

	CUT GAS LINE EMERGENCIES	2015revA
	AUTHORED BY: Firefighter Ben Ramos	FESSAM #: 5F.4
	APPROVED BY: Fire Chief Mark Miller 	EFFECTIVE DATE: 5/6/2015 REVISION DATE: 5/6/2018

Procedure:

Size-Up Considerations

The size-up is one of the most critical components for the development of an Incident Action Plan (IAP). The size-up essentially provides an evaluation of the situation confronted by the first arriving officer, unit or member. The first arriving officer, unit or member shall consider the following questions when preparing for an “On Scene” radio report:

- What has happened?
- What is happening now?
- What is likely to happen?

The first arriving officer, unit or member shall consider the following factors when preparing for an “On Scene” radio report while only committing to what can be seen from the cab.

Description of Event

The first incoming unit needs to notify Dispatch whether or not a gas line has been struck. If so, the need for Xcel, including requesting a possible ETA, must also be transmitted to Dispatch. The first arriving officer, unit or member shall look at the affected area size, product identification, evacuation in progress or need for evacuation, visible victims, visible conditions (including pipe size, if possible and wind direction) and other features that help describe the conditions being faced by the first arriving officer, unit or member.

Staging Location

The first arriving engine, truck or rescue and battalion chief shall respond to the scene. However, the first arriving officer, unit or member may recommend a different placement for apparatus based on terrain, weather conditions, chemical vapor cloud or location of the incident.

All other units assigned to the incident shall stage at the last tactical option or, if applicable, a different staging area defined by the first arriving officer, unit or member.

Establishment of Command

The first arriving officer, unit or member shall assume and name command based on street address or location. The first arriving officer, unit or member can retain command or pass command to the battalion chief if determined to be a working incident.

Verbalization of passing command to the battalion chief can occur during the “On Scene” report or during the “Follow Up” radio report. The actual upgrade of Command will occur when the battalion chief arrives on scene of the working incident; however, the initial incident commander still has Command until the battalion chief formally accepts it upon arrival.

Action Taken

The first arriving officer, unit or member shall attempt to complete a 360 and transmit they will be conducting a 360 during the “On Scene” report. If the first arriving officer, unit or member recognizes this cannot be accomplished upon arrival, the member shall transmit that a 360 cannot be completed or announce a 360 was not completed during the “Follow Up” radio report.

If the first arriving officer, unit or member does not have obvious signs of a possible hazard, they shall transmit that they will be conducting a 360 and investigating during the “On Scene” report.

Resource Needs

The first arriving officer, unit or member shall determine if resources responding are appropriate for the situation. If additional Fire/EMS resources are needed, the first arriving officer, unit or member shall request an upgrade to a first alarm assignment with the communication center.

By this time, a clarified ETA for Xcel should be established as well as the appropriate plan of approach for the incident declared by the BC on scene.

“On Scene” Report

As mentioned earlier, the “On Scene” report is a description of what the first arriving officer, unit or member encounters. LFRA has adopted and modified the Blue Card Certification program to establish a standard method of initiating Command. Therefore, the following is an example of the standard method of transmitting an “On Scene” report:

“200, Engine 3.... Engine 3 is on scene of a cut natural gas line. All parties are away from the struck gas line. Have all units continue and stage at the intersection of North Glade Road (23H) and Buckhorn Drive. This will be ‘Buckhorn Command’. I’ll be completing a 360.”

Incident Action Plan (IAP) Considerations

The development of the IAP is based on the conditions, actions and resources available to the incident commander. In reference to a Natural Gas Cut Gas Line Emergency, it is imperative the first arriving officer, unit or member understand the need for established strategies and tactics to be used at the incident as they relate to the Incident Priorities.

The development of the IAP begins with the initial Dispatch information, but does not get communicated until after the first arriving officer, unit or member arrives on scene and completes their 360 and transmits their “Follow Up” report. The “Follow Up” report shall serve as the foundation of the IAP along with the Incident Priorities.

The first arriving officer, unit or member shall consider the following factors when preparing for a “Follow Up” radio report and developing the IAP:

360 Complete

The 360 shall be completed by first arriving officer, unit or member if conditions, size of the hole and piping, possible existence of a vapor cloud, weather conditions and terrain permitting. This also serves as a benchmark and indicates an IAP is about to follow.

Description of Scene

The first arriving officer, unit or member shall provide greater detail on the description of the incident and relay that information to incoming units during the “Follow Up” report.

If not noted on the initial size-up, this is where the first arriving unit or member can better describe the situation on scene: product identification, location/extent of damage to affected area, size of pipe, CGI readings, and extent of evacuation area or possible victim needs.

Strategy

During the “Follow Up” report, the first arriving officer, unit or member shall transmit the strategy of the incident, protect in place and evacuation procedures, if needed, or pipe clamping operations.

Actions

The actions of the first arriving officer, unit or member shall be described in simple terminology. This provides incoming resources a quick briefing on the course of action being taken by the first arriving officer, unit or member.

For example, the first arriving unit may state, *“E3 will be establishing an initial isolation area of 300' diameter” or “E3 will be initiating a clamping operation and will have fire suppression in place”*.

Assignments

The relay of fire ground tasks to incoming units is the final step of the IAP. Incoming resources have either been assigned to staging or they have been given tasks in alignment with the IAP and Incident Priorities. Potential assignments could be as follows: fire suppression, water supply, air monitoring, evacuation, creating an isolation perimeter, identifying potential hazards, investigating with correct tools for the situation (CGI, TIC, etc.), elimination of ignition sources, investigating adjoining units or nearby residence/buildings and securing utilities at nearby residence/business.

Communication

Once assignments have been given by the incident commander, the assigned units or members shall complete the communication loop upon arrival. If arriving units fail to complete the communication loop,

the incident commander shall repeat any needed information for clarification or to confirm that the message has been received.

“Follow Up” Report

The “Follow Up” report is a description of what the first arriving unit or member encounters upon completion of a 360. LFRA has adopted and modified the Blue Card Certification program to establish a standard method of initiating Command. Therefore, the following is an example of the standard method of transmitting a “Follow Up” report:

“All incoming units... 360 complete with a confirmed (size of gas line) cut gas line. E3 will have fire suppression and will be establishing an initial perimeter of 100’. Next due truck.... Air monitoring and line clamping. Battalion 1, please assume Command upon your arrival.”

Company Level Functions

First Arriving Apparatus

The method for how an incident will unfold is often based on the actions and positioning of the first arriving apparatus. The responsibilities of the first arriving apparatus are often based on the decisions of the first arriving officer, unit or member and the formulation of the IAP.

The following are some of the responsibilities of the first arriving engine:

- Position in a manner for the best tactical advantage in accordance with the Incident Priorities as well as consideration for future anticipated needs.
- Establish/secure an initial evacuation perimeter.
- Possible determination of line and hole size.
- Determine the correct resources needed for incident stabilization/evacuation.
- Stretch appropriate handline for given conditions.
- Identify any hazards around the affected area or ones that could potentially ignite.
- Secure an adequate water supply (if within reasonable distance) if conditions indicate.

Truck and/or Support Companies

The arriving truck or support company's responsibilities will be determined by the incident commander.

Truck and/or support companies may be assigned to accomplish the following responsibilities:

- Assist with investigation
- Assist with air monitoring
- Assist with line clamping operations
- Check for hazards including ignition sources
- Possible evacuation strategies or containment areas

Benchmarks

The following benchmarks are utilized with a cut gas line response to ensure that the incident priorities are being obtained as well as to determine that the appropriate strategy is being assigned to the incident:

360 Complete

The 360 shall be completed by the first arriving officer, unit or member if the conditions, possible existence of a vapor cloud, weather conditions and terrain permit. This also serves as a benchmark and indicates that an IAP is about to follow.

Problem Identification

This benchmark would be completed by the first arriving crews investigating where the gas line was damaged. The first arriving officer, unit or member will communicate the natural gas leak size and location, as well as the size of gas line affected to all incoming units and Dispatch, as well as any further hazards that could potentially disrupt the incident.

Problem Isolated

This benchmark should ensure that we complete our second incident priority, Incident Stabilization. This could be completed by the first or second arriving crews who have mitigated the incident or clamped the exposed line.

Utilities Secured

This benchmark shall be announced whenever utilities are secured to isolate the problem.

Resources on Scene

This benchmark shall be used to indicate when the incident commander has requested resources outside of LFRA to respond and they arrive on scene. This keeps the communication center informed that requests for resources are being filled. An example may be:

“200, Command.... Xcel on scene.”

Evacuation in Progress

The first arriving officer, unit member shall attempt to identify the need for immediate process of evacuation. This action will be based on the incident priorities and the available information to the first arriving officer, unit or member.

Evacuation Complete

The first arriving officer, unit or member shall communicate the completion of the evacuation process. If assigned, this can also be communicated by the 2nd or 3rd due resource. This would be determined and based on the Incident Priorities and availability of incoming units.

The information gathered from the above benchmarks, along with the Incident Priorities, would be the driving factors in the establishment of the following benchmarks:

Scene Perimeter Secured

Leak Contained

Leak Stopped/Clamped

Evacuation in Progress

Evacuation Complete

Operation Terminated

Appropriate Notifications

The following notifications would need to be made if the conditions/actions warrant:

- A. Gas line damaged or cut: Have Dispatch Center notify Xcel and ask for a follow up ETA.
- B. Multiple 911 calls for the smell of gas in nearby homes or businesses. Notify incoming crews to monitor the area and generate possible need for evacuation strategies.

Validation Summary:

Revision History:

References:

1. Eng. Todd Heasty Cut Gas Line draft.
2. Xcel Technicians
 - a. Greg Sorter
 - b. Ed Skinner
 - c. John Onal