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

## Introduction

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

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

## Objectives

When complete, you will better be able to:

- Access electronic tools for risk assessment information
- Identify the geographical region where there may be an impact from the release using plume modeling software
- 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 involving a hazardous material incident.

**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 to 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**

Use plume modeling software common to your area, such as CAMEO available free at https://www.epa.gov/cameo, to model the chemical release.

Display the plume, using Google Earth to map areas of concern. Google Earth provides layers that can be turned on to show special populations or locales like hospitals, schools, fire departments, etc.

**Plan a response**

Use the plume modeling to help plan a response.