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# LESSON LEARNED

## Incident Management: Identifying Remote Staging Areas

### SUMMARY

Incident commanders should identify potential remote staging areas for use during response operations when resources may be exposed to unacceptable hazards. This enables incident commanders to relocate and protect resources from potential exposure.

### DESCRIPTION

On October 5, 2006, at approximately 9:38 a.m., the Apex Fire Department (AFD) responded to a report of a chlorine odor at a street intersection in Apex, North Carolina. AFD Engine Company 3 reported a large vapor cloud upon arrival to the scene at approximately 9:43 a.m. and immediately requested a second alarm. The fire chief arrived soon thereafter and established the incident command post. The Apex Police Department (APD) activated the Apex Reverse 9-1-1 system, which provided residents with relevant emergency and shelter-in-place information. APD officers also went door-to-door to evacuate those residents living downwind of the gas cloud.

AFD reconnaissance teams could not determine the source of the chlorine release throughout the initial response and evacuation. However, a fire eventually burned through the roof of the nearby Environmental Quality Company and released a plume of unknown chemical vapors. AFD immediately sounded a general alarm that recalled its entire staff to respond to the incident, and APD recalled its officers for extended evacuation duties. AFD personnel and contract firefighters did not begin offensive operations until the fires died down at 9:00 a.m. the next day. In all, approximately 17,000 evacuated their homes, and 33 individuals sought medical attention for respiratory distress and skin irritation.

A wind inversion pushed the chemical plume over 2 miles through the center of Apex during the incident response. The shifting winds and chemical cloud required the evacuation of the emergency operations center and the police department. It also forced the incident commander to relocate the incident command post on two separate occasions. The winds and chemical cloud remained unpredictable throughout the incident response. This could also have forced staging sites to be evacuated.

For additional information on the incident response, please see the [US Fire Administration Chemical Fire in Apex, North Carolina Report](#).

The incident commander neither identified nor employed a remote staging area during the response. The US Fire Administration (USFA) noted that exposing vital equipment to the chemical plume would have negatively affected Apex's successful response. The USFA recommends that incident commanders establish a staging area for reserve and undeployed personnel and equipment away from potential exposure or contamination areas during chemical fires and other similar types of incidents. Further, the USFA Technical Report suggests that emergency managers consider "implementing the military model of one-third

of resources held in reserve and two-thirds deployed at an emergency situation" to ensure continuous operations during any long-term response.

Incident commanders should identify potential remote staging areas for use during response operations where resources could be exposed to unacceptable hazards. This enables incident commanders to protect resources from potential exposure and to reallocate them as needed.

#### **CITATION**

Department of Homeland Security, United States Fire Administration. *Technical Report Series: Chemical Fire in Apex, North Carolina*. April 2008.

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