



# Beginning CAMEO Outline

## **I. WHAT IS THE CAMEO SUITE?**

- a. CAMEO – Computer Aided Management of Emergency Operations. (Current version is 1.1.3)
- b. ALOHA – Aerial Locations of Hazardous Atmospheres. (Current version is 5.4)
- c. MARPLOT – Mapping Application for Response, Planning, and Local Operational Tasks. (Current version is 3.3.2)

## **II. WHAT IS CAMEO<sup>fm</sup>?**

- a. Database of over 6,000 hazardous substances
- b. Modules for storing:
  - i. Facility Information
  - ii. Chemical Inventory Information
  - iii. Contact Information
  - iv. Information on locations of special concern
  - v. Routes
  - vi. Planning Scenarios
  - vii. Resources
  - viii. Haz Mat Incident Records

## **III. WHAT IS ALOHA?**

- a. Air Modeling Program for both neutrally buoyant and heavy gases & vapors.
- b. Plots the plume of the release
- c. Can show estimated chemical concentration at any given location over time.
- d. Plots hazard levels for B.L.E.V.E.s, pool fires, & flame jets.

## **IV. WHAT IS MARPLOT?**

- a. Presents a map of your county.
- b. You can add and remove layers at will. Each item can be attached to a record.
- c. Links with CAMEO and ALOHA to show plumes, explosion & fire hazard areas and CAMEO records.

## **V. HISTORY OF THE CAMEO SUITE**

- a. Created in 1986 by the National Oceanic & Atmospheric Administration (NOAA).
- b. Now jointly developed & supported by NOAA and the U.S. Environmental Protection Agency (EPA).
- c. Originally on Macintosh computers only, now works on Macintosh and PC's.
- d. With the release of CAMEOfm in 2002, all aspects of the CAMEO suite look and act virtually identically in both Macintosh and PC environments.

- e. The CAMEO suite is used by thousands of fire departments and hazardous materials responders in the United States, and has been translated into many other languages for use throughout the world.

## **VI. HOW TO GET THE CAMEO SUITE FOR FREE**

- a. Log onto the following web site operated by the U.S. EPA:  
<http://www.epa.gov/ceppo/cameo/>
- b. Click on the CAMEO icon, & follow the instructions.  
(Note: The CEPPO site also has other neat computer tools – check it out!)

## **VII. INSTALLING THE CAMEO SUITE**

- a. Download CAMEO, ALOHA, and MARPLOT from the CAMEO web site.
- b. Download their respective manuals from the CAMEO web site.
- c. Unzip the files. (All these files come in a compressed format called a “ZIP” file. You can “unzip” these with a program such as WinZip (shareware) or with the full version of Stuffit (Macintosh). If you use the Windows XP operating system, it should be able to open zipped files without WinZip.
- d. After you unzip the files, look in the folders you just unzipped. You should see a program called “setup.exe” for each of the programs in the CAMEO suite. Double-click on the program’s icon, then follow the directions. For more complete instructions, print out the area of each manual that discusses installation.

## **VII. THE CAMEO NAVIGATOR**

- a. The Navigator is the easiest way to move from place to place in CAMEO. It provides tools for:
  - i. Searching the Chemical database.
  - ii. Searching the Facility database.
  - iii. Moving to each of CAMEO’s modules and other CAMEO suite programs:
    1. Chemical Library
    2. Facilities
    3. Chemicals in Inventory
    4. Contacts
    5. Incidents
    6. Screening & Scenarios
    7. Special Locations
    8. Routes
    9. Resources
    10. Help
    11. ALOHA
    12. MARPLOT

## **VIII. SEARCHING FOR A CHEMICAL**

- a. Go to the Navigator.(If you are in another part of CAMEO, click the box in the upper left corner of the screen labeled “Navigator”.
- b. Click on the button labeled “Search for a Chemical”
- c. Enter information in one or more fields about the chemical. Try to choose something unique about the chemical, so you don’t get scores of matches.

- d. “CONTAINS WORDS STARTING WITH” search  
If you know *for sure* that the chemical name begins with certain letters, click the radio button in front of the phrase “Contains Words Starting With”, enter your data, then click the “Search” button. Only chemicals listed in the database starting with these letters will be shown.
- e. “CONTAINS CHARACTERS” search  
If you are not sure if a chemical name starts with certain characters, but you know these characters should appear somewhere in the chemical name, click the radio button in front of the phrase “Contains Characters”, enter your data, then click the “Search” button. Any chemical containing these characters in the order you entered will be shown. This type of search usually shows many more matches than the “Contains Words Starting With” type of search.
- f. More Complicated Searches  
If you know more information about the chemical, enter that data in the other fields. This will narrow your search. Now click the “Search” button.
- g. Advanced Searches – This topic is covered in the Advanced CAMEO course.

## **IX. CHEMICAL SEARCH EXERCISES**

- a. Find the chemical “Chlorine”
  - i. How many matches did you find?
  - ii. How did you finally find the chemical “Chlorine”?
- b. Find the chemical “Chlorine” and the UN No. “1017”
  - i. How many matches did you find?
- c. You are looking at an overturned drum through binoculars where a label is partially visible. The part of the label you can see says “anochlorine pesti”. The barrel has a loose solid head on the drum, and some white powder has spilled on the ground from the barrel. You also see a white diamond-shaped label on the drum with a skull and crossbones. Find the chemical.

## **X. USING THE CHEMICAL LIBRARY**

Once you have found the chemical using the search tools, double-click on the chemical and you will be taken directly to the chemical library for that chemical. The chemical library consists of the following components.

- a. CHEMICAL IDENTIFICATION INFORMATION
  - i. Chemical Identification
  - ii. Synonyms – Note that some chemicals may have over 50 synonyms!
  - iii. NFPA Codes – Based on the NFPA 704 Sign System. Similar to HMIS codes.
  - iv. Regulatory Information – Which Federal laws govern the use of this chemical?
  - v. Screenings & Scenarios – This holds key data CAMEO uses to calculate threat distances in the Screenings & Scenarios module.
- b. RESPONSE INFORMATION DATA SHEETS (RIDS)  
(Note that RIDS sheets are like generic MSDS sheets).
  - i. General Description
  - ii. Properties
  - iii. Reactivity

- iv. Reactive Hazards
- v. First Aid
- vi. Firefighting
- vii. Fire Hazards
- viii. Non-fire Response
- ix. Health Hazards
- x. Protective Clothing

Note that each description includes in parenthesis the source and year of the information [i.e.(DOT, 2000)].

## **XI. PRINTING REPORTS FROM CHEMICAL SEARCHES**

Of course you don't want to have to write all the information out by hand that you find in the database if you can get the computer to do it for you. Here is how you do it:

- a. From the pull-down menu marked "File" in the upper left corner of the screen, choose "Make Report".
- b. If you only want to print out the record you are currently on, click the radio button that says "Current Record". If you want to print out the records for everything your search found, click the radio button that says "Found Set".
- c. Click on the "Select Report Type" box.. Choose the report type you wish. (I almost always select type 2, Chemical Database and Rids).
- d. If you want synonyms for the chemical listed, click on the radio button to include synonyms. (Note that this only works on Report Type 1).
- e. If you only want certain types of data, click on the boxes you want the report to show. I almost always click the "Select All" button.
- f. Click on the "Make Report" button.
- g. For a printed copy, press on the "Print" button.

## **XII. FACILITY SEARCHES**

- a. From the Navigator, click on the "Search for a Facility" button.
- b. Remember to use the "Contains Characters" or the "Contains Word Starting With" radio buttons, as appropriate.
- c. Enter information for the fields in which you are interested.
- d. Click on the "Search" button.
- e. Once you have found the record you want, double-click on it to go to its record in the Facilities Database module.

## **XIII. FACILITY SEARCH EXERCISES**

- a. You want to see the records for a facility called "Green" something. Find all that match.
- b. You want to see records for all the facilities that have federally reportable quantities Extremely Hazardous Substances (EHSs) – [Note – California calls these same chemicals Acutely Hazardous Materials (AHMs)]. Find these facilities.

## **XIV. ADVANCED FACILITY SEARCHES & STATE SEARCHS**

These topics are covered in the Advanced CAMEO course.

## **XV. USING THE FACILITIES DATABASE MODULE**

The Facilities Database module is where you can store information for the facilities that handle chemicals in your jurisdiction. This database is linked to other databases in CAMEO, such as the Chemical Inventory module and the Contacts module. The type of information the Facilities Database holds is as follows:

- a. Address
- b. Facility Phones
- c. Contacts
- d. Chemical Inventory
- e. Checklist
- f. ID Codes
- g. State Fields
- h. Map Data
- i. Site Plan
- j. Notes

## **XVI. PRINTING REPORTS OF FACILITY RECORDS**

- a. From the pull-down menu marked “File” in the upper left corner of the screen, choose “Make Report”.
- b. If you only want to print out the record you are currently on, click the radio button that says “Current Record”. If you want to print out the records for everything your search found, click the radio button that says “Found Set”.
- c. If you only want certain types of data, click on the boxes you want the report to show. If you want to see all the information, click the “Select All” button.
- d. If you want to make mailing labels, click on the “Mailing Labels” button.
- e. Click on the “Make Report” button.
- f. For a printed copy, press on the “Print” button.

## **XVII. ADDING INFORMATION INTO THE FACILITIES DATABASE**

This subject is covered in the Advanced CAMEO course.

### **ABOUT THE INSTRUCTOR**

Kevin Smith serves as the Deputy Fire Marshal – Haz Mat with the Chino Valley Fire District in California. He has used CAMEO since 1987, and became a Federally certified CAMEO Instructor in the early 90’s. He is currently one of 42 Federally certified CAMEO instructors in the nation, and one of only two in California. Kevin has taught courses in CAMEO at California’s annual *Continuing Challenge* Haz Mat Workshop every year since 1992, and has taught CAMEO classes for Los Angeles County Fire Haz Mat, Santa Monica Fire, Garden Grove Fire, Fountain Valley Fire, Culver City Fire, and has done customized CAMEO programming for the Chevron El Segundo Refinery. Kevin designed and currently teaches an on-line CAMEO course over the Internet for the University of California at Davis Extension. For more information on the on-line CAMEO course, go to <http://universityextension.ucdavis.edu/>. Click the “Search” box and type “CAMEO”.

Kevin earned his Master of Public Administration Degree from California State University at Fullerton, and a 24 unit Certificate in Hazardous Materials Management at the University of

California at Irvine. He is a Registered Environmental Assessor with the State of California, and a Certified Hazardous Materials Instructor with the California Specialized Training Institute. Kevin also owns California Hazard Environmental Services (CHES), a hazardous materials training and consulting company which provides hazardous materials and CAMEO training and consulting services.

Kevin can be reached at home at (714) 921-2705 or through his home e-mail at [plancmil@aol.com](mailto:plancmil@aol.com). He can also be reached through the Chino Valley Independent Fire District at (909) 902-5280 x230, or via his e-mail at work at [ksmith@chofire.org](mailto:ksmith@chofire.org).