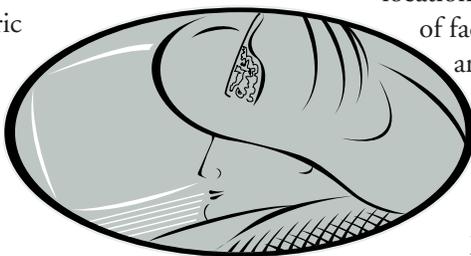




# CAMEO®

**P**lacing accurate, timely information in the hands of decision makers is vital to a safe, effective response to a chemical incident.

Computer-Aided Management of Emergency Operations (CAMEO®) is an integrated set of applications jointly developed by the U.S. Department of Commerce's (DOC) National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA). CAMEO is designed to help first responders and emergency planners respond to and plan for chemical accidents.



The ALOHA atmospheric dispersion model (separate info sheet available) provides an estimate of the potential downwind dispersion of a chemical cloud. Graphical outputs include the cloud's footprint, source strength, and chemical concentration curves.

The output from ALOHA can be displayed in MARPLOT, the mapping module. The user can compare the footprint location with information concerning the location of facilities storing hazardous materials and special-concern populations such as hospitals, and schools, found in MARPLOT. Important data about these locations, such as emergency contacts, hours of operation, and potential affected population, can be displayed in CAMEO information modules to help with decisions about the degree of hazard posed by the incident.

## Critical Response Information

The CAMEO system includes

- a database of hazardous chemicals,
- MARPLOT®, a map display application, and
- ALOHA®, an application for predicting the movement of hazardous chemical clouds in the atmosphere.

All modules work interactively to display critical information in a timely fashion.

The Chemical Library module contains response recommendations for approximately 6,000 chemicals and includes 100,000 chemical synonyms and identification numbers which aid the emergency responder in identifying unknown substances in an incident. Once a chemical is identified, CAMEO's Response Information Data Sheets (RIDS) provide fire fighting, physical properties, health hazards, first aid and spill response recommendations, along with information about air and water hazards. In addition, with the Reactivity Worksheet, CAMEO provides a way to virtually "mix" chemicals to find out what dangers could arise from accidental combinations.

## CAMEO International

CAMEO is used widely in the U.S., and also is a major component of the United Nations Environment Programme's Awareness and Preparedness for Emergencies at the Local Level (APELL) program. CAMEO has been demonstrated or taught in 50 countries as part of the APELL workshops on community preparedness for chemical accidents. CAMEO has been translated into French and Spanish. Additionally, the program has been distributed to more than 20 countries outside the APELL program.

The CAMEO software is available for free download for Macintosh and Windows-compatible computers from <http://www.epa.gov/ceppo/cameo>.

For additional information visit <http://response.restoration.noaa.gov>, e-mail [orr.cameo@noaa.gov](mailto:orr.cameo@noaa.gov), or call 206/526-6317.

Navigator | List | Edit | << | < | > | >>

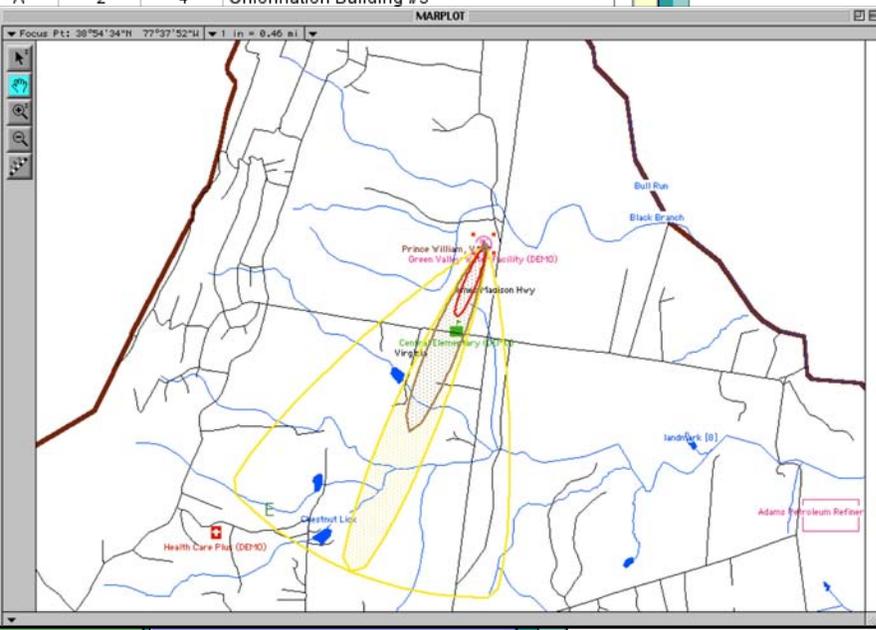
**Chemicals in Inventory** Last Modified 12/5/2000

Facility / Route:  Report Year:   
 Dept:  City:  State:

CAS #:  View RIDS  
 Chemical Name:  Adjust Link

In Inventory  
  In Transit  
  EHS Substance  
  Trade Secret  
 MSDS:

Location	Physical State & Quantity	Components	Dates	State Fields	Notes	
	Amount	Unit	Type	Press	Temp	Location
		Pounds	A	2	4	Chlorination Building #1
		Pounds	A	2	4	Chlorination Building #2
		Pounds	A	2	4	Chlorination Building #3
		Pounds				



Navigator | List

**Chemical Library**

Chemical Name:

Chemical Identification Information		Response Information Data Sheets		
Firefighting	Fire Hazards	Non-Fire Response	Health Hazards	Protective Clothing
General Description	Properties	Reactivity	Reactive Hazards	First Aid

**AIR AND WATER REACTIONS:**  
 Water dissolves about twice its volume of chlorine gas, forming a mixture of hydrochloric acid and hypochlorous acids. Will be corrosive due to acidity and oxidizing potential. Slightly soluble in water.

**CHEMICAL PROFILE:**  
 CHLORINE reacts explosively with or supports the burning of numerous common materials. Ignites steel at 100°C in the presence of soot, rust, carbon, or other catalysts. Ignites dry steel wool at 50°C. Reacts as either a liquid or gas with alcohols (explosion), molten aluminum (explosion), silane (explosion), bromine pentafluoride, carbon disulfide (explosion catalyzed by iron), 1-chloro-2-propyne (excess chlorine causes an explosion), dibutyl phthalate (explosion at 118°C), diethyl ether (ignition), diethyl zinc (ignition), glycerol (explosion at 70-80°C), methane over yellow mercury oxide (explosion), acetylene (explosion initiated by sunlight or heating), ethylene over mercury, mercury(I) oxide, or

