vulnerability survey will give cities concrete information on which to base their emergency planning. Without this information they often do not know the true extent of the problem. They may have an idea of what their exposure is, but it is often erroneous. Armed with numbers and facts, emergency service personnel may be able to convince the City Fathers that spending priorities should be reexamined. Or they may be able to apply for grants from various sources. There are also training programs that are sponsored by the State and Federal governments that may be free or low cost.

Issues Facing Rural Areas

Just as no two urban areas are the same, no two rural areas are the same. There is no typical rural area. But we can make some assumptions about the rural planning process. First, one must become familiar with some of the major issues facing rural areas.

Small towns face the same problems as urban areas such as crime and pollution. The difference is in how they each define and respond to these problems. Some of the more general issues facing small towns are "urbanization, in-migration, low income, and governance" (3:15). These issues are straining the very limited resources of the small towns. This can be a serious

threat to the future existence of these small towns. The way that these issues are dealt with will determine the future of these small towns.

Planning in Small Towns

To combat these problems adequate planning must be undertaken. To do this, the planner must learn about the town's "social structure, local economy, influence patterns, and cultural values and norms" (3:15). Otherwise, the planner is planning in a vacuum and so the resultant plan cannot reflect its surroundings.

According to Rural and Small Town Planning, (6) there are 3 phases in the development of an effective rural planning program:

- 1) getting to know the people and the place;
- 2) picking a problem and solving it -- quickly and effectively; and
- 3) selling planning -- move to more traditional planning areas (6:20).

In this approach the emphasis is on listening and thus getting to know the priorities and problems of the area. While this is important in any type of planning process it is essential in small town planning because the client population is smaller and thus there should be more personal contact in formulating the plan. The planner will be more visible in a small town and will be closely scrutinized by the citizens of the small town

or rural area. It is also likely that there has been no "planner" in the community before and thus the planner will be closely watched.

One of the largest problems in planning in rural areas is the planner. Often the planner does not understand the rural area and so approaches the rural area in an urban mindset. This is evidenced by planners trying to use techniques and formulas that are designed and scaled to urban areas. Their approach may not take into account the special capabilities and limitations of the area. The approach must be tailored to the capabilities and needs of the client population. For example, a formula that the planner desires to utilize may require data that is unavailable. Due to limits of record keeping some data is not available for small towns and rural areas that is available for an SMSA (Standard Metropolitan Statistical Area). In this case, a different formula is required or it must be adapted to utilize the available data. But this must be carefully scrutinized. Not all approaches can be "scaled down" for use in small towns.

Planning for rural areas has certain inherent problems. One of these is the lack of expertise by planners and local officials to deal with rural development issues. In dealing with emergency planning, in particular, there may be a lack of knowledge of

emergency planning on the part of local officials. The Police and Fire Chiefs may have some knowledge of emergency planning or they may be totally uneducated in this aspect. There is also a lack of resources to finance the planning. The third major problem is the "anti-planning" philosophy of many rural elected officials. This is coupled with an anti-regulation philosophy (6:2). This is commonly evidenced by a lack of codes regulating development in rural areas.

Lee Nellis, a planner for Hot Springs County, Wyoming states that there are four reasons for rural resistance to planning:

- 1) a strong emphasis on private property rights;
- 2) distrust of outside priorities for land use;
- 3) the inappropriateness of traditional urban planning tools and attitudes; and
- 4) a feeling that planners have little empathy with rural values (7:15).

These are valid criticisms of the planning profession and planning process. That is why this project strives to overcome these criticisms by developing methods and a manual that can be used by small towns and rural areas. The manual is not simply a "scaled down" version of a manual for urban areas.

If the small town is to embrace the planning process it will expect to see something concrete. This

will probably take the form of physical planning such as a land use plan. In a rural area the land use planning process must be sensitive to the needs of the citizens of the area. Rural planner Nellis states,

The traditional future land use/zoning map approach to planning tends to ignore landscape features. It also claims a predictive value no one will accord it where the local economy constantly fluctuates in response to distant commodity markets and uncontrollable weather. (8:20)

The rural planning process must be more sensitive to the environment than urban planning. Rural planning must take into account slope, drainage, exposure and soil type. The soil's ability to support crops is another important consideration in this time of shrinking farm land. This is not to say that those trained in Urban Planning cannot be effective in a small town. They must expand their scope and become more sensitive to the small town.

Small Towns and Small Towners (9) points out that physical planning is not an end in itself but a means for creating an environment that satisfies the social and economic objectives of the community. This must be kept in mind while the planning process is pursued so that the result will be applicable to the area being studied.

Rural planner Nellis has devised 7 Principles of Rural Planning. They are based on one fundamental assumption: "Rural planning will be successful only if it is based firmly in rural values". (8:21)

Nellis' Basic Rural Planning Principles are:

- 1) Be sensitive! Rural planning should be guided by rural values, not by urban values for rural areas.
- 2) Try to build planning efforts on traditional areas of mutual concern.
- 3) Demonstrate a strong, positive orientation to the local clientele.
- 4) Use appropriate planning tools.
- 5) Try to get the local planning board or commission's task clearly defined as providing leadership in planning.
- 6) Be patient.
- 7) Finally, keep an eye on the details of plan enforcement and record keeping and on the ultimate quality of local citizen planning efforts. (8:24)

While rural and urban areas are similar, rural planners must be more in tune to the needs of the citizens. Often, this is the area's first exposure to planning and so this will set the tone for the future of planning in the rural area.

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CHAPTER 4

Process Used in Writing the Manual

Assumptions of the Project

In the fall of 1980 the writer became involved in a U.S. Department of Transportation project, "A Community Model for Handling Hazardous Material Transportation Emergencies". The project involves an integrated approach to develop guidelines and manuals that a community can use in a total preparedness program. One part of the project was to develop a manual to be used by small towns and rural areas in developing their own hazardous materials emergency plan. This project was based on three assumptions:

- 1) Small towns face risks from the transportation of hazardous materials and planning can help to mitigate the effects.
- 2) No manuals exist that are specifically written for small towns and rural areas.
- 3) Manuals written for urban areas cannot be "scaled down" to fit the needs of small towns and rural areas.

Determining Risk Index/Vulnerability

The first step was to determine the extent of the problem and gather information on what hazardous materials are being transported through rural areas in Kansas. To do this, teams of researchers were sent to 11 cities in Kansas to determine their risk index/vulnerability. (The risk index methodology was developed during the first phase of the research, Users Manual for Small Communities and Rural Areas and validated during phase three, Risk Assessment/Vulnerability Validation Study.)

The communities selected were 11 Kansas communities within an approximate 50 mile radius of Manhattan, Kansas. Population ranged from 546 to 28,192. Seven have a population of 5,000 or under. All have a paid police department of some sort; five had volunteer fire departments.

Selection was based primarily on travel and funding constraints. As the study progressed it became apparent that the 11 were indeed, typical Kansas towns (all but one with a railroad) and there was probably too little difference between them for a good test of the model, particularly in regard to its sensitivity.

The model was intended to be used by local officials who, although they may have no knowledge of hazardous materials, were assumed to have intimate

knowledge of their town.

After calculating the risk index and vulnerability, the researchers returned to the cities to review the results with affected public officials. In most cases the researchers met with the Police Chief, Fire Chief and City Clerk or Mayor. The goal was to obtain their reaction to the process as well as the study report and conclusions of the city's vulnerability contained therein. This interview approach provided the best subjective validation of the model possible.

When meeting with these officials, a questionnaire was used so that the answers could be quantified. They were first given the results of the risk index/vulnerability study. These results were discussed to discern their perception of risk and how it coincided with what the risk index found. Follow-up questions related to their perception of risk and the city's ability to recover from a hazardous materials transportation emergency. The questions were attempting to determine how these small towns would deal with a hazardous materials transportation emergency. In particular, gaps in their ability to recover from such an emergency were examined. It is very important to recognize that there will be gaps in capability and then determine how these gaps will be filled.

This phase of determining the risk assessments was part of a validation phase. This risk assessment model was subsequently fine tuned. The validation was necessary to find out how the procedure would work in a real world situation. One of the overriding themes of the research was that it was to relate to the real world. This research would not be such that it had no practical application. If the manuals developed were not written so that they could be easily used, the reserch was useless.

Now that the writer was more familiar with the risks faced by these small towns and had reaffirmed the theory that these communities did not have adequate planning to combat a hazardous materials transportation emergency, the writer moved on to developing a manual. The manual was developed as a guide to be used for small towns and rural areas in writing their own Hazardous Materials Emergency Plan.

Principles Used in Writing the Manual

Three principles were developed to be used in writing the manual:

- 1) The manual must be written so that it can be followed by anyone. Using the manual would not require specialized knowledge or experience.

- 2) The resulting plan must be tailored to the needs and capabilities of the area represented. It is of no use to write a plan that would just sit on a shelf.
- 3) The manual must not lead the writer into a false sense of security by allowing them to just fill in the blanks. A plan written in that way could be quite dangerous if called upon in an emergency.

Review of Manuals

Over and over in the interviews it was brought out that the cities felt a need and wanted to do something about the problem of hazardous materials emergencies but did not know where to start. The need for a manual to be used in writing a plan was strong. No source seemed to be filling this need. Various manuals had been published and so these were gathered and reviewed. Two manuals published by the State of Kansas and Rockwell International seemed to be the most significant. The State of Kansas publishes Guidelines for Development: Hazardous Material Contingency Plan (1). This manual was written by the Division of Emergency Preparedness of the Adjutant General's Department. The Introduction to the Guidelines states,

The purpose of this document is to give an example of the items necessary to develop a useful contingency plan for handling hazardous materials incidents/accidents (1:General.)

This document is basically a fill in the blanks approach to writing a plan. It even goes as far as stating that the word "Model" on the cover should be replaced with the name of the local governmental unit.

If this guide was followed by placing the proper names in the proper spaces the result would be a Hazardous Materials Contingency Plan for City/County "X". This guide's deficiency is that it is too easy to fill in the blanks without really looking at the planning process and the unique needs of the city affected. The introduction states, "Your plan should reflect the unique capabilities and needs of your own particular community." (1:General) The guide does give some direction in writing the plan but the results will probably not reflect the unique needs and capabilities of the city. This is dangerous because in the event of an actual hazardous materials emergency it may not be possible for the plan to be operational. The resulting document may be totally useless in an actual emergency.

Another guide that was reviewed is Preparing for Environmental Emergencies, A Planning Guide and Checklist written by Rockwell International (2). This guide was subsequently published by the Federal Emergency Management Agency (FEMA) as Planning Guide and Checklist for Hazardous Materials Contingency Plans in July 1981 (3). It is commonly referred to as "FEMA 10".

This guide uses an approach opposite of the State of Kansas guide. The introduction clearly states that this is not a "fill-in-the-blanks" model plan. It also state clearly, "Your finished plan, by itself, does not assure that you can cope with spills." (2:1-2) This approach is much more realistic and is more likely to result in a plan that is operational. The Rockwell guide revolves around a series of "Decision Points". Decision points:

allow the user to decide what parts of this guide he needs or wants to use, as well as clarify and organize his own assignment, goals, and objectives within the planning framework (2:1-4).

The guide poses a series of questions which will guide the writer in producing a plan which is unique to their needs. The deficiency of this guide is that it may not give enough guidance to some local officials. One of the premises that is used in this project is that the guide should be useable by officals in small cities and rural areas. Many of these officials have no formal training in planning and thus may need more guidance than this guide may give.

An important factor considered was that the process followed in writing the guide could be reproduced by persons in these small towns and rural areas. It was soon discovered that the existing guides were geared to large cities. They would thus be unsuitable. Rural

areas are distinct from urban areas and so the process must be tailored to rural areas. Therefore, the planning process must follow rural planning principles in order to develop a plan specifically for rural areas. It would not be adequate to just "scale down" urban plans.

Research has shown that in the event of an emergency virtually all jurisdictions rely on existing functional lines of organization in public works, safety, and management departments, rather than the countywide emergency and civil defense offices encouraged by state and federal programs (4:10). This is important to recognize in writing a plan. For the plan to be operational, it must be based on the reality of how a town functions and not some idealized notion of how it should function.

Kartez contends that the current intergovernmental programs for preparedness planning are encouraging a two-tiered system of plans. The first tier consists of the federally mandated response plans, which support the countywide planning and coordination mode. The second tier comprises local procedures that develop out of adaption to each jurisdiction's experience, potentials and constraints (4:17). In this model the writer has tried to integrate these two tiers by stressing that the plan must recognize the needs and most importantly, the

capabilities of the small towns involved. Most small towns do not operate in a textbook fashion. They have highly developed patterns of operation and the plan must take these into account in order for the plan to be successful.

Writing the Hazardous Materials Plan

After reviewing the other guides and keeping in mind the three principles, Manual for Small Towns and Rural Areas to Develop a Hazardous Materials Emergency Plan (5) was developed. This guide or manual is not a fill in the blanks approach. The guide poses a series of questions to be answered by knowledgeable persons from the community. They are intended to spark discussion among those writing the plan and thus the resulting document will accurately reflect the needs and capabilities of the affected community. This is followed by a suggested outline for the plan and a list of potential groups to be included in the operation of the plan.

The plan will be tailored to the needs of the individual community. This will be accomplished by using input from members of the community. The plan will not be formulated by a team of experts who "know what is best for you." While it may be necessary to refer to experts for information and possibly contract

with someone to do the actual writing, ultimately the contents will be what is needed in the community. The plan asks questions and it is up to the writer(s) to formulate answers based on their knowledge of the area. If the person(s) writing the plan finds many times that adequate information is not available it may be necessary to slow down and bring in some help. Just going through the process (and reviewing it periodically) is an extremely important exercise that in itself has numerous benefits to a community that has never thought through these problems.

In order to meet the guidelines of FEMA an integrated approach is required. The Integrated Emergency Management System (IEMS) approach was utilized in developing the manual so that the guide would meet the FEMA guidelines.

Main Topics of the Guide

The guide follows a set of questions that will lead you through the planning process in an orderly and systematic manner. The following questions are the main topics:

- 1) Why are we writing the plan?
- 2) Who will write and put the plan together?
- 3) What area (geographically) will the plan cover?
- 4) What hazards exist?

- 5) What are our capabilities?
- 6) What should be included in the plan?
- 7) What other plans exist?
- 8) Who will up-date the plan?

Each section contains explanatory material that would be used to develop the needed information. The persons writing the plan are led by the questions and also the explanations. Each section explains its importance to the entirety of the plan so that those writing the plan can see how the plan fits together.

Appendix A of the guide includes a list of groups that may be included in the plan and the roles that they may play. This is included to give those writing the plan more direction to the task. Again it is stressed that the list should not be copied and considered a finished plan. The lists included in the guide are to be considered guides or suggestions to move those writing the plan in the proper direction. In other words, the guide helps by holding their hand but does not move the pencil on the paper.

Testing the Guide

The first draft of the guide was mailed to city officials in the 11 cities that were surveyed in the earlier phase of the project. They were then mailed a questionnaire that asked if the guide was easy to follow and if it would be useful in a city the size of theirs.

Mail returns were minimal and so follow-up telephone interviews were conducted. These conversations illuminated areas of misinterpretation and areas that city officials felt were confusing. A second draft was then prepared incorporating comments from the earlier interviews. This draft was then mailed to the same people plus a few others that had been suggested by the first group of respondents. In-person follow-up interviews were conducted. These interviews usually lasted from thirty to sixty minutes and resulted in many productive comments. These comments were then incorporated into the final draft which was used in developing the guide.

This guide has been presented to various groups from small towns and rural areas. The comments from the audience during the presentations indicate that the guide is useful and can be understood. This indicates that the previous testing and rewriting were not in vain. Those in attendance indicated that this guide is superior to other guides available.

It is most effective when the guide is used in conjunction with a training session. A leader meets with local officials or representatives from interested communities. They bring telephone books, maps and any existing emergency plans from their community. At the session, the leader guides the group through the manual.

At the end of the session, usually one day, the representatives will have the outline of a hazardous materials emergency plan. It is up to them to take it back to their communities for additional work and adoption.

Conclusions

In conclusion, the guide that we have written takes into account the needs of rural planning and an understanding of the need for hazardous materials emergency planning. The guide can be followed by any group without additional training or a high level of expertise. These two factors meet our requirements of a guide that can be used by the general public. This is an important step in mitigating the effects of hazardous materials transportation emergencies.

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CHAPTER 5

Conclusions and Recommendations

Validating the Manual

During and after the development of the manual it was presented to various groups around the State of Kansas. In these instances, there was much feedback that was incorporated into the manual. It was found that it would be effective for the person that leads the planning process to be familiar with the emergency planning process. Usually in the small towns this level of expertise is not available. Perhaps it would be good for the State to take the lead and offer to aid in the planning process. This would be difficult at the State level, because to be effective the person would need much contact in the affected city. They would have to travel to the cities and keep in touch. Due to the size of the state and the location of the capital this may be impractical.

Another option is to have training sessions throughout the state for group leaders. Each county

could send representatives to a training session on using the manual and then return to their respective counties ready to proceed with the planning process.

An obstacle that is very real is the manual itself. The State of Kansas publishes a manual that is inadequate. If they were to train people around the state to write an emergency plan, they would use their own manual. An emergency plan written from their manual has limited validity.

Emergency Planning as a Comprehensive Planning Function

During the course of working on this project the writer worked as a planner in two cities in Kansas. In both of them, emergency planning is not a function of the planning department. It is a function of the Police and/or Fire Departments. It would be more effective to have the planning department involved in emergency planning, not as the lead group, but as a consulting group. In most cases, the scope of the Police and Fire Departments is very limited and oftentimes their writing ability leaves much to be desired. The planning department, if adequately staffed, could be more effective in compiling the information gained from the emergency services. This is not to say that the planning department would become the lead in any emergency situation. This would be ludicrous and

dangerous. The Police and Fire Departments have the expertise but are sometimes lacking in the ability to put it into a written document. The emergency plan could then be updated yearly as part of the Master Plan process as required by the State Statutes.

While this manual answers a need there are other approaches that cities could take to lessen the impact of a hazardous materials transportation emergency. One way is in the designation of land uses. Just as we recognize the limitations the environment puts on the use of land we should recognize the limitations that we should place on the use of land to minimize incompatible uses. For example, a factory that requires hazardous materials to be shipped in or out should not be situated such that these materials travel in or near residential uses. While this may seem obvious this principle is not followed in practical application. Gasoline is a very hazardous material and gas stations are often located so that the tank trucks pass through or along the edge of residential neighborhoods. The designation of land use is an integral part of this problem and guidelines that address the concerns of the transportation of hazardous materials should be explored further.

This manual has been reviewed by the Association of Bay Area Governments (ABAG) for possible use in their own planning functions. They received grant money from

DOT to validate the manual and found it to be valid. This adds credibility to the manual because it is being tested in an area far removed from Kansas. This shows that it is not written particularly for midwesterners.

While the manual may be effective for planning, this planning must be accompanied by training of the personnel that will be involved in an incident. This is an important component in the comprehensive emergency planning functions of any small town or rural area.

Another important component in the emergency planning process is a review of procedures after an emergency of "debriefing". This review should point out the deficiencies in the emergency operations so that these can be incorporated into the plan.

In conclusion, the manual developed has been found to be a valid document that can be used in small towns and rural areas. It is most effective when there is a leader involved that is familiar with the emergency planning process but this is not crucial.

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1. State of Kansas, Division of Emergency Preparedness, The Adjutant General's Department, Guidelines for Development: Hazardous Material Contingency Plan, October 1980.
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Report No. DOT-RC-92013

PHASE II FINAL REPORT

MANUAL FOR SMALL TOWNS AND RURAL
AREAS TO DEVELOP A HAZARDOUS MATERIALS
EMERGENCY PLAN; WITH AN EXAMPLE APPLI-
CATION OF THE METHODOLOGY IN DEVEL-
OPING A GENERALIZED EMERGENCY PLAN FOR
RILEY COUNTY, KANSAS



JANUARY 1986

FINAL REPORT

CIVIL ENGINEERING DEPT.
KANSAS STATE UNIVERSITY
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Prepared For

U.S. DEPARTMENT OF TRANSPORTATION
OFFICE OF UNIVERSITY RESEARCH

EXECUTIVE SUMMARY

The enclosed manual was developed as a guide to be used for small towns and rural areas in writing their own Hazardous Materials Emergency Plan. The Guide takes you through the entire process from the initial decision to write a plan to choosing a writer to writing the plan and updating it. Also enclosed is a list of groups that may be included in the plan and the roles that they may play. Suggested detail plan sections are also included.

The manual was used by the author to write a Hazardous Materials Emergency Plan for Riley County, Kansas. This served to test the manual and subsequent revisions were incorporated into this final version. Subsequent to this the Hazardous Materials Emergency Plan was incorporated into the Riley County/Municipal/University Emergency Operations Plan. This was written as part of the requirements of the contract with U.S. DOT. This involved a major re-writing of the Riley County plan which was inoperable. The principles that were used in writing the Hazardous Materials Emergency Plan were adopted for use in the Emergency Operations Plan which covers all types of emergencies that could be expected in Riley County, Kansas.

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INTRODUCTION

Under DOT Contract RC92013 Kansas State University completed a "Community Model for Handling Hazardous Materials Emergencies," an empirical model developed as a practical methodology using data and techniques within the grasp of small town and rural officials. This model was then tested in the "Risk Assessment/Vulnerability Validation Study" under Phase II of the project. In the validation phase the risks associated with the transportation of hazardous materials in small cities were assessed. Out of this grew Phase III of the project.

In Phase III a model was developed for small cities to write their own plan to be used in the event of a hazardous materials incident. This model was then used to write a Hazardous Materials Emergency Plan for Riley County, Kansas which was incorporated into a general disaster plan for Riley County, Kansas. Out of this testing phase, generalized guidelines, "A Guide to Writing Your City's Hazardous Materials Emergency Plan" were developed. This last guide was the major thrust of this last phase and is Chapter 3 of this report.

Riley County, Kansas was chosen as the test site for a variety of reasons. One of the main reasons is that Kansas State University is located in Manhattan which is the county seat of Riley County, Kansas. Another reason is the variety of transportation modes that cross Riley County. Riley County also contains a variety of land

uses and a population that is concentrated in one city--Manhattan. Finally, Riley County had a published emergency plan, albeit outdated, that would serve as a starting point.

The project staff acted as the planners for the Riley County/Municipal/University Emergency Operations Plan. Using information gleaned from the Hazards Analysis, the hazards that affect Riley County were included. These range from fire, to flood, to tornadoes to hazardous materials transportation emergencies. In order to include all of the affected agencies an outline was developed starting with the offices of Public Safety. These offices were then questioned to determine what other agencies they deal with on both a daily basis and on an emergency basis. This started a network of agencies. Each named agency was then questioned as to other agencies they dealt with. Eventually the agencies named are repeated and the process concluded.

The first draft of the plan was sent to all of the agencies named in the plan. A follow-up interview was then conducted. Many of those charged in the plan had constructive comments that were incorporated in the second draft. The second draft was also presented to the affected agencies. Their comments were then included. From this point on, all revisions were made by the staff for clarity and continuity. The final draft was reviewed by the public officials that would be major characters in

a disaster. After they gave final approval, the emergency plan was then considered operational. Telephone call lists, which would be part of an actual plan, would be added to make the plan operational when adopted by Riley County, Kansas.

REVIEW OF MANUALS

In order to develop a model to be used by cities to write their own Hazardous Materials Emergency Plan, various manuals were reviewed.

The State of Kansas publishes its own manual, "Guidelines for Development: Hazardous Material Contingency Plan." (1) This manual was written by the Division of Emergency Preparedness of The Adjutant General's Department. The Introduction to the Guidelines states,

"The purpose of this document is to give an example of the items necessary to develop a useful contingency plan for handling hazardous materials incidents/accidents." (Division of Emergency Preparedness, 1980, Introduction)

This document is basically a fill-in-the-blanks approach to writing a plan. It even goes as far as stating that the word "Model" on the cover should be replaced with the name of the local governmental unit.

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(Rockwell, 1979, p. 1-4)

The guide poses a series of questions which will guide the writer in producing a plan which is unique to their needs. The deficiency in this guide is that it may not give enough guidance to some local officials. One of the premises that is used in this project is that the guide should be useable by officials in small cities and rural

areas. Many of these officials have no formal training in planning and thus may need more guidance than this guide may give. This guide was subsequently published by FEMA as, "Planning Guide and Checklist for Hazardous Materials Contingency Plans" in July 1981. It is commonly referred to as "FEMA 10" (3).

Out of these two approaches a third approach was developed. This guide or manual is not a "fill-in-the-blanks" approach. The guide poses a series of questions to be answered by knowledgeable persons from the community. They are intended to spark discussion among those writing the plan and thus the resulting document will accurately reflect the needs and capabilities of the affected community. While we cannot guarantee that following the guide will result in a Hazardous Materials Emergency Plan that is perfect, following this guide should result in a plan that is suited to the unique needs and capabilities of the particular city or county. In order to meet the guidelines of the Federal Emergency Management Agency (FEMA) an integrated approach is required. The IEMS approach is discussed in the next chapter in this report. It was utilized in developing the manual so that the guide would meet the guidelines.

The first draft of the guide was mailed to city officials in the 11 cities that were surveyed in the earlier Phase of this report. They were then mailed a questionnaire that asked if the guide was easy to follow and would it be useful in a city the size of theirs.

Mail returns were minimal and so follow-up telephone interviews were conducted. These conversations illuminated areas of misinterpretation and areas that city officials felt were confusing. A second draft was then prepared incorporating comments from the earlier interviews. This draft was then mailed to the same people plus a few others that had been suggested by the first groups of respondents. In-person follow-up interviews were conducted. These interviews usually lasted from 30-60 minutes and resulted in many productive comments. These comments were then incorporated into the final draft which was used in developing a Hazardous Materials Contingency Plan for Riley County, Kansas.

REFERENCES

1. Division of Emergency Preparedness. The Adjutant General's Department, Guidelines for Development: Hazardous Materials Contingency Plan, State of Kansas, Topeka, KS. October, 1980.
2. Rockwell International, "Preparing for Environmental Emergencies, A Planning Guide and Checklist (Draft)" Prepared for: Oil and Hazardous Materials Spills Branch. Industrial Environmental Research Laboratory - Cincinnati, U.S. Environmental Management Agency, Newburg Park, CA, August, 1979.
3. Federal Emergency Management Agency and U.S. Environmental Protection Agency, "Planning Guide and Checklist for Hazardous Materials Contingency Plans", Washington, D.C., 1981.

The Integrated Emergency Management System (IEMS) was created by the Federal Emergency Management Agency (FEMA) because an integrated approach is the most effective way to accomplish FEMA's emergency management missions (FEMA, Sept. '83, pg. 3) (1). The goal of the system is:

"develop and maintain a credible emergency management capability nationwide by integrating activities along functional lines at all levels of government and to the fullest extent possible, across all hazards" (FEMA, Sept. '83, pg. 4).

This is an attempt to reduce the number of response plans needed. This will be done by increasing emphasis on developing the common and unique capabilities required to perform specific functions common to all hazards. This is opposite of the philosophy wherein responses are developed for each specific hazard. This is based on the premise that different hazards all have common characteristics and thus the need for common responses.

In order for State and local governments to utilize the IEMS process, three steps must be followed:

- 1) determine the hazards and magnitude of risk;
- 2) assess the existing and required capability with respect to these hazards; and
- 3) establish realistic local and State plans that outline actions for closing the gap between existing and required levels of capability.

(FEMA, Sept. '83, pg. 5). These steps must be followed sequentially in order to be effective. These steps will lead you to the capability shortfall or capability gap. This is the gap between the actions required and the existing capability to supply these actions. This shortfall leads to the preparation of a multi-year development plan. This process is the means of improving capability and not an end in itself.

FEMA designed the IEMS process so that it could be used by jurisdictions that do not have the same hazards or capabilities. FEMA claims that the process is

logical and applicable to all jurisdictions regardless of their size, level of sophistication, potential hazards, or current capabilities. (FEMA, Sept. '83, pg. 7).

In developing the manual it was recognized that various hazards have common responses. For example, both a tornado and a hazardous materials transportations emergency may require disposal of debris. Recognizing this, it is much more efficient and streamlined to write an emergency plan that recognizes these similarities. If these capabilities are present for us in a tornado they should also be available for use in another circumstance. To the contrary, if this capability is not present the community can easily see how many times this capability will be lacking. Also if the standard operating procedure changes for a necessary response it will change in all hazards without re-writing the plan.

REFERENCES

- (1) Federal Emergency Management Agency, CPG 1-100,
Process Overview, September, 1983.

**A GUIDE TO WRITING
YOUR CITY'S
HAZARDOUS MATERIALS EMERGENCY PLAN**

INTRODUCTION

This guide is designed to aid you in writing a Hazardous Materials Emergency Plan. It is not a "fill-in-the-blanks" type of guide. The Plan will be tailored to the needs of your individual community. How will this be accomplished? It will be accomplished by using input from members of the community. The plan will not be formulated by a team of experts who "know what is best for you." While you may refer to experts for information and possibly contract with someone to do the actual writing, ultimately the contents will be what is needed in your community. The plan manual will ask questions and it is up to you to formulate answers based on your knowledge and the capabilities of your community. If you find many times that you do not have adequate information to answer the questions you may want to slow down and bring in some help. Don't just scrap the whole process--it is important. Keep in mind also that just the exercise of going through the process (and reviewing it periodically) is an extremely important exercise that in itself has numerous benefits to a community that has never thought through the problem. You may find that someone else should be in charge and delegate responsibilities to them. You may find that you need a consultant.

If you are not now planning on writing a plan to combat Hazardous Materials Emergencies this guide may still be helpful. It may help you to realize that such a guide is necessary to ensure the safety of the inhabitants of your community. If you feel that you do not need such a plan, spend a few minutes reading through this guide. It may reinforce this idea or it may nudge you to look at your situation more closely. If you presently have a plan review it after you have studied the guide. You may find that it needs major re-working or perhaps only minor alterations.

So that the plan works for your community this guide will cover the following which will be adapted to fit the needs of your community:

This guide will cover the following:

1. Why are we writing the plan?
2. Who will write and put the plan together?
3. What area will the plan cover?
4. What hazards exist?
5. What are our capabilities?
6. What should be included in the plan?
7. What other plans exist?
8. Who will up-date the plan?

Now you are ready to begin. Proceed to Part I.

Part I--WHY ARE WE WRITING A PLAN?

This part will help you to decide why you are writing a Hazardous Materials Emergency Plan and thus the scope of the plan.

- A. Has there recently been an accident/incident in your community which stirred people up and prompted the writing of the plan?
- B. Is it an official mandate from the State or Federal level to write a plan?
- C. Is this part of the over-all long-range planning process in the community?
- D. Is this part of the emergency planning process in the community?

These questions should help you to form in your mind the reason you are writing the plan. You may not be the one actually writing the plan. You may be in charge of seeing that the task is accomplished by someone else. This is all the more reason for knowing why you are doing this planning--this will make it easier to communicate with another party and explain what is to be accomplished.

These questions should also get you thinking about the scope of the plan and how it fits in with the other planning functions. If a previous incident is the instigation of this plan you may be able to apply knowledge gained in combatting the previous incident. This

may have pointed out your strong and weak points. If you are writing the plan because of an official mandate you may not feel that the need is really there and the planning effort may struggle due to lack of support. If this is part of a long-range planning process in the community such as transportation and land use planning you may find that the skill is available for writing the plan but again the push may not be present. The plan may evolve into a nice book which collects dust. If the planning effort is part of the emergency planning process the plan may be successful because it means that there is experience in writing emergency plans such as those for floods or tornadoes. While these plans differ, the process is the same and the author may be familiar with the responses needed to mitigate the emergency.

Now that you have examined why you are writing a Hazardous Materials Emergency Plan it is time to get writing. Proceed to Part II.

PART II--WHO WILL WRITE AND PUT THE PLAN TOGETHER?

This part will help you to decide who shall be assigned the task of actually writing the plan or coordinating the writing of the plan.

- A. Have you been assigned the task? If so, by whom?
- B. Does this person have the legal authority to direct you to do this task? Persons that may have this authority include:
 - Police Chief/Sheriff
 - Fire Chief
 - City Manager
 - Mayor
 - County Civil Preparedness Coordinator
 - County Commissioners
- C. Has someone in the emergency services recently written an emergency plan such as a Standard Operating Manual for emergency services (including fires, tornadoes, etc.)?
- D. Does your city or county have a professional planning staff? These people will probably be involved in land use planning. Have they written a transportation or comprehensive plan?

While you may not see this as emergency planning it is related because the planning process is the same.

- E. Contact the State Department of Emergency Preparedness or the State Civil Defense Department to see if they have persons available to aid your community in writing your plan. The County Emergency Preparedness Coordinator may already be in contact with the State office. This would serve as a good way to find proper person at the State level.
- F. The State Department of Transportation may also have resource persons that can aid you in writing the plan.
- G. Read your State Disaster Manual. This will point out which State office has been charged with emergency planning in your state.
- H. Is there a group or an individual that is a leader and willing to write the plan?
- I. Will you hire a consultant to write the plan?

These questions are aimed to get you to thinking about who is actually qualified to write the plan. If you have been assigned the task based upon your qualifications you are probably ready to go to work and may not need this manual. If you have been assigned to

write the plan and don't feel that you are qualified you may need to do some research to prepare yourself for the task.

If you are in charge of seeing that someone else writes the plan these questions should prompt you to think of likely persons or groups. While we usually speak in terms of one person writing the plan, a group may be just as good or even better. As the saying goes, "Two heads are better than one." But this group cannot get so big that it is unworkable. If a group is to be used, it is best that one person is designated as a Chairman so that there is a contact person and one who is ultimately responsible for decisions concerning the plan.

You may look at present city or county employees who are experienced in planning and are familiar with the community. This may be your best source but you must also look at their other work responsibilities. Will they be able to put in enough time to make the plan successful? Will their other work commitments suffer because of the added load? Can their work be reassigned so that no one person is overloaded?

If you will be using resources from the State level: determine what their aid entails. Will they really examine your community or will they use a prepared plan and just change the name on the cover. The State level may turn out to be a good source of resources rather than a good source of an author. Contact the various State agencies that you have considered earlier.

Look closely at the volunteer groups in your community. Often, these groups with their vast memberships possess talents and skills that go unrecognized.

If you have decided to use a consultant, be aware of what services you are contracting. Will the consultant use a prepackaged plan and change the names and phone numbers where appropriate, or will you get a plan tailored for your community? This guide should help you decide if you need a consultant. If so, it is recommended that you get together a committee of your key people and require that the consultant have close contact with this committee. If the plan is prepared by a consultant, who will keep it up to date? Remember that planning is an ongoing process. A plan that just sits on a shelf and collects dust is more dangerous than no plan at all. Proceed to Part III.

PART III--WHAT AREA WILL THE PLAN COVER?

This part will help you to delineate the scope of the plan. This is important because without the scope being clearly defined you are likely not to cover your area adequately.

- A. Is your community one that relies on the county for many functions such as Police and Fire protection?
- B. Is the majority of the population of the county in one city?
- C. Does one city cover (geographically) most of the county?
- D. Is your community on the edge of the county and/or state?
- E. Do capabilities exist in your community to mitigate a hazardous materials incident without going outside of the city for aid? (If your answer is affirmative, you may not need this manual. You obviously have researched your community or you may be dangerously over-estimating your capabilities.)

In most cases, a Hazardous Materials Emergency Plan that is being written for a small community will need to cover more than the actual town or city. Often, the resources needed are not available in the city and you

must look outside. The county may be the source of many resources and thus a county-wide plan may be indicated. The State may also be a source of resources that will be needed as part of your local plan.

If the community is on a border of two or more counties and/or states, the plan should reflect these jurisdictions. While this will make writing the plan more difficult, now is the time to iron out these difficulties rather than waiting for an emergency. Emergencies do not automatically stop at city/county limits; your plan should not either.

Now that you've got your area delineated and your writers ready to write, it is time to determine what hazards exist. Proceed to Part IV.

PART IV--WHAT HAZARDS EXIST?

Now that you've decided who will write the plan and what area it will cover, you need to determine what hazards exist in your community.

- A. Has a hazards analysis been done for your area recently?
- B. Has an incident pointed out a hazard or possible hazard?
- C. Does the Police or Fire Department have an inventory of sites that store or use hazardous materials?

If a hazards analysis has been completed this should point out what hazards exist and what parts of your planning area could be affected. If no hazards analysis has been completed it is a good idea to do one now. There are various guides available. Look for one that is designed for small cities and rural areas such as "A Community Model for Handling Hazardous Materials Transportation Emergencies" by E. R. Russell et al. (1)

If an incident is prompting this planning effort look at the records of the incident. This will show the causes of the incident which can be translated into hazards. Look at other similar hazards that exist. In order to get a comprehensive view of hazards in your community you may want to do a hazards analysis.

If the Police or Fire Department keep an up-to-date list of those storing and using hazardous materials this will be a good start. From this list you can analyze the movement of these substances within your planning area. This should also be supplemented with a hazards analysis.

Now that the hazards which exist are inventoried it is time to document your capabilities. Proceed to Part V.

PART V--WHAT ARE OUR CAPABILITIES?

Now that the scope of the plan has been determined and the hazards that exist in the community have been inventoried, it is time to determine how to mitigate the effects of a hazardous materials incident. This involves finding out what capabilities exist and what capabilities are missing in our community.

Steps to determine what capabilities exist and what capabilities are missing in your community.

1. Examine the history of previous incidents.

This is important because these reports will point out what types of emergencies your community has been involved in and how they were handled. Do not rely on just the knowledge of the members of the group writing the plan. You may not be familiar with all incidents and your recollections may not be accurate. Contact as many sources as possible such as:

- Newspaper files

- Local governmental reports

- Weather Bureau

- Corps of Engineers

- Police/Sheriff Departments

- American Red Cross

- Other volunteer disaster agencies

- Knowledgeable persons

2. As these groups are contacted, ask the following:
 - A. What are your day-to-day responsibilities?
 - B. What additional tasks do you take on in an emergency?
 - C. How are you called into action in an emergency?
 - D. What other groups do you work with on a daily and/or emergency basis?
 - E. What incidents have you been involved with in the last 10 years?
 - F. What was your role?
 - G. How were you called to help?
 - H. Are you an official group, mandated by law to aid in the event of an emergency?
 - I. What other groups did you interact with at the time of the emergency?
 - J. What equipment did you use at the time of the incident?
 - K. Did you have all of the equipment available that you needed?
 - L. If your group borrowed equipment, was it obtained through a pre-incident agreement or was it an informal arrangement?
 - M. Are there other groups in the community that should have been involved and were not?

- N. Did the incident require that State or Federal aid be called? If so, how were they activated and what role did they fill?

In reviewing the answers from the various groups, you may find some information conflicting or confusing. This may be due to different perspectives on the events that transpired. In order to clarify the information that has been collected, it needs to be organized in some way. Separate the information by incidents. Each incident will then have information relating how the various groups interrelated and how the incident was handled. Look for the following information:

- A. What type of incident was involved?
- B. Was it successfully mitigated?
- C. Brief synopsis of events leading up to the incident.
- D. Which agency was called in first?
- E. Other agencies involved?
- F. In what capacities did they operate?
- G. Who was in charge?
- H. Was equipment available that was needed?
- I. Was there a post-incident meeting to discuss the incident? If so, what were the conclusions?

These answers should not be judgmental, pointing to any group that may not have operated efficiently. They are to gather the facts.

Analyzing the responses should point out deficiencies. Often these deficiencies can be met at the State or Federal level. If you are writing a plan for a rural county you may have to look outside of the county for many of the needed capabilities. This should not be considered as a weakness. Instead, it should be recognized and arrangements made to deal with the deficiency. It may not be cost effective to invest in all of the equipment needed if your hazards index has shown only a slight hazard exists. Proceed to Part VI.

PART VI--WHAT SHOULD BE INCLUDED IN THE PLAN?

This part is slightly different in approach from the other parts. Instead of being made up totally of questions to prompt you, it will contain a list of suggested sections for the Hazardous Materials Emergency Plan. It is up to you and your knowledge of the community to pick which sections are applicable and add other sections that may apply to your area. For example, if your area contains an endangered species that lives in its waterways you may want to expand that part pertaining to spill containment so that the chance of pollution is minimized.

- A. Do you have a firm outline of what needs to be contained in your plan?
- B. Do you feel that you have a fairly good idea what to include but think the list might jog you to think of other possibilities? If so, use the list for reference.
- C. Do you feel that you are somewhat lost in the process? If this is your situation, you may need to redefine your goals or reassign the task of writing the plan. If you feel that you are getting by fairly well, use the list as a reference.

No matter how experienced you are, the list may suggest something that you've overlooked. It is a suggested list of actions to be included and should be modified to fit your individual needs.

SUGGESTED DETAILED PLAN SECTIONS

Emergency Response Notification

Record of Changes or Amendments

Letter of Promulgation

Foreward/Preface

Acknowledgements

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Adapted from: Preparing for Environmental Emergencies, A
Planning Guide and Checklist (Draft) by Rockwell Interna-
tional, August 1979.

PART VII--WHAT OTHER PLANS EXIST?

This is important because the plan you are writing may need to interface with these other plans.

- A. What emergency plans exist for surrounding cities and counties?
- B. What statewide plans exist?
- C. What Federal plans exist?
- D. What other plans at the local level use some of the same capabilities?

If no one involved in writing your plan is familiar with these other plans search them out. You might be able to get assistance from the Federal Emergency Management Agency (FEMA) or your State Department of Emergency Preparedness. Once it is determined that another plan covers your area determine if you are overlapping or leaving gaps. The State may have a statewide emergency plan but it usually does not get into specifics at the local level. This is where your local plan fits in. Your plan will tell those at the local level how to respond in a hazardous materials emergency.

PART VIII--WHO WILL UPDATE THE PLAN?

Planning is not a static process, it is a continuing process. A plan may be written that covers all of the possible emergencies, is clear and concise, but is worthless unless it is kept up to date. This may include checking phone numbers and personnel at regular intervals all the way up to drills. Either way, it is important to designate an agency to keep the plan up to date.

- A. Is the agency designated to update the plan a regular city or county office?
- B. Was this office in on writing the plan?
- C. Does that office have personnel that can keep the plan up to date?
- D. Is it willing to accept the task?

If an agency or department is tasked with keeping the plan up to date, it must be capable of this task. It must have personnel that can do the updating and it must be a permanent department or agency. Updating should be made part of its standard operations. Otherwise, it will be difficult to keep the plan up to date and this could prove to be dangerous in an emergency when the plan is needed.

APPENDIX A--GROUPS TO BE INCLUDED IN THE PLAN AND THE
ROLES THEY MAY PLAY

POLICE

Communications

Establish On-Scene Command Post

Evacuation--determine when and extent

Notify citizens through news media of evacuation, when
needed

Collect weather information

Crowd control

Traffic control and rerouting, as necessary

Notify resources i.e. equipment operators

Notify Red Cross when mass care is needed

Notify Red Cross of the number of persons to be placed in
shelters

Secure evacuated areas

FIRE

Communications

Evacuation Assistance

Fire Control

Coordinate containment of spills

Fire suppression

EMERGENCY PREPAREDNESS

Communications

Evacuation

Notify citizen of evacuation

Monitor NOAA weather radio

Relay weather information to on-scene command post

PUBLIC OFFICIALS--MAYOR, CITY AND COUNTY COMMISSIONERS

Declare state of emergency

Authorize expenditures of city/county funds

HIGHWAY PATROL

Secure Site

Serve as temporary command post

AMBULANCE

Communications between hospital and police

Triage

Emergency Care

Coordinate removal of victims to hospitals

Evacuation of nursing homes, hospitals, and patient
records and medicines

Assist in rescue in search and rescue

HOSPITALS

Emergency Care

Morgue Facilities

PUBLIC WORKS

Provide information on roads and equipment available
Transport water if needed
Assist in crowd control--barricades and traffic signs
Contain spill through use of heavy equipment
Maintain list of equipment operators

AMATEUR RADIO CLUBS

Provide communications

RED CROSS

Coordinate triage with Ambulance
Provide emergency medical supplies
Set up shelters for displaced persons
Assist in search and rescue
Run shelters for displaced persons
Provide aid for displaced persons
Make arrangements for use of temporary shelters
Determine, with Police Dept., when shelters will cease operation

SCHOOLS

Provide buses for evacuation
Notify schools of evacuation
Provide schools for shelters

WEATHER BUREAU

Provide up-to-the-minute weather information

DEPARTMENT OF HEALTH AND ENVIRONMENT

Provide and man equipment for radiological monitoring

Relay results to Police

CITY AND COUNTY HEALTH DEPARTMENTS

Monitor long range effects on population and site

Provide information on materials

CHEMTREC

Provide information on chemicals on an emergency basis

through toll free telephone number

FOUR WHEEL DRIVE CLUBS

Provide vehicles and manpower in search and rescue

HUMANE SOCIETY

Provide food and water to animals left in evacuated areas

NOXIOUS WEEDS DEPARTMENT

Provide information on pesticides

NEWS MEDIA

Evacuation information

Weather information

Notify public of location of shelters

OHMTADS-EPA OIL AND HAZARDOUS MATERIALS TECHNICAL
ASSISTANCE DATA SYSTEMS

Provide information on identity, hazards, or action to be
taken

On-line computer available

CHLOREP-CHLORINE EMERGENCY PLAN

Respond to scene with trained personnel if required

Provide information on identity, hazards, or action to be
taken

Refer to knowledgeable contact

CHRIS--COAST GUARD CHEMICAL HAZARDS RESPONSE INFORMATION
SYSTEM

Provide information on identity, hazards, or action to be
taken

On-line computer available

EPA ERT-ENVIRONMENTAL RESPONSE TEAM

Respond to scene with trained personnel if required

Provide information on identity, hazards, or action to be
taken

CHECK YOUR LOCAL PHONE BOOK FOR OTHER GROUPS

REFERENCES

1. E. R. Russell, et al., "A Community Model for Handling Hazardous Materials Transportation Emergencies," U. S. Department of Transportation, Prepared for: Office of University Research, October 1981.

**Riley County
Municipal
University
Emergency Operations Plan**

INTRODUCTION

Riley County, Kansas can be affected by a multitude of disasters, both natural and technological. These range from fires which happen with some regularity to tornadoes which are seasonal to hazardous materials spills which happen irregularly and can be catastrophic.

Many agencies on both the city and county level have responsibilities in dealing with emergencies. The Riley County Fire Department, Manhattan Fire Department, Riley County Police Department and Riley County Ambulance have emergency functions as part of their standard operations. Other City and County departments such as Public Works can add functions in an emergency so that the effects of the disaster are made less severe or so that normal functions are returned as soon as possible.

In formulating this disaster plan it was essential that the types of disasters that could affect Manhattan are included. In order to accurately assess the nature and extent of these emergencies a Hazards Analysis was undertaken. This included reviewing historical records as well as a physical inventory.

The second step, once the potential disasters were outlined, was to assess the required capabilities needed to deal with these disasters. This was assessed through questionnaires and follow-up interviews. Various groups were questioned about their normal operations and their

responsibilities in a disaster. Each group was asked about other groups that they worked with. If these groups had not been previously contacted, they were added to the list. This ensured that all of the effected groups would be included in the plan.

From these assessed capabilities and roles an emergency plan was developed. The departments and groups were assigned in reference to their capabilities to the various functions. The document was then sent to the groups tasked in the plan for review and comment. These comments resulted in changes so that the plan would be more accurate and workable.

The telephone lists that are part of the plan must be updated on a regular basis. A 60 or 90 day interval is recommended. It is essential that these telephone lists be kept up to date so that connections can be made during an actual disaster.

Table top exercises or drills are recommended in order to test the plan. These can be quite effective in determining if the plan is useable in an actual emergency. More importantly, after these drills a critique of the performance of those involved is required. In .PA this way it is possible to assess the effectiveness of the plan and it can be modified in a timely manner.

SIGNATURES OF CONCURRENCE TO THE RILEY COUNTY/MUNICIPAL/
UNIVERSITY EMERGENCY OPERATIONS PLAN

Division of Emergency
Preparedness--The Adjutant
General's Department

Mayor of Manhattan

Mahlon G. Weed (Date)
Deputy Director
Division of Emergency
Preparedness

Mayor of Ogden

Riley County Commissioners

Mayor of Randolph

Chairman, Board of
Commissioners
Rosalys Rieger (Date)

Mayor of Riley

County Commissioner
Marjorie J. Morse (Date)

Manhattan City Clerk

County Commissioner
Darrell Westervelt (Date)

Riley County Clerk

Riley County Emergency
Preparedness Director

Del Petty (Date)

Army Corps of Engineers

Kansas State University

St. Mary's Hospital

Riley County Ambulance Service

U.S.D.

Mayor of Leondardville

Superintendent

Riley County Noxious
Weed Dept.

Riley County Police Department

Manhattan Fire Dept.

Riley County Public Works Dept.

Kansas State Parks
Authority

Manhattan Public Works Dept.

Manhattan Parks Dept.

Red Cross

Kansas Dept. of Health
and Environment

Riley County Humane Society

Kansas Fish and Game
Commission

Kansas National Guard

Manhattan City Manager

REACT

Manhattan Weather Watch

Riley County/Manhattan
Health Dept.

Riley County Highway
Dept.

DEBRIS AND TIMBER REMOVAL AND DISPOSAL

Debris and Timber Removal may be needed in the aftermath of a tornado, severe storm, or in the event of a hazardous materials incident. If the debris is the result of a tornado or severe storm it can be handled in the same manner as other debris. If the debris is from a hazardous materials incident it must be handled in a sensitive manner. In this case the Public Works Department will act under the guideline of the Kansas Department of Health and Environment.

CLEANUP OF DEBRIS

PRIMARY RESPONSIBILITY

*City and County Public Works Departments

If hazardous materials are involved--

Provide assistance to the shipper in cleanup operations.

Act under the guidance of the Kansas Department of Health and Environment.

If non-hazardous materials are involved--

Dispose of in usual, approved manner.

SUPPORT GROUPS

*Fire Department

Assist in coordination of cleanup operations.

Riley County Police Department

Assist in coordination of cleanup operations.

DISPOSAL OF DEBRIS

PRIMARY RESPONSIBILITY

*Emergency Preparedness Coordinator

Cooperate with the Kansas Department of Health and Environment for disposal of hazardous materials and waste.

SUPPORT GROUPS

*Riley County Police Department

DISPOSAL OF DEBRIS CONT'D

SUPPORT GROUPS

Maintain traffic control.

Assist in disposal.

*City and County Public Works Departments

Supply equipment and manpower as needed.

EMERGENCY MASS CARE

Emergency Mass Care may be needed in response to many emergencies such as: extensive fires, tornadoes, snow storms, and emergencies requiring evacuation of areas. Prior to the actual need a plan must be formulated designating various sites as mass care sites. These can include: church halls, schools, and public building. In choosing sites look at access, kitchen and restroom facilities, facilities for sleeping, etc. The Red Cross will have primary responsibility in designating these places. In the event that mass care is needed the Red Cross will be in charge of operation. Prior to use of any facility an agreement must be made between the owners, governmental entities and the Red Cross.

Riley County Police Department will notify the Red Cross when mass care is needed. They will inform them of the location and approximate number of persons affected. The Red Cross will determine the location(s) that will be used. The Red Cross will then notify the owners that the area is needed. The Red Cross will notify the Riley County Police Department of the location of the shelter. The location will be broadcast via radio and television.

The Red Cross will be in charge of the actual operation of the shelter.

The Red Cross in conjunction with the Riley County Police Department will determine when the shelter will cease operation.

EMERGENCY MEDICAL SERVICES

PRIMARY RESPONSIBILITY

*Riley County Ambulance Service

Direct triage.

Coordinate efforts with hospitals.

Provide emergency care.

SUPPORT GROUPS

*Riley County Police Department

Assist as directed by the Riley County Ambulance Service.

*Red Cross

Coordinate triage with Riley County Ambulance Service and provide medical supplies.

EVACUATION

PRIMARY RESPONSIBILITY

*Riley County Police Department

Coordinate evacuation operations.

Provide notification to citizens of impending evacuation.

Provide evacuation information to news media.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist in evacuation operations.

EVACUATION CONT'D

SUPPORT GROUPS

Provide notification of evacuation to citizens through means available, including door-to-door warning by volunteers, public address system, etc.

*Riley County Ambulance Service

Provide evacuation when needed according to established priorities.

Coordinate efforts with hospitals and nursing homes, as needed.

Coordinate removal of patient records and medicines at time of patient evacuation.

*Fire Department

Assist in evacuation.

*Superintendent of Schools

Provide buses for transportation of evacuees.

Notify schools that may need to be evacuated.

Provide school buildings to be used as shelters for displaced persons.

*Red Cross

Set up shelters for displaced persons.

*News Media

Transmit evacuation information as directed by Riley County Police Dept.

ESTABLISH SHELTERS

PRIMARY RESPONSIBILITY

*Red Cross

Notify owners of shelters that they will be used.

Activate shelters.

Provide staffing for shelters.

SUPPORT GROUPS

*Riley County Police Department

Coordinate with Red Cross to establish shelters.

Notify Red Cross of the number of persons to be housed and duration.

*News Media

Notify public of location of shelters.

EVACUATION AND TRANSPORTATION

Evacuation and transportation is needed in many situations such as major fires or in the aftermath of a tornado. It is often a reaction to an emergency that leaves an area uninhabitable either temporarily or permanently. Evacuation can be used as a preventative measure in order to protect the inhabitants of an area.

The Riley County Police Department will have the primary responsibility in an evacuation. They will decide when to activate an evacuation and the extent of the evacuation.

EVACUATION

PRIMARY RESPONSIBILITY

*Riley County Police Department

Coordinate evacuation operations.

Provide notification to citizens of impending evacuation.

Supply security to the evacuated areas.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist in evacuation operations.

Provide notification of evacuation to citizens through means available, including door-to-door warning by volunteers, public address system, etc.

Provide evacuation information to news media.

*Riley County Ambulance Service

Provide evacuation when needed according to established priorities.

Coordinate efforts with hospitals and nursing homes, as needed.

Coordinate removal of patient records and medicines at time of patient evacuation.

*Fire Department

Assist in evacuation.

*Superintendent of Schools

Provide buses for transportation of evacuees.

EVACUATION CONT'D

SUPPORT GROUPS

Notify schools that may need to be evacuated.

Provide school buildings to be used as shelters for displaced persons.

*Red Cross

Establish shelters for displaced persons.

*Riley County Humane Society

If evacuation is of sufficient duration to warrant, the Humane Society will be charged with the task of providing food and water to animals left in the evacuated areas.

FIRE SERVICES

Fires happen with regularity in Riley County. Most fires are routine calls involving the Manhattan Fire Department or Riley County Rural Fire Departments and the Riley County Police Department. At times, a fire may become major--a catastrophic occurrence. Grass fires can cover large areas very quickly affecting both humans and animals causing extensive damage. Fires resulting from hazardous materials must be handled in a sensitive manner due to the nature of the substances.

ALERT THE FOLLOWING

- *Riley County Police Dept. (if call is received by another department)
- *Manhattan Fire Dept. (if in Manhattan or Manhattan Township)
- *Riley County Rural Fire Departments (if applicable)
- *Riley County Emergency Preparedness Coordinator

ESTABLISH ON-SCENE COMMAND POST

PRIMARY RESPONSIBILITY

- *Riley County Police Department

Provide communications to all agencies.

Establish on-scene command post in specially equipped communications van.

SUPPORT GROUPS

- *First vehicle on-scene with communications capabilities will become temporary Command Post.

FIRE SUPPRESSION AND PREVENTION

PRIMARY RESPONSIBILITY

- *Fire Department

Responsible for fire control.

SUPPORT GROUPS

- *Riley County Police Department

Assist Fire Department.

FIRE SUPPRESSION AND PREVENTION CONT'D

SUPPORT GROUPS

*County and City Public Works Departments

Transport water to the site if needed.

Assist in evacuation and crowd control.

*National Guard

Can supply manpower and equipment.

PUBLIC SAFETY

PRIMARY RESPONSIBILITY

*Riley County Police Department

Relay information to Emergency Operating Center.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist in collection of data at scene.

Coordinate information from volunteers.

Coordinate information from professionals.

*Riley County Ambulance Service

Supervise triage.

Designate and utilize temporary morgue.

*REACT

Assist as directed by Riley County Police
Department.

COMMUNICATIONS

PRIMARY RESPONSIBILITY

*Riley County Police Department

Communicate with other law enforcement agencies and Kansas Highway Patrol.

Provide communications to Emergency Operating Center from On-Scene Command Post and vice versa.

Provide communications to local agencies and volunteer groups.

Provide other communications as needed.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Provide communication to Kansas Division of Emergency Preparedness.

Provide other communication as needed.

*Riley County Ambulance

Provide communications to hospitals and Police Departments concerning victims.

*County and City Public Works Departments

Provide information on roads and equipment as requested.

*Fire Department

Provide communications for coordination of fire operations.

COMMUNICATIONS CONT'D

SUPPORT GROUPS

Communicate with other fire departments to request aid as needed.

*REACT

Assist other departments as needed.

TRAFFIC CONTROL

PRIMARY RESPONSIBILITY

*Riley County Police Department

Provide traffic control, regulation.

Secure the area.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist with traffic control.

Coordinate with Police Department when rerouting of traffic is needed.

Provide volunteer manpower to help secure the scene, if needed.

*County and City Public Works Departments

Provide traffic signs and barricades.

*REACT

Assist as requested.

EVACUATION

PRIMARY RESPONSIBILITY

*Riley County Police Department

Coordinate evacuation operations.

Provide notification to citizens of impending evacuation.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist in evacuation operations.

Provide notification of evacuation to citizens through means available, including door-to-door warning by volunteers, public address system, etc.

Provide evacuation information to news media.

*Riley County Ambulance Service

Provide evacuation when needed according to established priorities.

Coordinate efforts with hospitals and nursing homes, as needed.

Coordinate removal of patient records and medicines at time of patient evacuation.

*Fire Department

Assist in evacuation.

*Superintendent of Schools

Provide buses for transportation of evacuees.

Notify schools that may need to be evacuated.

EVACUATION CONT'D

SUPPORT GROUPS

Provide school buildings to be used as shelters for displaced persons.

*Red Cross

Set up shelters for displaced persons.

*News Media

Transmit evacuation information as directed by the Riley County Police Department.

EMERGENCY MEDICAL SERVICES

PRIMARY RESPONSIBILITY

*Riley County Ambulance Service

Direct triage.

Coordinate efforts with hospitals.

Provide emergency care.

SUPPORT GROUPS

*Riley County Police Department

Assist as needed.

*Red Cross

Provide nursing care and medical supplies in shelters.

PUBLIC INFORMATION

PRIMARY RESPONSIBILITY

*Manhattan Fire Department

Provide information to news media, including radio, TV, Cable TV, and newspapers.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist in providing information.

FLOODS

Floods can happen suddenly, the result of large amounts of rain or the failure of a dam. They can also result from the saturation of the land due to long periods of rain or melting snow. The best means of protection from floods is prevention. Preventative measures can include the enactment of flood plain zoning which limits development in the flood plain.

A flood may require Evacuation, Search and Rescue, and Sheltering of Displaced Persons. Riley County Police Department will have the primary responsibility in the event of a flood.

ALERT THE FOLLOWING: (Phone numbers in Table 1)

*Riley County Police Department (if call is received by another dept.)

*Manhattan Fire Department (if in Manhattan or Manhattan Township)

*Riley County Emergency Preparedness Coordinator

ESTABLISH ON-SCENE COMMAND POST

PRIMARY RESPONSIBILITY

*Riley County Police Department

Provide communications to all agencies.

SUPPORT GROUPS

First vehicle on the scene with communications capabilities will become temporary Command Post until permanent Command Post is established.

COMMUNICATIONS

PRIMARY RESPONSIBILITY

*Riley County Police Department

Communicate with other law enforcement agencies and Kansas Highway Patrol.

Provide communications to Emergency Operating Center from On-Scene Command Post and vice versa.

Provide communications to local agencies and volunteer groups.

COMMUNICATIONS CONT'D

PRIMARY RESPONSIBILITY

Provide other communications as needed.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Provide communications to Kansas Division of Emergency Preparedness.

Provide other communication as needed.

*Riley County Ambulance Service

Provide communications to hospitals and Police Departments concerning victims.

Notify nursing homes as needed.

*County and City Public Works Departments

Provide information on roads and equipment.

*Fire Department

Provide communication for coordination of fire operations.

Communicate with other Fire Departments to request aid as needed.

*REACT

Assist other departments as needed.

EMERGENCY MEDICAL SERVICES

PRIMARY RESPONSIBILITY

*Riley County Ambulance Service

EMERGENCY MEDICAL SERVICES CONT'D

PRIMARY RESPONSIBILITY

Direct triage.

Coordinate efforts with hospitals.

Provide emergency care.

*Riley County Police Department

Assist as directed by Riley County Ambulance Service.

*Red Cross

Coordinate triage with Riley County Ambulance Service and provide medical supplies.

EVACUATION

PRIMARY RESPONSIBILITIES

*Riley County Police Department

Coordinate evacuation operations.

Provide notification to citizens of impending evacuation.

Provide evacuation information to News Media.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist in evacuation operations.

Provide notification of evacuation to citizens through means available, including door-to-door warning by volunteers, public address system, etc.

EVACUATION CONT'D

SUPPORT GROUPS

*Riley County Ambulance Service

Provide evacuation when needed according to established priorities.

Coordinate efforts with hospitals and nursing homes, as needed.

Coordinate removal of patient records and medicines at time of patient evacuation.

*Fire Department

Assist in evacuation.

*Superintendent of Schools

Provide buses for transportation of evacuees.

Notify schools that may need to be evacuated.

Provide school buildings to be used as shelters for displaced persons.

*Red Cross

Set up shelters for displaced persons.

*News Media

Transmit evacuation information as directed by the Riley County Police Department.

WEATHER INFORMATION

PRIMARY RESPONSIBILITY

*Emergency Preparedness Coordinator

WEATHER INFORMATION CONT'D

PRIMARY RESPONSIBILITY

Monitor NOAA Weather Radio.

Contact Weather Bureau for updated information and relay to On-Scene Command Post.

SUPPORT GROUPS

*Riley County Police Department

Assist in securing weather information.

*Manhattan Weather Watch

Collect weather information and relay to On-Scene Command Post.

*KSU Physical Plant

Sound alert as directed.

*Corps of Engineers

Notify persons in park area.

Relay weather information to Command Post.

*Kansas State Parks Authority

Notify persons in park area.

Relay weather information to Command Post.

SEARCH AND RESCUE

PRIMARY RESPONSIBILITY

*Emergency Preparedness Coordinator

Coordinate search for victims.

SEARCH AND RESCUE CONT'D

SUPPORT GROUPS

*Riley County Ambulance

Assist in rescue operations.

*Riley County Police Department

Assist in coordination of search.

*Fire Department

Provide equipment as needed for rescue procedures.

PUBLIC INFORMATION

PRIMARY RESPONSIBILITY

*Riley County Police Department

Provide information to news media, including radio, TV, Cable TV, and newspapers.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist in providing information to Riley County Police Department.

*Fire Department

Assist in providing information to Riley County Police Department.

TRAFFIC CONTROL

PRIMARY RESPONSIBILITY

*Riley County Police Department

TRAFFIC CONTROL CONT'D

PRIMARY RESPONSIBILITY

Provide traffic control, regulations, and rerouting of affected area and for evacuation.

. SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist with traffic control.

Coordinate with Police Dept. when rerouting of traffic is needed.

Provide volunteer manpower to help secure the scene, if needed.

*County and City Public Works Departments

Provide traffic signs and barricades.

CLEANUP OF DEBRIS

PRIMARY RESPONSIBILITY

*City and County Public Works Departments

Dispose of debris in a safe and approved manner.

Act under the guidance of the Kansas Department of Health and Environment.

*Fire Department

Assist in cleanup operations.

*Riley County Police Department

Assist in cleanup operations.

DISPOSAL OF DEBRIS

PRIMARY RESPONSIBILITY

*Emergency Preparedness Coordinator

Cooperate with the Kansas Department of Health and Environment for disposal of hazardous materials and waste.

SUPPORT GROUPS

*Riley County Police Department

Maintain traffic control.

Assist in disposal.

*City and County Public Works Departments

Assist in disposal.

HAZARDOUS MATERIALS INCIDENTS

Any city or rural area may be exposed to danger in an accident involving transportation of hazardous materials. This includes materials transported by rail, highway, waterways, pipelines and airways. These accidents fall into the categories of toxic release, explosion, acute fire, and corrosion. To offset and handle these dangers, governmental bodies must be able to respond quickly and efficiently in the event of an accident/incident.

Riley County, Kansas has formulated a contingency plan for dealing with transportation of hazardous materials incidents/accidents. This plan involves many agencies, both public and private. Therefore, the cooperation of all involved is very important for the success of the plan. The Riley County Department of Emergency Preparedness will serve as the lead agency in the event of an emergency. As each emergency differs and the response needed differs, the Emergency Preparedness Coordinator may want to designate another agency as the lead agency.

The plan is divided into sections. The call reporting an incident/accident will normally be received by the 911 center. The 911 operator will gather pertinent information and alert the needed agencies. As soon as the first vehicle with communications capabilities arrives on the scene this vehicle will become the On-

Scene Command Post and the agency involved will become the lead agency until the Emergency Preparedness Coordinator arrives. The lead agency will determine what agencies need to be notified and see to their notification. The On-Scene Coordinator will report to the proper authority and keep them informed. Support agencies will be utilized as the situation warrants.

In the following sections are actions that should be taken in order to deal with a transportation of hazardous material incident/accident. The tasks are to be considered guidelines and not a definitive list of tasks and agencies. Due to the unpredictable nature of incidents/accidents duties and agencies may be rearranged and supplemented.

The On-Scene Coordinator in conjunction with public officials will determine when to activate the Emergency Operating Center and notify the proper persons. A State of Local Disaster Emergency will be declared by the County Commissioners or by the mayor of the city involved on the recommendation of the On-Scene Coordinator.

INITIAL RESPONSE

Calls related to a hazardous materials incident will normally be received by the Riley County Police Department Communications Center. If possible the following information should be obtained: (*most important information); other information may be gathered by On-Scene Coordinator.

- *a. Caller's name, address, and phone number from which call is being made.
- *b. Location or address of the hazardous materials incident.
- c. Name of shipper of materials.
- d. Type of substance or material, if known.
- *e. Any visible leak--liquid or gas.
- f. Time of occurrence.
- g. Estimated number of injuries or deaths (if applicable).
- h. Property damaged or destroyed (if applicable).
- i. Source of caller's information.

911 OPERATOR WILL ALERT THE FOLLOWING: (Phone numbers in Table 1)

*Riley County Police Department (if call is received by another dept.)

911 OPERATOR WILL ALERT THE FOLLOWING: CONT'D

*Manhattan Fire Department (if in Manhattan or Manhattan Township

*Riley County Rural Fire Departments (if applicable)

*See Tables 1 and 3 for list of other agencies that may be needed as directed by the On-Scene Coordinator.

ESTABLISH ON-SCENE COMMAND POST

PRIMARY RESPONSIBILITY

*Riley County Police Department

Provide communication to all agencies.

SUPPORT GROUPS

First vehicle on the scene with communications capabilities will become temporary Command Post until permanent Command Post is established.

FIRE SUPPRESSION AND PREVENTION

PRIMARY RESPONSIBILITY

*Fire Department

Responsible for fire control.

SUPPORT GROUPS

*Riley County Police Department

Assist Fire Department.

Crowd control and evacuation.

FIRE SUPPRESSION AND PREVENTION CONT'D

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist Fire Department.

*County and City Public Works Departments

Transport water to the site if needed.

Assist in evacuation and crowd control.

*County Noxious Weed Department

Provide information on pesticides.

*Manhattan Parks Department

Provide information on licensed pesticide applicators.

PUBLIC SAFETY

PRIMARY RESPONSIBILITY

*Riley County Police Department

Locate driver/conductor.

If not located--contact carrier to get information concerning the vehicle and material being transported.

Relay information to Emergency Operating Center.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist in collection of data at scene.

Coordinate information from volunteers.

PUBLIC SAFETY CONT'D

SUPPORT GROUPS

Coordinate information from professionals.

*Riley County Ambulance

Supervise triage--designate and utilize temporary morgue.

*REACT

Assist as directed.

SEARCH AND RESCUE

PRIMARY RESPONSIBILITY

*Emergency Preparedness Coordinator

Coordinate search for victims.

SUPPORT GROUPS

*Riley County Ambulance Service

Assist in rescue operations.

*Riley County Police Department

Assist in coordination of search.

*Fire Department

Provide warning of danger to rescue personnel.

Provide equipment as needed for rescue procedures.

Assist with coordination of search.

*Red Cross

Assist in search and rescue operations.

SEARCH AND RESCUE CONT'D

SUPPORT GROUPS

*REACT

Assist in search and rescue operations.

COMMUNICATIONS

PRIMARY RESPONSIBILITY

*Riley County Police Department

Communicate with other law enforcement agencies and Kansas Highway Patrol.

Provide communication to Emergency Operating Center from On-Scene Command Post and vice versa.

Provide communications to local agencies and volunteer groups.

Provide other communication as needed.

*Emergency Preparedness Coordinator

Provide communications to Kansas Division of Emergency Preparedness.

Provide other communications as needed.

*Riley County Ambulance

Provide communication to hospitals and Police Departments concerning victims.

*County and City Public Works Departments

Provide information on roads and equipment as needed.

COMMUNICATIONS CONT'D

PRIMARY RESPONSIBILITY

*Fire Department

Provide communications for coordination of fire operations.

Communicate with other fire departments to request aid as needed.

*REACT

Assist other departments as needed.

TRAFFIC CONTROL

PRIMARY RESPONSIBILITY

*Riley County Police Department

Provide traffic control, regulation, and rerouting.

Secure the area.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist with traffic control.

Coordinate with Police Dept. when rerouting of traffic is needed.

Determine other possible routes through information secured by volunteer aerial observers.

Provide volunteer manpower to help secure the scene, if needed.

TRAFFIC CONTROL CONT'D

SUPPORT GROUPS

*County and City Public Works Departments

Provide traffic signs and barricades.

EVACUATION

PRIMARY RESPONSIBILITY

*Riley County Police Department

Coordinate evacuation operations.

Provide notification to citizens of impending evacuation.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist in evacuation operations.

Provide notification of evacuation to citizens through means available, including door-to-door warning by volunteers, public address system, etc.

Provide evacuation information to news media.

*Riley County Ambulance Service

Provide evacuation when needed according to established priorities.

Coordinate efforts with hospitals and nursing homes, as needed.

Coordinate removal of patient records and medicines at time of patient evacuation.

EVACUATION CONT'D

SUPPORT GROUPS

*Fire Department

Assist in evacuation.

*Superintendent of Schools

Provide buses for transportation of evacuees.

Notify schools that may need to be evacuated.

Provide school buildings to be used as shelters for displaced persons.

*Red Cross

Set up shelters for displaced persons.

*News Media

Transmit evacuation information as directed by the Riley County Police Department.

*Corps of Engineers

Notify persons in park area of evacuation.

*Kansas State Parks Department

Notify persons in park area of evacuation.

EMERGENCY MEDICAL SERVICES

PRIMARY RESPONSIBILITY

*Riley County Ambulance Service

Direct triage.

Coordinate efforts with hospitals.

Provide emergency care.

EMERGENCY MEDICAL SERVICES CONT'D

SUPPORT GROUPS

*Riley County Police Department

Assist as needed.

*Red Cross

Provide triage and medical supplies.

HAZARDOUS MATERIAL CONTROL--SPILL CONTAINMENT

PRIMARY RESPONSIBILITY

*County and City Public Works Departments

Contain spill at the scene through the use of heavy equipment.

Maintain list of equipment operators.

*Fire Department

Coordinate containment and provide direction.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Coordinate information from volunteers and professionals.

Notify the necessary supporting resources.

Assist in containment.

*Riley County Police Department

Assist in providing notification to the needed resources.

Assist in containment as directed by lead agency.

HAZARDOUS MATERIAL CONTROL--RADIOLOGICAL MONITORING

PRIMARY RESPONSIBILITY

*Kansas Department of Health and Environment

Provide equipment and personnel.

Conduct monitoring.

Relay results to Riley County Police Department.

*Riley County Police Department

Assist in providing equipment and personnel.

*Fire Department

Assist in providing equipment and personnel.

*Kansas Highway Patrol

Assist in providing equipment and personnel.

WEATHER INFORMATION

PRIMARY RESPONSIBILITY

*Emergency Preparedness Coordinator

Monitor NOAA Weather radio.

Contact Weather Bureau for updated information and relay to On-Scene Command Post.

SUPPORT GROUPS

*Riley County Police Department

Assist in security weather information.

*Manhattan Weather Watch

Collect weather information and relay to On-Scene Command Post.

PUBLIC INFORMATION

PRIMARY RESPONSIBILITY

*Riley County Police Department

Provide information to news media, including radio, TV, Cable TV, and newspaper.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist in providing information.

*Fire Department

Assist in providing information.

POLLUTION OF STREAMS AND STORM SEWERS

PRIMARY RESPONSIBILITY

*City and County Public Works Departments

Notify proper authorities.

Coordinate pollution control efforts.

Supply machinery and manpower to be used to control pollution.

Close any water mains necessary to prevent contamination of the water supply.

Retain necessary service to the Fire Department when mains are closed, by reopening or rerouting the water supply.

Restore water service to the hazardous materials incident area as soon as possible.

POLLUTION OF STREAMS AND STORM SEWERS CONT'D

PRIMARY RESPONSIBILITY

Coordinate efforts in the restoration of essential utilities at the hazardous materials incident scene.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Provide notification to proper authorities of possible pollution.

Assist in coordination of observation of runoff and potential pollution.

*Riley County--Manhattan Health Department

Monitor the potential impact of the runoff of polluted water.

Perform water quality inspections.

*Fire Department

Assist in notification to the proper authorities of possible pollution.

Assist in controlling the spread of polluted water.

*Riley County Police Department

Assist in notification to the proper authorities of possible pollution.

*Kansas Fish and Game Commission

Monitor effects of pollution on fish and game.

*Kansas Department of Health and Environment

Provide monitoring of the site.

CLEANUP OF DEBRIS

PRIMARY RESPONSIBILITY

*City and County Public Works Departments

Provide assistance to the shipper in cleanup operations.

Act under the guidance of the Kansas Department of Health and Environment.

SUPPORT GROUPS

*Fire Department

Assist in coordination of cleanup operations.

*Riley County Police Department

Assist in coordination of cleanup operations.

*Kansas Department of Health and Environment

Provide technical expertise.

DISPOSAL OF DEBRIS

PRIMARY RESPONSIBILITY

*Emergency Preparedness Coordinator

Cooperate with the Kansas Department of Health and Environment for disposal of hazardous materials and waste.

SUPPORT GROUPS

*Riley County Police Department

Maintain traffic control.

Assist in disposal.

DISPOSAL OF DEBRIS CONT'D

SUPPORT GROUPS

*City and County Public Works Departments

Assist in disposal.

*Kansas Department of Health and Environment

Provide technical expertise.

TERMINATION OF INCIDENT/ACCIDENT

PRIMARY RESPONSIBILITY

*Riley County Police Department

Guard affected area.

*Fire Department

Assist in checking for residue of hazardous materials and waste in conjunction with support groups.

*City and County Public Works Departments

Assist in removing debris to a state approved disposal site.

*Emergency Preparedness Coordinator

Complete information for the Kansas Division of Emergency Preparedness, Radiological Systems Management (RADIAC).

AFTER AREA IS DECLARED SAFE

PRIMARY RESPONSIBILITY

*Riley County Police Department

Determine when traffic is allowed to resume.

Determine when evacuees are allowed to return to homes and businesses.

SUPPORT GROUPS

*City Manager/Mayors/Chairman of the Riley County Commissioners

Make final public information release.

*Riley County--Manhattan Health Department

Final inspection of the site.

*Emergency Preparedness Coordinator

All participating agencies will furnish a narrative after action report to the Emergency Preparedness Coordinator concerning the actions of their department.

Summarize all activities in a final after action report and submit to the Kansas Division of Emergency Preparedness, Radiological Systems Management (RADIAC). Submit Form A (See Appendix) to RADIAC next working day.

SEARCH AND RESCUE

Search and Rescue may be needed in the aftermath of a disaster such as fire, flood, or tornado or could be needed in response to an isolated incident such as lost person, downed aircraft, or drowning.

In order to carry out this function, preplanning is necessary. It is necessary to establish liaison with neighboring jurisdictions, the Kansas Highway Patrol, and the local commander of the Kansas National Guard for the purpose of keeping current approved plans and to provide search, rescue, and evacuation mutual aid assistance. Plans should be made which include medical facilities. Local resources including manpowers, equipment, and radio clubs should be inventoried and kept up to date.

The Emergency Preparedness Coordinator will have the primary responsibility in a search and rescue operation. The Riley County Police Department may assume the lead role in the emergency and activate their specialized rescue squad as the situation warrants.

SEARCH AND RESCUE

PRIMARY RESPONSIBILITY

*Emergency Preparedness Coordinator

Coordinate search for victims.

SUPPORT GROUPS

*Riley County Ambulance

Assist in rescue operations.

Provide medical care as needed.

*Riley County Police Department

Assist in search operations.

Activate rescue squad as warranted.

*Fire Department

Provide equipment as needed for rescue procedures.

SEVERE WEATHER

Severe weather happens intermittently in Riley County. This includes severe thunderstorms, sleet, snow, and ice storms. In the case of severe weather it is important to warn citizens so that they may seek shelter and be better able to cope. Responses needed may include Search and Rescue, Emergency Medical Assistance, and Cleanup of Debris. The Riley County Police Department will assume the primary responsibility in alerting the public and organizing any response that may be needed.

INITIAL RESPONSE

Calls related to severe weather will come from the Police Network Hotline, Commercial Radio and Television and from the National Weather Service.

INFORMATION RECEIVED WILL INCLUDE:

Type of Storm
Speed and direction of storm
Precipitation--type, direction, and amount
Barometric readings
Expected duration of the storm

ALERT THE FOLLOWING

- *Riley County Police Department
- *Manhattan Fire Department
- *KSU Security
- *Riley County Emergency Preparedness Coordinator
- *Manhattan Weather Watch
- *Other counties and cities that may be affected
- *School districts affected

WEATHER INFORMATION

PRIMARY RESPONSIBILITY

- *Emergency Preparedness Coordinator

Monitor NOAA Weather radio.

WEATHER INFORMATION CONT'D

PRIMARY RESPONSIBILITY

Contact Weather Bureau for updated information and relay to On-Scene Command Post.

SUPPORT GROUPS

*Riley County Police Department

Assist in securing weather information.

*Manhattan Weather Watch

Collect weather information and relay to On-Scene Command Post.

SEARCH AND RESCUE

PRIMARY RESPONSIBILITY

*Emergency Preparedness Coordinator

Coordinate search for victims.

SUPPORT GROUPS

*Riley County Ambulance Service

Assist in rescue operations.

*Riley County Police Department

Assist in coordination of search.

Activate specialized rescue squad as the situation warrants.

*Fire Department

Provide equipment as needed for rescue procedures.

COMMUNICATIONS

PRIMARY RESPONSIBILITY

*Riley County Police Department

Communicate with other law enforcement agencies and Kansas Highway Patrol.

Provide communications to Emergency Operating Center from On-Scene Command Post and vice versa.

Provide communications to local agencies and volunteer groups.

Provide other communications as needed.

*Emergency Preparedness Coordinator

Provide communications to Kansas Division of Emergency Preparedness.

Provide other communication as needed.

*Riley County Ambulance Service

Provide communications to hospitals and Police Department concerning victims.

*County and City Public Works Departments

Provide information on roads and equipment as needed.

*Fire Department

Communicate with other fire departments to request aid as needed.

*REACT

Assist other departments as needed.

EMERGENCY MEDICAL SERVICES

PRIMARY RESPONSIBILITY

*Riley County Ambulance Service

Direct triage.

Coordinate efforts with hospitals.

Provide emergency care.

SUPPORT GROUPS

*Riley County Police Department

Assist as needed.

*Red Cross

Provide nursing care and medical supplies.

PUBLIC INFORMATION

PRIMARY RESPONSIBILITY

*Riley County Police Department

Provide information to news media, including radio, TV, Cable TV, and newspaper.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist in providing information.

*Riley County Police Department

Assist in providing information.

*Fire Department

Assist in providing information.

CLEANUP OF DEBRIS

PRIMARY RESPONSIBILITY

*City and County Public Works

Provide assistance to the shipper in cleanup operations.

Act under the guidance of the Kansas Department of Health and Environment.

SUPPORT GROUPS

*Fire Department

Assist in coordination of cleanup operations

*Riley County Police Department

Assist in coordination of cleanup operations.

*Emergency Preparedness Coordinator

Cooperate with the Kansas Department of Health and Environment for disposal of hazardous materials and waste.

SUPPORT GROUPS

*Riley County Police Department

Maintain traffic control.

Assist in disposal.

*City and County Public Works Department

Assist in disposal.

AFTER AREA IS DECLARED SAFE

PRIMARY RESPONSIBILITY

*Riley County Police Department

Determine when traffic is allowed to resume.

Determine when evacuees are allowed to return to homes and businesses.

SUPPORT GROUPS

*City Manager/Mayors/Chairman of the Riley County Commissioners

Make final public information release.

*Riley County--Manhattan Health Department

Final inspection of site.

*Emergency Preparedness Coordinator

All participating agencies will furnish a narrative after action report to the Emergency Preparedness Coordinator concerning the actions of their department.

TORNADOES

Because tornadoes are somewhat more prevalent than other types of storms and happen with tremendous speed, they are being singled out from the severe weather category for separate treatment. The Riley County Police Department will have the primary responsibility in a tornado.

INITIAL RESPONSE

Information regarding tornadoes will come from the National Weather Service. A Tornado Watch is issued when tornadoes are expected and implies that thunderstorm activity, usually severe, is expected.

WHEN A WATCH IS PROCLAIMED, ALERT THE FOLLOWING:

*Riley County Police, who will alert the following:

Radio and Television Stations

Riley County Ambulance

Manhattan Weather Watch

*Manhattan Fire Department

*KSU Security

*Riley County Emergency Preparedness

*Superintendent of Schools

*McCall's

*Farm Bureau

Each alerted body will alert those in their jurisdiction.

WHEN A TORNADO HAS BEEN SIGHTED, ALERT THE SAME.

After receiving a report of impending danger,

a. Proclaim a TAKE COVER.

b. Direct sounding of local public warning system.

IF A TORNADO TOUCHES DOWN

ALERT THE FOLLOWING:

- *Riley County Police Department
- *Manhattan Fire Department
- *Riley County Rural Fire Department
- *Riley County Emergency Preparedness Coordinator

ESTABLISH ON-SCENE COMMAND POST

PRIMARY RESPONSIBILITY

- *Riley County Police Department
- Provide communications to all agencies.

SUPPORT GROUPS

- *First vehicle on scene with communications capabilities will become temporary Command Post.

FIRE SUPPRESSION AND PREVENTION

PRIMARY RESPONSIBILITY

- *Fire Department
- Responsible for fire control.

SUPPORT GROUPS

- *Riley County Police Department
- Assist Fire Department.
- Crowd control and evacuation.

FIRE SUPPRESSION AND PREVENTION CONT'D

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist Fire Department.

*County and City Public Works Departments

Transport water to the site if needed.

Assist in evacuation and crowd control.

*Utility companies

Disconnect utilities as needed to maintain safety.

SEARCH AND RESCUE

PRIMARY RESPONSIBILITY

*Emergency Preparedness Coordinator

Coordinate search for victims.

SUPPORT GROUPS

*Riley County Ambulance

Assist in rescue operations.

*Riley County Police Department

Assist in coordination of search.

Activate search squad as situation warrants.

*Fire Department

Provide equipment as needed for rescue procedures.

COMMUNICATIONS

PRIMARY RESPONSIBILITY

*Riley County Police Department

Communicate with other law enforcement agencies and Kansas Highway Patrol.

Provide communication to Emergency Operating Center from On-Scene Command Post and vice versa.

Provide communications to local agencies and volunteer groups.

Provide other communications as needed.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Provide communications to Kansas Division of Emergency Preparedness.

Provide other communications as needed.

*Riley County Ambulance Service

Provide communication to hospitals and Police Departments concerning victims.

*County and City Public Works Departments

Provide information on roads and equipment as needed.

*Fire Department

Provide communications for coordination of fire operations.

COMMUNICATIONS CONT'D

SUPPORT GROUPS

Communicate with other fire departments to request aid as needed.

*REACT

Assist other departments as needed.

EMERGENCY MEDICAL SERVICES

PRIMARY RESPONSIBILITY

*Riley County Ambulance Service

Direct triage.

Coordinate efforts with hospitals.

Provide emergency care.

*Riley County Police Department

Assist as needed.

*Red Cross

Provide triage and medical supplies.

WEATHER INFORMATION

PRIMARY RESPONSIBILITY

*Emergency Preparedness Coordinator

Monitor NOAA Weather radio.

Contact Weather Bureau for updated information and relay to On-Scene Command Post.

WEATHER INFORMATION CONT'D

SUPPORT GROUPS

*Riley County Police Department

Assist in securing weather information.

*Manhattan Weather Watch

Collect weather information and relay to On-Scene Command Post.

PUBLIC INFORMATION

PRIMARY RESPONSIBILITY

*Riley County Police Department

Provide information to news media, including radio, TV, Cable TV, and newspaper.

SUPPORT GROUPS

*Emergency Preparedness Coordinator

Assist in providing information.

*Fire Department

Assist in providing information.

CLEANUP OF DEBRIS

PRIMARY RESPONSIBILITY

*City and County Public Works Departments

Dispose of debris in a safe and approved manner.

Act under the guidance of the Kansas Department of Health and Environment.

CLEANUP OF DEBRIS CONT'D

SUPPORT GROUPS

*Fire Department

Assist in cleanup operations.

*Riley County Police Department

Assist in cleanup operations.

DISPOSAL OF DEBRIS

PRIMARY RESPONSIBILITY

*Emergency Preparedness Coordinator

Cooperate with the Kansas Department of Health and Environment for disposal of hazardous materials and waste.

SUPPORT GROUPS

*Riley County Police Department

Maintain traffic control.

Assist in disposal.

*City and County Public Works Departments

Assist in disposal.

AFTER AREA IS DECLARED SAFE

PRIMARY RESPONSIBILITY

*Riley County Police Department

Determine when traffic is allowed to resume.

AFTER AREA IS DECLARE SAFE CONT'D

PRIMARY RESPONSIBILITY

Determine when evacuees are allowed to return to homes and businesses.

SUPPORT GROUPS

*City Manager/Mayors/Chairman of the Riley County Commissioners

Make final public information release.

*Riley County--Manhattan Health Department

Final inspection of site.

*Emergency Preparedness Coordinator

All participating agencies will furnish a narrative after action report to the Emergency Preparedness Coordinator concerning the actions of their department.

APPENDIX A--GROUPS TO BE INCLUDED IN THE PLAN AND THE
ROLES THEY MAY PLAY

POLICE

Communications

Establish On-Scene Command Post

Evacuation--determine when and extent

Notify citizens through news media of evacuation, when
needed

Collect weather information

Crowd control

Traffic control and rerouting, as necessary

Notify resources i.e. equipment operators

Notify Red Cross when mass care is needed

Notify Red Cross of the number of persons to be placed in
shelters

Secure evacuated areas

FIRE

Communications

Evacuation Assistance

Fire Control

Coordinate containment of spills

Fire suppression

EMERGENCY PREPAREDNESS

Communications

Evacuation

Notify citizens of evacuation

Monitor NOAA weather radio

Relay weather information to On-Scene Command Post

PUBLIC OFFICIALS--MAYOR, CITY AND COUNTY COMMISSIONERS

Declare state of emergency

Authorize expenditures of city/county funds

HIGHWAY PATROL

Monitor radiation

Traffic control

AMBULANCE

Communications between hospitals and police

Triage

Emergency Care

Coordinate removal of victims to hospitals

Evacuation of nursing homes, hospitals, and patient
records and medicines

Assist in rescue in search and rescue

HOSPITALS

Emergency Care

PUBLIC WORKS

Provide information on roads and equipment available
Transport water if needed
Assist in crowd control--barricades and traffic signs
Contain spill through use of heavy equipment
Maintain list of equipment operators
Provide construction materials and supplies
Provide mechanics for equipment repair

AMATEUR RADIO CLUBS

Provide communications

RED CROSS

Coordinate triage with Ambulance
Provide emergency medical supplies
Set up shelters for displaced persons
Assist in search and rescue
Run shelters for displaced persons
Provide aid for displaced persons
Make arrangements for use of temporary shelters
Determine, with Police Dept., when shelters will cease operation

SCHOOLS

Provide buses for evacuation
Notify schools of evacuation
Provide schools for shelters

WEATHER BUREAU

Provide up-to-the-minute weather information

DEPARTMENT OF HEALTH AND ENVIRONMENT

Provide and man equipment for radiological monitoring

Relay results to Police

CITY AND COUNTY HEALTH DEPARTMENTS

Monitor effects of release of Hazardous Materials

CHEMTREC

Provide information on chemicals on an emergency basis

FOUR WHEEL DRIVE CLUBS AND BOAT OWNERS' CLUBS

Provide vehicles and manpower in search and rescue

HUMANE SOCIETY

Provide food and water to animals left in evacuated areas

NOXIOUS WEEDS DEPARTMENT

Provide information on pesticides

NEWS MEDIA

Evacuation information

Weather information

Notify public of location of shelters

OHMTADS-EPA OIL AND HAZARDOUS MATERIALS TECHNICAL ASSISTANCE
DATA SYSTEMS

Provide information on identity, hazards, or action to be
taken

On-line computer available

CHLOREP-CHLORINE EMERGENCY PLAN

Respond to scene with trained personnel if required

Provide information on identity, hazards, or action to be
taken

Refer to knowledgeable contact

CHRIS--COAST GUARD CHEMICAL HAZARDS RESPONSE INFORMATION
SYSTEM

Provide information on identity, hazards, or action to be
taken

On-line computer available

EPA ERT-ENVIRONMENTAL RESPONSE TEAM

Respond to scene with trained personnel if required

Provide information on identity, hazards, or action to be
taken

CHECK YOUR LOCAL PHONE BOOK FOR OTHER GROUPS

DEVELOPMENT OF A MANUAL FOR SMALL TOWNS AND RURAL AREAS
TO DEVELOP A HAZARDOUS MATERIALS EMERGENCY PLAN

by

REBECCA HESSEL GARTEN

B.S. Southwest Missouri State University, 1978

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

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MASTER OF REGIONAL AND COMMUNITY PLANNING

Department of Regional and Community Planning

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1986

ABSTRACT

DEVELOPMENT OF A MANUAL FOR SMALL TOWNS AND RURAL AREAS TO DEVELOP A HAZARDOUS MATERIALS EMERGENCY PLAN

Rebecca Hessel Garten

The transportation of hazardous materials is a daily occurrence in the United States. Quite often, in the transportation of these materials there are accidents that result in significant losses of both life and property. Due to the requirements of our society it is not feasible to ban the transportation of these materials. Instead, it is important to look at ways to mitigate the effects that such incidents may have. One way is to plan the response that would be needed in the event of a hazardous materials emergency.

In order for a city to write a plan to be used in the event of a hazardous materials transportation emergency, they must be familiar with the planning process and the factors that must be taken into account

in the plan. Manuals exist that can be used by cities to write their own plan but these guides are geared for large cities and rural areas.

For a small town to write an emergency plan a manual would be quite helpful as a guide but none is available. Therefore, the focus of this report is the development of such a manual and the testing of the manual by its application to a real city.

A manual was developed and applied to Riley County, Kansas. The plan was written and reviewed by the affected agencies. Their comments were incorporated into the final version. It has been used successfully by other small cities in developing their own plans.

One of the main conclusions is that the emergency planning function should be part of the master planning functions of the affected city. In this way the master plan is sensitive to the needs of emergency planning and all of the planning functions are integrated.

The development of an emergency plan is just one way in which cities and towns can mitigate the effects of a hazardous materials transportation emergency. Other ways include training of personnel and the configuration of land uses in order to lessen the impacts between uses.