

Exercise

Overview

A broad range of electronic resources are available to emergency responders and increasingly used in the Incident Commander structure to understand hazards and plan a response.

In this exercise you will access some of these tools for hazard assessment, use a model to predict geographical areas that will be affected by the release and plan a response.

Objectives

1. Access electronic tools for risk assessment information.
2. Identify the geographical region where there may be an impact from the release.
3. Plan a response

Depending on the class size and your role, you may work in small groups, or individually. In small groups, you may select a note taker for the report back to the other participants.

You will be given a scenario or hypothetical situation involving a hazardous material incident at the facility.

Using Airborne Dispersion Models in Planning a Response to a Chemical Release

Risk assessment

The facilitator will introduce several websites and other electronic resources for you to access for the risk assessment.

Use a laptop, tablet or smartphone, collect information about the properties and hazards of the chemical in the incident.

Map the facility

Use Google Earth to map the facility. A zip code or city and state can be entered into the Search box to start. Zoom in on the map until details of the site are visible. When the exact location of the leak is determined, record the latitude and longitude. Utilize the map to assist in determining sight issues and for zoning the incident, and setting up the details of the operation.

Predict plume of the release

Utilize a plume generated by CAMEO/ALOHA (available free online at <http://www2.epa.gov/cameo>.) or PlumeRAE (proprietary software for those utilizing RAE Instruments equipment) to model the chemical release.

Display the plume, using Google Earth to map areas of concern. The plume generated in ATT Exercise III may be used, or another plume provided by the instructor. Google Earth provides layers that can be turned on to show special populations or locales like hospitals, schools, fire departments, etc.

If you can put the map on a computer and project it for discussion amongst the group, that would be helpful. When completing this exercise, be mindful of chemical storage areas, hazardous locations, worker/contractor normal travel patterns, situations on or off-site which might contribute or be severely affected by such an incident.

Plan a response

Access the following National Incident Management System (NIMS) documents:

ICS 201 Incident Briefing

ICS 209 Incident Status Summary

at <http://www.training.fema.gov/emiweb/is/icsresource/icsforms.htm>. Use these forms to describe the incident and plan and prioritize the response.