

**PHOENIX REGIONAL  
STANDARD OPERATING PROCEDURES**

**HAZARDOUS MATERIALS EVACUATION**

**M.P. 204.01A**

**12/25-R**

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**PURPOSE**

Evacuations during hazardous materials incidents are conducted to address Life Safety as our number one tactical priority. The area and number of people impacted is determined by critical factors that Hazard Sector must provide to the Incident Commander. These factors may dictate that decisions be made quickly and citizens moved rapidly.

This procedure identifies the method and resources required to execute a small to large scale evacuation.

**POLICY**

**Levels of Evacuation**

Experience has reflected three levels of evacuation. Each requires a different resource commitment. They include Site Evacuation, Intermediate Level Evacuation, and Large-Scale Evacuation. The establishment of an Occupant Services Sector should be considered at each level to assist in providing the affected citizens the appropriate resources.

**Site Evacuation**

Site evacuation involves a small number of citizens. This typically includes the workers at the site, and persons from adjacent occupancies or areas. The citizens are easily evacuated and collected uphill/upwind at the perimeter area. Evacuation holding times are typically short, generally less than an hour or two, and citizens are permitted to return to their businesses or homes.

**Intermediate Level Evacuation**

The next level, or intermediate level, involves larger numbers of citizens and/or affects a larger area. This level affects off-site homes and businesses and normally affects fewer than 100 persons. Persons may remain out of the area for two to four hours or more. Evacuation completion times will be somewhat longer, but generally rapid. Collecting, documenting, and controlling the evacuees becomes more difficult. Off-site collection sites or shelter areas will need to be determined and managed. Some evacuees will leave the area on their own or be sent home by employers. Site perimeters become larger and perimeter security requires more resources. Close coordination with the

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Police Department and other agencies will be required.

### **Large Scale Evacuation**

A large or concentrated release of a hazardous substance may cause a large off-site evacuation. Thousands of citizens could be evacuated. Rapid initiation of the evacuation process may be required. Evacuees may be out of their homes and businesses for many hours if not days. Evacuation completion time frames will be extended. Evacuation shelters will need to be located, opened and managed. Close coordination with the police and other agencies will be required. Site and evacuation perimeters become extended and require many more resources to maintain. Security of the evacuated area becomes a concern. In most cases, the City's Emergency Operations Center (EOC) will be opened to support the evacuation and site operations.

### **Time Factor Considerations**

Time factors are also an important consideration in the evacuation decision.

A rapidly developing moving toxic cloud will demand a more immediate size-up and quick decision making between Hazard Sector and Command.

The speed of the developing hazard will dictate the speed of evacuation. Immediate evacuation will require more resources than a slower developing event.

It will take time to complete the evacuation. The more people to be evacuated, and the distance between the occupancies to be evacuated, the more time required. The greater numbers needing evacuation will also require a greater resource commitment.

### **Critical Factors**

The decision to evacuate needs to be considered quickly and early. Delays in initiating evacuations can expose greater numbers of the public to the hazardous product. An unnecessary evacuation should be avoided. However, once the hazard has been identified and verified, the process of deciding who, when, and how to evacuate should proceed quickly.

In some cases, sheltering in place (staying indoors) may provide adequate protection and should be considered.

Factors to consider when evaluating the evacuation need include:

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- Physical state of the product (is it a gas that is heavier than air?)
- Flammable and or explosive potential of a product
- Product Toxicity (as a health hazard)
- Concentrations (before it becomes a health hazard)
- Length of Time Exposed
- Weather Conditions (temperature, humidity)
- Wind Direction (direction, speed)
- Wind Changes
- Predicted Weather Changes
- Distances From Site Requiring Evacuation
- Evacuation Risk to Public (bringing them outdoors)
- Infiltration into Buildings (should be verified by Hazard Sector)
- Shelter Locations
- Transportation Needs and Availability
- Evacuation Time Factors
- Resources Required for Evacuation
- Concentrations of the population in the area

In some situations, sheltering in place can be used to protect the public rather than to initiate an evacuation. In-place sheltering can be considered during the following circumstances:

- The hazardous material has been identified as having a low or moderate level health risk.
- The material has been released from its container and is now dissipating.
- Leaks can be controlled rapidly and before evacuation can be completed.
- Exposure to the product is expected to be short-term and of low health risk.
- The public can be adequately protected by staying indoors.
- The material has been released from its container, and based on the hazards, it is safer to shelter in place than being exposed to the product during evacuation.

Command may need to provide instructions and/or protective measures to the affected public that include shutting down their evaporative cooling systems and sealing their buildings.

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**Command Organization**

Once Command has determined evacuation to be necessary, appropriate resources, agencies and equipment must be requested. A central staging area for all agencies should be considered and communicated.

The Incident Command Organization may need to be expanded to include other Sections/Branches. This level of Command structure should be considered to effectively manage a large-scale incident. Sections/Branches to be considered include:

- Operations Section
  - Fire Control Branch
  - Hazmat Branch
  - Evacuation Branch
- Administrative Section
- Logistics Section
- Planning Section

**Command Responsibilities**

Command's responsibilities include the following items:

- Communicate with Hazard Sector to rapidly size up the situation to determine the need to evacuate.
- Use Hazard Sector to assist in determining evacuation perimeters.
- Determine the number and location of shelter sites and communicate the locations to the command organization. (Use the CAD INFO SHELTERS or the Red Disaster Operations Manual for shelters and maps.)
- Order evacuation.
- Provide resources required.
- Establish Police liaison.
- Order the alert of other appropriate agencies.
- Expand the command organization to meet the incident/evacuation needs.
- Establish an evacuation plan and communicate the plan to sectors and agency liaisons.
- Monitor, support, and revise the evacuation process as necessary.
- Determine the priority of evacuation of persons from the area of greatest danger first (the use of Fire Department Resources with proper PPE should be considered based upon the hazards that are present).
- Assign specific areas to evacuate in order to avoid duplication or missed areas
- Provide the transportation necessary for evacuees.
- Provide continuing command of the evacuation, de-commitment, and return of evacuees.

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**Police Responsibilities**

The Police Department will be an integral part of the evacuation process, as a large portion of the evacuation may be accomplished by police officers. Police responsibilities include:

- Provide a ranking officer to the incident command post.
- Provide a ranking officer to the Evacuation Sector/Evacuations Branch.
- Provide a communication system for police resources.
- Provide police resources needed for evacuation.
- Police resources can be used for areas that have not yet been impacted but need to be addressed with the evacuation "footprint" that is provided by Hazard Sector.
- Provide traffic control and traffic routing.
- Provide perimeter security.
- Provide evacuation zone security.

**Dispatch Center's Responsibilities**

- Dispatch appropriate resources as requested.
- Notify appropriate Fire and City officials.
- Notify the appropriate support agencies as requested or listed in standard operating procedures.
- Initiate recall of additional Dispatch personnel to meet the demands of the incident.
- Notify the hospitals in the area of evacuation (both those exposed and not exposed) and provide a status report and updates as needed (intermediate and large-scale evacuations).

**Public Information Officer's Responsibilities**

- Notify the news media and provide status reports and updates as necessary.
- Provide the media with consistent and accurate evacuation instructions as provided by Command or the Evacuation Branch/Sector.
- Utilize the media and coordinate evacuation notices through news media.

**Red Cross Responsibilities**

Once long-term sheltering is identified, the Red Cross will open and manage shelters. Early notification is required. The Red Cross will need up to three hours to get adequate personnel, equipment and supplies to the shelter sites.

Some Fire Department resources may need to be committed to the shelters, particularly in the area of initial opening and staffing by a shelter crew, and later for potential

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emergency medical support.

### **Evacuation Branch/Sector Responsibilities**

An Evacuation Branch/Sector must be established. On large-scale evacuations, Evacuation Branch should have a separate radio channel. Geographical and site-based sectors will also need to be established and report to the Evacuation Branch.

Typically, a large commitment of police officers will be required to accomplish an evacuation. The Evacuation Branch officer must obtain a ranking police officer at his/her location in order to closely coordinate evacuation efforts. An appropriate commitment of police resources must be obtained.

Evacuation responsibilities include:

- Obtain resources needed to evacuate.
- Obtain ranking police officer for liaison.
- Establish sectors as needed.
- Provide sectors objectives and specific areas to evacuate
- Provide sectors shelter location and instructions.
- Provide sectors private vehicle routing instructions (how to exit the area).
- Obtain/provide buses or other transportation to those requiring transportation out of the area.
- Evacuate those at greatest risk first.
- Evacuate the greatest concentrated areas next (i.e., apartment complex).
- Consider individual sectors for large population occupancies (i.e., multi-story buildings, large apartment complexes, schools, etc.).
- As individual geographic or grid sectors complete their evacuations, terminate the sector identity and reassign resources to other developing sectors (for large scale evacuation).
- Closely document and maintain records of the evacuation process to avoid duplication or missed areas.
- Document those addresses refusing to leave.

### **On-Site Notification to Evacuate**

Door-to-door notification is time-consuming. In many cases, adequate resources and time is not available to do this type of face-to-face notification. Use of sirens, air horns and PA systems will speed the alert process.

When making door-to-door evacuations:

- Be in uniform.

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- Wear your helmet.

Face-to-face notification should include the following instructions:

- There's been a hazardous materials incident.
- You are in danger.
- Leave immediately.
- Go to the shelter (location).
- Take (     ) route out of area.
- Do you need transportation?
- Provide the customer with evacuation instructions.

Take the following items:

- Wallet/purse
- House & car keys
- Money
- Eyeglasses
- Medications
- Proper clothing
- Pets

In other situations, where immediate and rapid evacuation makes door-to-door notification impossible, use the following notification method:

- Use 3 five-second blasts of the siren while on the "YELP" setting.
- Followed by the standard evacuation instruction over PA system (see instructions above)
- Use maximum volume on PA system.
- Proceed slowly to maximize notification.
- Initiate notification at the beginning of each block and each 50 yards after that.

Once each assigned grid of objectives is complete, report completion to the Evacuation Branch/Sector officer.

**Refusal to Leave**

Some citizens may refuse to leave. A few methods of persuasion to leave include:

- Be in uniform.
- Wear your helmet.
- Wear SCBA and facepiece (air hose not connected) when advising the citizen to leave.
- Ask for next of kin and a phone number.
- Write the next of kin of information down.

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Evacuations follow somewhat of a triage philosophy--we'll evacuate the greatest number for the greatest benefit. Individual refusals will be left to fend for themselves. There simply may not be enough time or resources to initiate forced removal of persons from their homes. However, documentation of the refusal should be done. Write the address down (or if radio traffic permits, radio the address to the Evacuation Branch/Sector officer).

**Transportation Sector Responsibilities**

A Transportation Branch/Sector should be a priority consideration for any intermediate or large-scale evacuation. Not all citizens will have a vehicle available to them.

- Obtain buses (start with minimum of two) and other vehicles that can be used for transportation.
- Stage all transportation resources.
- Put one firefighter (or police officer) with a radio on each vehicle equipped with a Fire or Police Department radio.
- Coordinate with Evacuation Branch/Sector the pick-up points or addresses of those citizens needing transportation.

**Emergency Operations Center (EOC) Operations**

If a significant or major evacuation occurs, the City's Emergency Operations Center (EOC) will go into operation. The EOC will collect department heads and senior staff from the Fire, Police, City Manager's Office, Public Works, and other City departments to the EOC. The EOC's objective is to use the City's resources to support the incident operations and evacuations.

Responsibilities of the EOC Liaison Officer are:

- Establish a cellular telephone or other communication link with the EOC.
- Obtain an immediate status report from Command and provide that report to the EOC fire officer.
- Provide an immediate report to the EOC on any changes in plans, strategy, problems encountered, etc.
- Provide progress reports every 30 minutes unless the EOC requires more frequent or less frequent reports.
- Act as the communication link from EOC to Command.
- Provide Command with direction, policy information, etc. that is communicated from the EOC.



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The EOC will remain in operation for the duration of the evacuation. Command will maintain an EOC liaison and a communication link with the EOC throughout the evacuation, including de-commitment and return of evacuees.

**Return Evacuees**

The decision to return evacuees to their homes will be the sole responsibility of the Fire Department Incident Commander. If the EOC is operating, the decision to return evacuees will be made by the EOC staff. No other City agency will be authorized to order the return.

Returning evacuees may require transportation. A Transportation Branch/Sector may need to be reactivated to provide for these needs.

