

REGION 6 LEPC Update



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12th Annual LEPC Conference, information from the U.S. Environmental Protection Agency - Region 6



After a 2 year vacation, we have decided it's time to hold the next Region 6 Conference. The conference will be held Monday, January 12 to Wednesday, January 14, 2009. We will be conducting the conference at the Holiday Inn, Emerald Beach Hotel, located in Corpus Christi, TX, and will be hosted by the Nueces County LEPC.

As we explained at the last conference in Little Rock, we will no longer be able to financially assist LEPCs in attending the conference (lodging or travel expenses), but we will be able to hold the conference without a registration fee.

You can make reservations for the conference by calling 1-888-HOLIDAY. The conference code is EPA. You can also make reservations online at:

<http://www.ichotelsgroup.com/h/d/hi/1/en/hotel/crpeb>



Make sure you enter the conference code: EPA.

We will be putting out further information concerning agenda topics, etc. in the upcoming months. You can check the Hotzone webpage at www.hotzone.org for further information in the future.

For those of you curious, the preceding conferences were held in:

- | | | |
|-------------------------------------|-------------------------------------|------------------------------------|
| 1 st : Amarillo, TX | 5 th : Wichita Falls, TX | 9 th : Houston, TX |
| 2 nd : Waco, TX | 6 th : McAllen, TX | 10 th : Houston, TX |
| 3 rd : Oklahoma City, OK | 7 th : Hot Springs, AR | 11 th : Little Rock, AR |
| 4 th : Lake Charles, LA | 8 th : Shreveport, LA | |

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NOAA / USCG Chemical Response Tools, *information from the National Oceanic Atmospheric Administration*



The Chemical Response Tool website (chemresponsetool.noaa.gov) is a chemical response encyclopedia and decision support aid. It contains information and guidance for federal, state, local response and emergency planners who need to respond to hazardous chemical incidents, or plan for incidents.

The links on the start page are organized according to the three successive phases of a response to a hazardous chemical incident:

- (1) identifying the substance(s) and getting information about it.
- (2) assessing its hazards.
- (3) managing the response.

About the Chemical Response Tool

The Chemical Response Tool is designed for people responding to hazardous materials incidents, especially U.S. Coast Guard personnel. Use it as an information resource when you need to:

- Identify the hazardous materials on scene and assess their hazards.
- Get response recommendations from authoritative sources.
- Work with CAMEO Chemicals (or CAMEO).
- Predict potential reactivity if two or more substances mix together.



Contacting NOAA

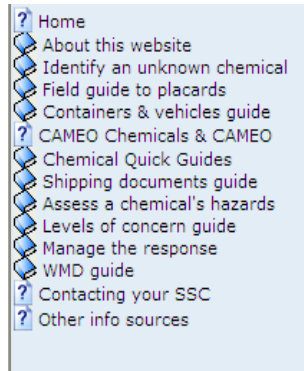
The Chemical Response Tool was developed for the U.S. Coast Guard by the Office of Response and Restoration, National Oceanic and Atmospheric Administration (NOAA OR&R).

If you find an error or have a comment about the Chemical Response Tool, please tell us: ORR.chemresponsetool@noaa.gov.

Guided tours

The Chemical Response Tool offers guided tours to learn to work with the website (the Chemical Response Tool) or with CAMEO Chemicals. Each tour takes you step-by-step through the website and a series of fictional emergency response scenarios.

- The Chemical Response Tool: http://chemresponsetool.noaa.gov/crt_guided_tour.pdf
- CAMEO Chemicals: a Guided Tour http://chemresponsetool.noaa.gov/cameochemicals_guided_tour.pdf



The website is driven by a menu system on the left side of the screen.

Identifying unknown substance(s) and getting information:

Find its name and ID number

- Where in a vessel, vehicle, or facility to look for the shipping documents, placards and labels that identify the hazardous materials present.

Use physical clues to identify chemicals

- How to use physical clues (such as color and odor) to check whether hazmat is present on a vessel or vehicle, or in a facility.

- ? Home
- ? About this website
- ? Identify an unknown chemical
- ? Field guide to placards
- ? Containers & vehicles guide
- ? CAMEO Chemicals & CAMEO
- ? Chemical Quick Guides
- ? Shipping documents guide
- ? Assess a chemical's hazards
- ? Levels of concern guide
- ? Manage the response
- ? WMD guide
- ? Contacting your SSC
- ? Other info sources

CAMEO Chemicals and CAMEO

- How to get datasheets for about 6,000 hazardous materials from the CAMEO Chemicals website, or from the CAMEO software.

Chemical Quick Guides

- Quick guides to 89 hazardous materials of special concern to USCG.

Field guide to placards and labels

Field guide to DOT placards, NFPA "diamond" labels, and intermodal tank codes.

Field guide to shipping documents & data sources

- Field guide to standard shipping documents and data sources.

Field guide to containers & vehicles

- Field guide to the containers and vehicles used to transport or store hazardous materials, and the markings, labels, and placards used on different types of containers.

Assessing hazards:

Assess a chemical's hazards

- How to assess a chemical's hazards to people and the environment.



Field guide to toxic levels of concern

Field guide to common toxic exposure limits, which indicate the level of hazard from a toxic gas or vapor.

Managing the response:

Getting response recommendations

- Get response recommendations from CAMEO Chemicals for controlling a hazmat release, fighting a fire, providing first aid to victims, and cleaning up the spill.

Dealing with hazmat on a vessel

- How to tell whether substances could react if they mix, recognize a "bad actor" chemical coming to your port, check for incompatible chemicals in a container, deal with a toxic gas hazard, verify cargo manifests, and more.

Is its Reportable Quantity (RQ) exceeded?

- Check whether the quantity of an on-scene substance exceeds its reportable quantity (RQ).

Identify an unknown chemical

Chemicals differ widely in their properties and in the hazards they pose: be as sure as possible of a chemical's identity when dealing with it during a response. Resources available to assist in identifying chemicals during an incident:

Find its name and ID number

- If you don't already know the identity of the substance, use shipping documents, placards and labels to get its name and/or ID numbers.



Use physical clues to identify chemicals

- If you think a hazardous material might be present, and have no name or ID number, use physical clues you observe on scene to find out.



Once you have a name and/or ID numbers for substances involved in an incident, use that information to view a Quick Guide for the chemical or to search for a more detailed report on the chemical in CAMEO Chemicals (or other sources).

A table titled "HAZARDOUS MATERIAL IDENTIFICATION GUIDE" with columns for Health, Reactivity, and Protective Equipment, and rows for various hazard levels.

Field guide to placards and labels

Three kinds of placards and labels are commonly used to mark hazardous materials containers or vehicles.

Use this field guide to decode the placards and labels you encounter during a response:

DOT placards:

Must be displayed on vehicles and freight containers transporting hazardous materials in amounts of 1,001 pounds or more, and on vehicles transporting any amount of explosives (divisions 1.1, 1.2, and 1.3), poison gases, poisonous liquids that pose an inhalation hazard, water-reactive substances, and certain radioactive materials.



Intermodal ID codes and panel:



Intermodal tanks and containers may be placarded with an orange panel that contains an international hazard identification code in the top section, and the commodity's UN/NA number United Nations-North America number. (Also UN Number or DOT Number.)

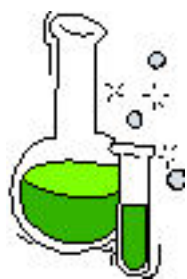
Four-digit number identifying an individual chemical or group of chemicals with similar characteristics. Required on shipping papers; often shown on placards or labels. Often preceded by "UN": e.g., "UN1219." in the bottom section.

The NFPA 704 diamond:

A standard placard used to identify the level of chemical hazard at fixed locations, such as production facilities, warehouses, storage tanks, and storage sheds.



The NFPA diamond also is used on some transported containers. It's sometimes called the "fire diamond."



Field guide to hazmat containers and vehicles

Hazardous materials are stored and transported in many kinds of containers and vehicles.

This field guide shows the kinds of containers and vehicles typically used to transport or store hazardous materials.

It describes the kinds of markings, labels, and placards used for particular kinds of containers, and how to interpret this information. Use this guide in any of three ways:

1. To get a clue to a container's contents. Because different kinds of containers typically carry certain kinds of substances, container type can be a clue to the kind of substance(s) it could be carrying. More definitive ways to identify a shipped hazardous material include the shipping documents that accompany the shipment, as well as markings, placards, and labels on containers.





2. To find out where to look on a container for labels and placards, and how to read and interpret them.
3. To check a tentative identification. Because shipping documents, placards, and labels sometimes contain errors, use multiple information sources--including container type--whenever you need to identify a shipped substance. For example, if a container's label indicates that it is a gas but the container is a type used to carry liquids, assume that the label may be in error, and check for additional information about the container's contents.

You can choose a container or vehicle to find out what it might contain and where to look for markings, labels, placards, and shipping documents



Intermodal Tank



Drum or small container



Fixed storage tank



Truck / tank car



Rail car

CAMEO Chemicals and CAMEO

CAMEO is a software tool for responding to chemical incidents, or planning for them. It comes in online and installable versions:

CAMEO Chemicals is an online library of information and response recommendations for more than 6,000 hazardous materials.



You can use its Reactivity Worksheet to predict the potential reactivity between substances involved in an incident.

You need only an Internet connection and browser to use CAMEO Chemicals.



CAMEO is a set of software programs, which includes the same chemical library and Reactivity Worksheet that are in CAMEO Chemicals.

It also includes ALOHA, a model that can predict the area that could be affected by a toxic gas release, fire, or explosion, and MARPLOT, an electronic mapping program.

CAMEO can be downloaded at no cost from the CAMEO Website.

What's in a chemical data sheet in CAMEO?

For each of more than 6,000 hazardous materials, CAMEO Chemicals and CAMEO show you a:

- description of the substance and its properties,
- response recommendations (e.g., first aid and firefighting, PPE selection),
- information about potential hazards (e.g., water reactivity), and
- how to control them (e.g., keep water away from water-reactives).



Chemical quick guides

The 89 hazardous materials below are of special concern because they are transported in bulk in the U.S.



In the response tools, you can click any name to see a quick-reference guide for that material. The guide shows the substance's most important hazards, NFPA codes Numbers representing the flammability, health, reactivity (instability), and other hazards of individual chemicals; shown on the "NFPA diamond", and key physical properties.

The guide also lists initial isolation and protective action distances for the material. Those distances give you a rough idea of the scale of the hazard. Longer distances mean the potential hazard could extend over a wider area.

Acetaldehyde	Carbon tetrachloride	Ethylene glycol	Hydrogen sulfide	Phosgene
Acetone	Chlorine	Ethylene oxide	Isobutane	Phosphorus trichloride
Acrylonitrile	Chlorobenzene	Ethylenediamine	Isopropanol	Propane
Alcoholic beverages	Chloroform	Ethyl methyl ketone	Kerosene	Propylene
Alcohols, n.o.s.	Chlorosulfonic acid	Flammable liquid, n.o.s.	Methacrylonitrile	Propylene oxide
Allyl alcohol	Crotonaldehyde	Fluorine	Methanol	Sodium hydroxide
Ammonia	Cyclohexane	Formaldehyde	Methyl bromide	Styrene
Ammonium nitrate	Diborane	Formic acid	Methyl chloride	Sulfur dioxide
Arsine	Diesel fuel (fuel oil)	Fuel oil (diesel fuel)	Methyl ethyl ketone	Sulfuric acid
Benzene	Diethanolamine	Furfural	Methyl methacrylate monomer	Tetraethyl lead
Benzyl chloride	Ethylene	Gasoline	Methyl tert-butyl ether (MTBE)	Toluene
Boron trichloride	Ethanol	Hydrocarbons, liquid, n.o.s.	Naphthalene	Trichloroethylene
Boron trifluoride	Ethyl acetate	Hydrochloric acid	Nitric acid (fuming)	Triethylamine
1,3-butadiene	Ethyl acrylate	Hydrogen bromide	Oleum (fuming sulfuric acid)	Tungsten hexafluoride
Butane	Ethylbenzene	Hydrogen chloride	Petroleum crude	Vinyl acetate
Butanol	Ethylene chlorohydrin	Hydrogen cyanide	Petroleum distillates	Vinyl chloride
Butyl acrylate	Ethylene dibromide	Hydrogen fluoride	Petroleum gases (liquefied)	Xylene
Butylene	Ethylene dichloride	Hydrogen peroxide	Phenol	
Carbon disulfide				

Field Guide to Shipping Documents and Data Sources

Use shipping papers along with other data sources (such as label and placards on containers and vehicles) to identify a potentially hazardous substance and recognize its hazards. Shipping papers should accompany any hazmat shipment. This is a guide to the commonest kinds of shipping documents and data sources.

Use as many information sources as you can!

- Shipping and facility documents and placards
- Dangerous cargo manifest (DCM)
- Shipping papers
- Material Safety Data Sheets (MSDS)
- Facility documents
- Placards and labels
- Chemical data sources for responders
- Emergency Response Guidebook (DOT ERG)
- CAMEO Chemicals and CAMEO
- CHEMTREC



Using shipping documents to initially identify chemicals

Use shipping documents along with placards and labels on containers to initially identify the contents of a container, vessel, or vehicle.

Contact the shipper and/or consignee if appropriate, as well as the 24-hour point of contact for the hazardous material(s) listed on the shipping document.

To ensure a shipped chemical's identity, search for the data sheet for the listed material in CAMEO. Compare CAMEO Chemical's description of the listed material against physical clues you find on scene.

Assess a chemical's hazards

This section explains how to use a substance's CAMEO Chemicals data sheet and other references to answer questions about its hazards.

Key questions about hazards:

- If it spills as a liquid, would the evaporating vapor be dangerous?
- What are its reactive hazards?
- Could it react with other chemicals on scene?
- Could it react with water?
- If it spills into water, will it float or sink?
- If it spills into water, could it dissolve into the water?
- If it spills into water, could it harm water animals or plants?
- Could it burn or explode?
- Is it corrosive?



Field guide to toxic Levels of Concern

A toxic Level of Concern (LOC) tells you what level (threshold concentration) of exposure to a chemical could hurt you or other people if you breathe it in for a defined length of time (exposure duration). LOCs also may be referred to as exposure limits, exposure guidelines, or toxic endpoints. Generally, the lower the LOC for a substance, the more toxic the substance is by inhalation. More...

This guide describes the LOCs that are often used in emergency response. A common use of LOCs during a response is to identify the area where a toxic threat to people could exist.

An LOC is a way to measure the toxicity of a gas or an evaporating vapor. An LOC for a particular substance is usually the "threshold concentration" of a substance in air, above which a toxic hazard to people is believed to exist.

Each LOC is designed to reflect hazard either (1) to the general public (including children and elders, people who are ill, and pregnant women) or (2) to adult workers.



Most LOCs have two components: a threshold concentration and an exposure duration.

The exposure duration for an LOC is part of the definition of that LOC.

When the threshold concentration is exceeded for longer than the exposure duration, exposed people might experience the symptoms represented by the LOC.

Public exposure guidelines

Guidelines to predict how the general public could be affected if exposed to a particular hazardous chemical:

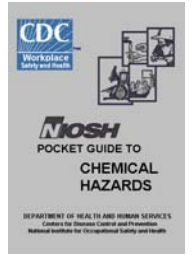
- AEGL (Acute Exposure Guideline Level)
- ERPG (Emergency Response Planning Guideline)
- TEEL (Temporary Emergency Exposure Limit)



Workplace exposure limits

Workplace exposure limits are meant to protect worker safety and health over a working lifetime. They typically incorporate safety margins to ensure that workers won't be overexposed to hazardous chemicals in the workplace. Generally, employers must ensure that these limits are not exceeded in the workplace:

- IDLH (Immediately Dangerous to Life and Health Level)
- TLV (Threshold Limit Value)
- REL (Recommended Exposure Limit)
- PEL (Permissible Exposure Limit)



Manage the response to an incident

This section explains how to use CAMEO Chemicals data sheets and other information sources to:

- Get response recommendations for hazardous materials. Instructions for getting recommendations for chemical incident response (e.g., firefighting, first aid, protective gear selection) from CAMEO Chemicals.
- Plan for or respond to incidents involving hazardous materials shipped on vessels.
- Work with a chemical's Reportable Quantity (RQ). Find out whether there is a Reportable Quantity (RQ) for a spilled chemical and calculate whether the RQ has been exceeded (you'll need to know the release amount and duration). RQ does not dictate whether a response is needed or not, or how to respond, but it does affect whether a release must be reported.

Getting response recommendations

This page explains how to get response recommendations from the CAMEO Chemicals data sheet for a hazardous material, and other sources:

1. First, search for the chemical's data sheet in CAMEO Chemicals
2. Next, review the data sheet for the following recommendations:

- Fighting a fire involving the material
- Responding to a release of the material when there's no fire:
- Providing first aid and protecting people at the scene:
- Choosing protective gear (PPE)
- Cleaning up a spill and disposing of spilled material



Is the RQ exceeded?

For each of about 800 chemicals designated as hazardous substances under CERCLA ("Superfund"), a reportable quantity (RQ) has been established (40 CFR 302).

If an amount of a CERCLA chemical as large or larger than the RQ is released to the environment during a 24-hour period, the responsible party (RP) must report the release to the National Response Center (NRC, 1-800-424-8802) (40 CFR 302.4).

Also, for each of about 360 chemicals designated as extremely hazardous substances (EHSs) in, a threshold planning quantity (TPQ) has been established. A release of an EHS that reaches or exceeds the TPQ may need to be reported to state and local planning authorities (40 CFR 355).

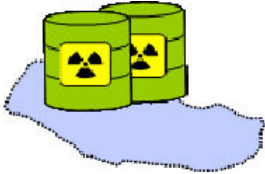
Some specific exceptions to these rules are explained in CERCLA and EPCRA.

RQ does not dictate whether a response is needed or not, or how to respond, but it does affect whether a release must be reported.

Finding an RQ and checking whether it's exceeded

You can use the RQ Calculator to check whether there is an RQ for a released chemical and whether the RQ has been exceeded. You'll need the chemical's name or CAS number, and estimates of the release amount and duration.

You also can use CAMEO Chemicals to check whether there is an RQ (or TPQ) for a substance on scene, to see that RQ (or TPQ), and to find out whether it has been exceeded.



Field Guide to WMD

Some kinds of dangerous materials historically have been used as weapons of mass destruction (WMDs) or could be used as WMDs.

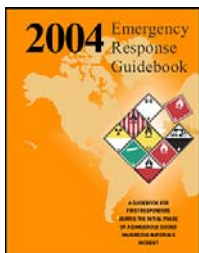
This field guide contains basic information and expert contacts for the following kinds of WMD:

- Chemical warfare agents
- Biological warfare agents
- Radiological warfare agents
- Industrial chemicals as WMDs

Other information sources found on the Chemical Response Tool website

Chemical factsheets and response guides

- CAMEO Chemicals - Online library of information and response recommendations for more than 6,000 hazardous materials.
- International Chemical Safety Cards - Information about hazards and recommendations for transport, storage, disposal, and response for about 1,500 hazardous materials.
- Hazardous Chemical Factsheets - Briefing papers (in PDF format) about common hazardous chemicals, including health hazards, identification, workplace exposure limits, medical tests, workplace controls and practices, personal protective equipment, handling and storage, definitions, and emergency response information for fires, spills and first aid.
- Toxicological Profiles (ToxFAQs) - For common hazardous materials, from ATSDR.
- WebWISER - Hazards information and response recommendations for 415 hazardous substances from the National Library of Medicine. Includes tool for identifying a chemical using physical clues and human health symptoms. Includes common biological and radiological agents.



- North American Emergency Response Guidebook - Online version
- NIOSH Pocket Guide to Chemical Hazards - Online version.
- EXTOXNET pesticide information - Toxicity information, physical properties, and environmental fate and effects for pesticides.
- CAMEO Website - Download the CAMEO software suite (you need to install it to use it). It includes the same chemical library and Reactivity Worksheet that are in CAMEO Chemicals, and other tools for responders and emergency planners.
- ChemFinder - Database of physical properties information for chemicals. Must register (free) after five searches.

PPE recommendations & data

- DuPont's SafeSPEC - Online tool for PPE recommendations.
- Dupont's Chemical Resistance Data - Search by chemical name to see breakthrough times and permeation rates for tested materials.
- Trelleborg Level A protection - To see breakthrough times data, click product name, then open and review its product sheet.
- NIOSH Recommendations for Chemical Protective Clothing - Companion to the pocket guide. Scroll down to find links to chemical-specific recommendations.
- NIOSH Personal Protection page - Index of links to PPE topics.
- OSHA Respiratory Protection page - Background information about respirators and other protection.



Calculation tools

- RQ Calculator - Quickly find out whether the amount of a hazardous substance spilled exceeds its reportable quantity Or RQ. The quantity of a hazardous substance or extremely hazardous substance that, if released, must be reported to the National Response Center, the State Emergency Response Commission, and the community emergency coordinator for areas likely to be affected by the release.

WMD references



- Chemical Agent Information - Briefing sheets and related information from NIOSH.
- Chemical Attack - Factsheet from the National Academy of Engineering (PDF file, 92 KB)
- Bioterrorism Agent Information - Briefing sheets from CDC.
- Biological Attack - Factsheet from the National Academy of Engineering (PDF file, 162 KB)
- Information on radiation emergencies - Information and guidelines for responders, the public, and medical workers from CDC.
- Radiological Attack - Factsheet from the National Academy of Engineering (PDF file, 94 KB)
- Nuclear Attack - Factsheet from the National Academy of Engineering (PDF file, 112 KB)

Local Government Reimbursement Awarded

EPA Headquarters has evaluated an application submitted by Lone Grove, OK, under the Local Government Reimbursement Program.

Based on HQ evaluation, Lone Grove is eligible for an award of \$18,912.47 for costs incurred responding to a contaminant release on January 23, 2008. Refer to the LGR webpage for more information concerning this important program:

<http://www.epa.gov/oem/content/lgr/index.htm>



Emergency Numbers for Spill Reporting in Region 6

Arkansas Dept. of Emergency Management	800-322-4012
Louisiana State Police	877-925-6595
New Mexico State Police	505-827-9126
Oklahoma Dept. of Environmental Quality	800-522-0206
Texas Environmental Hotline	800-832-8224

National Response Center	800-424-8802
EPA Region 6	877-372-7745
CHEMTREC	800-424-9300