OREGON HAZMATTERS

Protecting citizens, their property and the environment from fires and hazardous materials.

OSFM Mission Statement

Fall 2007

Hazardous Materials Response Team # 4 ~ Klamath/Lake at a gasoline tanker response on July 28th.

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Inside this issue...

EMERGENCY PLANNING & RESPONSE SECTION SPOTLIGHT

CR2K Gets A New Manager

Chris Kuenzi has worked at the Oregon Office of State Fire Marshal (OSFM) since 2001. Chris began his career at OSFM as a Hazardous Materials Information Specialist. In February 2004, Chris moved into a new position as a Community Planning Coordinator, providing hazardous materials planning and training assistance to emergency response personnel around the state. In June 2007, Chris became manager of the Community Right to Know Unit which collects, validates, and distributes information about hazardous materials in Oregon.

Before coming to the OSFM, Chris worked for the Marion Soil and Water Conservation District, providing technical assistance to landowners on conservation issues. He also worked for Waterlab Corporation as a laboratory technician. Chris graduated from Oregon State University in 1998 with a B.S. in Environmental Science.

"I look forward to the opportunity to contribute to the leadership of the Oregon Community Right to Know program and hope to continue its success" says Kuenzi.

If you have anything that you would like to be included in the Emergency Planning & Response Section Spotlight, please email it to Jamie Kometz at jamie.kometz@state.or.us

HazMat Team Member Retires

Submitted by Reed Godfrey

Larry Blumenstein retired on August 07, 2007. His dedication, enthusiasm, and energy will be greatly missed by the Salem Hazardous Materials Response Team, Salem Fire Department, and the fire service as a whole.

The 2007 HazMat Teams Conference was a great success. Soon the HazMat Teams Conference planning committee will meet to begin planning the 2008 HazMat Teams Conference. The dates and locations are still to be determined.

Regional Hazardous Materials Response Team #13 ~ Salem

How many members are on your team and explain the make up of it.
Salem HazMat 13 is made up of 28 personnel: 24 members from Salem Fire Department, and four members from City of Salem Public Works. At the fire department, eight personnel are assigned to the team from each shift with three team members assigned to Station 9 where the bulk of the equipment is quartered. Station 9 is located at Boone and Battlecreek Road SE at the south end of the city near I-5 and Kuebler Road SE.

What is the average age of your team members?
The average age of the team members is approximately 38.

Give a general description of your team's response boundaries. What type of geographical area do you serve? How does this impact your ability to respond?
HazMat 13 responds along Hwy 22 from the coast to the Santiam Pass at Three Fingered Jack, and along the I-5 corridor from just south of Woodburn to just north of Jefferson. HazMat 13's response area includes all or part of Clackamas, Lincoln, Linn, Marion, Polk, Tillamook, and Yamhill Counties.
HazMat 13's response area contains several major highways and numerous waterways including the Willamette and Santiam Rivers. The diversity of terrain, two mountain passes, and limited water crossings in many areas pose the greatest physical challenges to incident response.
The vast majority of incidents occur in and around Salem as well as along the I-5 corridor.

As a team, what type of HazMat training do you do?
HazMat 13 holds a HazMat drill every Friday for half a day and organizes other drills and training sessions when possible on shift. Fire department team members attend drill on duty thereby training approximately once every three weeks.
HazMat 13 endeavors to conduct a full day of training with the entire team twice a year. Typical training includes table top exercises, scenario based evolutions, equipment familiarization, and chemical identification.

What is your greatest potential for a HazMat incident?
HazMat 13's greatest incident potential changes on a regular basis as industries within the community change. Salem has several cold storage and food processing plants which use large amounts of chlorine and ammonia. HazMat 13's most consistent potential for hazardous materials incidents include terrorist acts against the numerous state and federal offices in Salem and transportation incidents from I-5 and Hwy 22.

What has been your most challenging incident?
While every incident provides its own unique challenges, one of the most challenging times was when anthrax scares were at their peak several years ago. During that time, HazMat 13 responded to hundreds of white powder calls. Many involved government offices and a number of the incidents were determined to be credible threats.
Sifting through the threats and providing comfort to frightened citizens on so many calls for such a prolonged time was a challenge given the limited resources available.

Regional Hazardous Materials Response Team #13 ~ Salem

continued ...

Is there any advice you would give to the other teams?
It's dangerous out there. Watch where you step … and what you step in.

Is there any other information you would like to share?
HazMat 13 recently received a new Suburban and trailer. Still being in one of the original style

response apparatus, the extra capacity will be a great improvement to the team's response capabilities.

Salem is currently developing a suit/PPE tracking access database. It will store all suit testing information and prompt the user for necessary maintenance tests as well as low stock levels of various PPE items. Please feel free to contact us if you are interested in this database once it is complete.

For questions about Hazardous Materials Response Team #13, contact: **Reed Godfrey,** Hazardous Materials Response Team Administrator
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egodfrey@cityofsalem.net

Regional Hazardous Materials Response Teams Contact Information

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HazMat 02/Eugene – Contact Lance Lighty at: Lance.D.Lighty@ci.eugene.or.us

HazMat 03/Gresham-Multnomah Co. – Contact Steve Best at: best@ci.gresham.or.us

HazMat 04/Klamath- Lake – Contact Larry Burg at: lpburg@charter.net

HazMat 05/Linn/Benton – Contact Scott Cowan at: scott.cowan@cityofalbany.net

HazMat 06/Portland – Contact Grant Coffey at: gcoffey@fire.ci.portland.or.us

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HazMat 09/Tualatin Valley – Contact Brian Sherrard at: sherrard@tvfr.com

HazMat 10/Hermiston – Contact Steve Frazier at: sfrazier@mail.hermiston.or.us

HazMat 11/Astoria – Contact Mark Truax at: mtruax@astoria.or.us

HazMat 12/LaGrande – Contact Bruce Weimer at: bweimer@uwtc.net

HazMat 13/Salem - Contact Reed Godfrey at: egodfrey@cityofsalem.net

HazMat 14/Ontario – Contact Terry Mairs at: terry.mairs@ontariooregon.org

HazMat 15/Coos Co. – Contact Mark Anderson at: manderson@coosbay.org

What Has Happened Since September 11, 2001?

September — a month that brings memories of the tragic events of September 11, 2001. Four airplanes were hijacked by an organized group of terrorists. Two planes struck the World Trade Center Towers in New York City —causing both to tragically crash to the ground. A third struck the Pentagon in Washington DC and a fourth crashed in a field in Pennsylvania. Thousands of lives were lost along with billions of dollars in property damage amidst untold human suffering. The efforts of the emergency response organizations were truly heroic and played a major role in restoring order out of the chaos.

What has happened since…

There have been a number of actions by governments, trade and professional associations and individual companies, including:

- The US federal government created the Department of Homeland Security (DHS) which continues to aggressively improve security systems across the country.
- State and local governments have reviewed their security systems and have made a variety of significant improvements. The US Coast Guard and Department of Transportation have published federal regulations dealing with security issues.
- AIChE's Center for Chemical Process Safety (CCPS) developed and distributed "Guidelines for Analyzing and Managing the Security Vulnerabilities at Fixed Chemical Sites".
- American Chemistry Council members have implemented the Security Code of Responsible Care.
- Many chemical facilities globally have completed a Security Vulnerability Analysis (SVA) and have implemented recommendations.

What you can do…

An informed, watchful workforce is a major element in any site's security effort.

- Question things that look out of place: packages, people and transportation vehicles should have been "requested" by someone at your site. If they are present for no apparent reason, there is immediate cause for concern. Get the right people involved in investigating these questionable activities and events.
- Your site may have a variety of security procedures dealing with suspicious packages, bomb threats, emergency response and others. Take time to read them and understand your role in carrying them out.
- Be particularly diligent if your site handles hazardous chemicals. These facilities are especially sensitive and should receive special attention.
- Housekeeping is an important element in site security. A clean plant is a plant where "unusual items" are readily detected.
- Recognize that increased security may result in increased inconveniences. Be tolerant of them.

(Reference: Process Safety Beacon)

HOME LAB RELEASES SIGNIFICANT AMOUNTS OF MERCURY

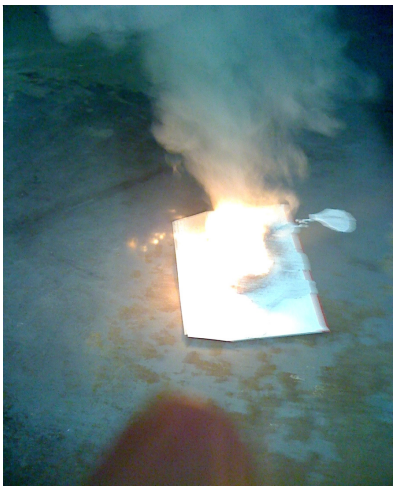
BY GRANT COFFEY, REGIONAL HAZARDOUS MATERIALS RESPONSE TEAM #6 ~ PORTLAND

On Saturday May 5th at approximately 10 p.m., Portland Firefighters responded to a call of smoke in a structure, at the Ladd's Addition apartments in southeast Portland. They found misty, white smoke in the hallways and initially thought someone had discharged a dry chemical extinguisher. Later it was discovered that a resident had been conducting an experiment with Mercury and when the metal ignited he spilled it on the floor. State Regional Hazmat Response Team #6 was called because of the Incident Commander's inability to identify the source and the number of patient exposures. Several residents were transported to the hospital with respiratory distress, even before the responders knew what was in the smoke traveling throughout the structure. This contamination was basically confined to the structure and due to the time of day, the team was not concerned with others in the neighborhood.

While the team was evaluating the scene, a resident showed up and informed them that he was the cause of the incident. This home 'scientist' was experimenting with an alloy that in theory could eventually be used to produce hydrogen gas that could be an economical source for a motor vehicle. His lab was in a garage/storage area on the first floor of a three story apartment building and contained an accumulation of years worth of chemicals, experiments and research. The team notified OERS and Oregon Poison Control and began to develop and plan for the possible victim exposures to Mercury.

The setup for the production of hydrogen was relatively simple and consisted of a pressure cooker on a heat plate, copper tubing, nitrogen gas and several chemicals. The basic operation started with sodium metal sliced up and mixed with powdered aluminum and liquid mercury. This mixture was placed in a crucible in the pressure cooker and heated to 400 degrees F under an inerting atmosphere of nitrogen gas. When finished, the desired result was an alloy that when in contact with water, would produce hydrogen gas that could be used for fuel. The cooker told me that his initial test was to drop a BB size sample of the alloy down the laundry sink drain. A two-foot yellow flame emerged when water was subsequently poured down the drain.

When the experiment went awry, the cooker dropped the now flaming metals onto the concrete floor and left the scene without informing any residents of what the smoke contained. An estimated ¼ to ½ pound of Mercury was spread throughout the structure in the ensuing smoke. **Mercury (CAS # 7439-97-6)** is a naturally occurring, shiny silver-white metal that when heated produces a colorless, odorless gas. This chemical has been found in at least 714 of 1,467 National Priorities List sites identified by the EPA. It is found in many products such as switches, lights, motors, computers, sump pumps, thermometers, paint, batteries, dental amalgam, light-up shoes, just to name a few.



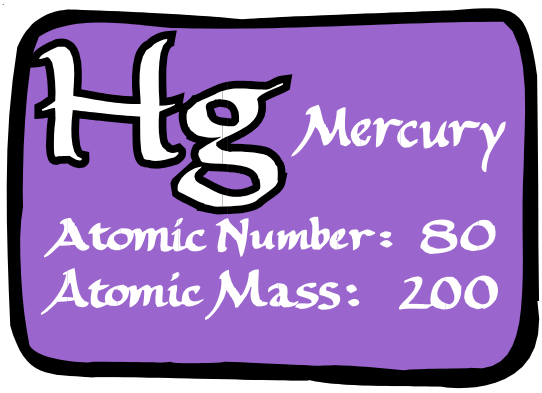
The nervous system is very sensitive to all forms of mercury. Exposure to high levels of metallic, inorganic or organic mercury can permanently damage the brain, kidneys and developing fetus. Relocation is recommended if the indoor levels are at or above 10ug/m3. Exposures are less than ½ of the TLV and about 1/10 of the OSHA PEL. The exposure limits for elemental mercury vary by regulatory agency:

Home Lab Releases Significant Amounts of Mercury

continued...

OSHA	50-100ug/m3
NIOSH	50ug/m3
ACGIH TLV	25ug/m3
EPA (residential occupancy)	≤ 1ug/m3

After selective decon operations, the residents were placed in a bus and temporary living arrangements were made for them. Our firefighters left much of their equipment on scene and the apartments were secured for the night. This was the beginning of a two week presence at the scene for evaluation and decontamination due to the presence of toxic levels of mercury. Nearly three dozen residents and responders were treated at Oregon Health and Sciences University and Portland Fire and Rescue ended up discarding over $10,000 worth of equipment. Mercury blood levels were from 2ug/L for some medics, to 32ug/L for a firefighter. Most of the firefighters began precautionary chelation therapy, but it was discontinued after blood tests came in at levels only slightly elevated.



The Hazmat team returned to the station, but the team coordinator remained to coordinate a multi-agency response over the next several days. This team included; OERS, EPA, Explosives Disposal Unit, Fire Marshal's Office, Fire Investigators, Multnomah County Health, City Attorney's Office, Poison Control, NRC cleanup contractors, DEQ, ATSDR (agency for toxic substance and disease registry) and the CDC. Daily small team briefings were held, along with daily phone consultations between various parties. Group meetings were held with the residents and the media visited the site several times.

Cleanup and decontamination procedures required environmental technicians that were suited up and wearing mercury vapor respirators. The apartments and contents tested at levels from 145 ug/m3 at the lab bench, to over 250 ug/m3 for some firefighter turnouts. The whole building had to be sealed and heated to nearly 100 degrees F to drive the Mercury into vapor form, where it could be filtered or otherwise collected. The unified group agreed to a reoccupation standard of ≤ 1.0mg/m3. This process took nearly two weeks before most of the residents could move back into their rooms. Much of the contents of the apartments including carpets wall coverings and clothing had to be removed, bagged and sealed in a dumpster. A special mercury detector called a Lumix was shipped in and the NRC team began to monitor samples from the building. Hallway surfaces were washed with Simple Green, followed with GBX Mercury suppression material. The lab itself was acid washed and then painted over with a sealant. When the dumpster was filled, readings were 50-100 ug/m3 at a point 6" from the dumpster cover. Inside the box, readings exceeded 999 ug/m3 or over 1 mg of mercury. Eventually the whole dumpster was sent to Arlington, Oregon and buried as hazardous waste.

Mercury contaminated objects are regulated as hazardous wastes under the ***Resource Conservation and Recovery Act (RCRA) 42 USC 6921***. Hazardous wastes are generally defined in ***40 CFR 261.23***. Hazardous wastes must be stored, transported and disposed of in accordance with RCRA which has extensive regulations governing each step of the process. The wastes may only be transported by EPA registered companies pursuant to 40 CFR 263.

Home Lab Releases Significant Amounts of Mercury

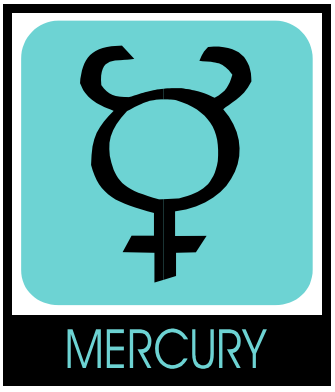
continued...

Some event lessons included;

- Respiratory protection should be worn in all cases when there is an unknown product present, respiratory complaints or visible smoke

- Contamination even if minor, can become a public relations problem especially if the product is spread off-site to other areas by the affected population.

- Be prepared for the possibility of equipment contaminated so severely that although possible, decontamination isn't cost effective. Significant quantities of equipment may have to be discarded – consider disposable items when possible.



- Transport medics generally will not take patients that have any contamination. Conduct regular interagency training to become familiar with each other's SOP's.

- Notify OERS early and specify agencies that if brought in early can help to avoid downstream problems. Develop face to face relationships with these agencies before these events happen.

- This type of event can happen anywhere and anytime.

Mercury (Hg) Facts

By Chris Kuenzi, CR2K Manager

Description:

- Synonyms: quicksilver; hydrargyrum
- Silvery, extremely heavy, odorless liquid
- Hazard classes: (6.1) Poisonous Materials; (8.0) Corrosive; (6.4) Chronic Health Hazard
- CAS No.: 7439-97-6
- UN-NA No.: 2809

Health Hazards:

- Highly toxic material
- Threshold Limit Value (TLV): 0.025 mg/m^3
- Metallic mercury is highly toxic by skin absorption and inhalation of fumes or vapors. All inorganic compounds and most organic compounds of mercury are highly toxic.
- Symptoms of acute exposure include irritation, burns, metallic taste, nausea, vomiting, coughing and chest tightness.
- Chronic exposure through any route can produce central nervous system damage.

Personal Protective Equipment:

- In normal conditions wear eye protection and impervious gloves to prevent any possibility of exposure. If engineering controls are not in place and respirators are required, up to 0.5 mg/m^3 use cartridge respirator with mercury vapor cartridges. Up to 2.5 mg/m^3, use full face chemical canister with mercury compounds canister. Up to 10 mg/m^3 use full faced, positive pressure SCBA.
- In fire conditions wear special protective clothing and full-faced, positive pressure SCBA.

Incident Reporting and Information:

- There are approximately four facilities in Oregon currently reporting mercury on the Hazardous Substance Information Survey.
- There have been 18 hazardous materials incidents reported in Oregon from 1986 to mid-2007 involving mercury

HazMat Outreach Off The Beaten Path

by Sarah J. Colvin, Deputy State Fire Marshal

Ever wonder where Pine Hollow Fire Department is? What about Moro RFPD, Fossil Fire Department, or Juniper Flats RFPD?

Well…. They have wonders too! They wonder about the Regional HazMat teams. What do they do? What equipment do they have? When should they call for a HazMat team? Will they get billed if they call you for assistance? Just exactly who are the HazMat people and how can they help us?

As a Deputy State Fire Marshal, I cover five rural counties in the north central part of this state; Wasco, Sherman, Gilliam, Morrow and Wheeler Counties. I buzz around doing my thing and talk with a lot of volunteer chiefs and firefighters, listen to their calls on the radio, and try to share some of my resource knowledge with them. One thing they have in common is their interest in HazMat teams. The departments close to a Regional Team are familiar with the teams and know when and how to call, but it's the little guys off the beaten path who have questions.

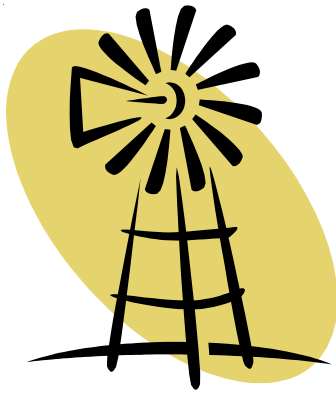
A few suggestions of how your hazmat team can help these small departments is to offer:

- training on decontamination capabilities
- training on site security, identification and stabilization
- training on containment
- take the vehicles up to a drill night and show them all the toys and equipment
- make contact with them and discuss when to call and what services you provide

These fire departments love new ideas, training, and gaining knowledge. They would be happy to group a variety of small departments together for a combined department training session.

I hope you take on my challenge statewide. If you have any questions or need contact information for my district, please contact me at 541-980-3341.

FIELD DEPUTY STATE FIRE MARSHALS CONTACT INFORMATION



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Colvin, Sarah (Madras)
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Crosiar, George (Albany)
541-967-2043
Davis, Greg (Klamath Falls)
541-883-5713 x255
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Goff, Scott (Pendleton)
541-276-4076
Huff, Brian (Prineville)
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Megert, Ted (Portland)
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Nees, Paul (Salem)
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Smith, Richard (Ontario)
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Stevens, Michelle (Central Pt)
541-776-6114 x272
Wright, Bob (Supv DSFM Roseburg)

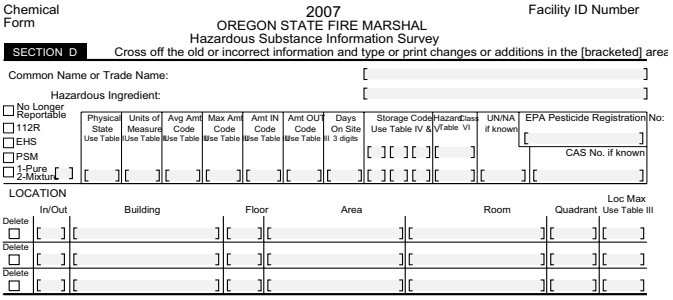
Avoid Having Your Hazardous Substance Information Survey Returned

By Jackie Sparks, Survey Processor

Did you know that Hazardous Substance Information Surveys are returned to facilities if required information is missing or incorrect? If certain information is missing from the survey or reported incorrectly, the survey will be returned to the facility and will not be considered 'received' by the Office of State Fire Marshal. This could cause your survey to be late. As a result, the facility would be out of compliance with the Oregon Community Right to Know and Protection Act of 1985 and possibly subject to a, Notice of Non-Compliance and a possible penalty assessment could be issued. To provide the facility an opportunity to correct their survey, the staff of the Community Right to Know Unit return surveys with missing or incorrect information.

Following are the top ten items on the survey usually reported incorrectly or missing required information.

1. Questions 1 thru 4 in Section A which relate to hazardous substance present at the facility.
2. The six-digit North American Industry Classification System (NAICS) number that best describes the industry and business activity for the facility at the site. If a facility needs help to find the correct NAICS code, a good resource is the U.S. Census web site at http://www.census.gov/epcd/naics02/index.html.
3. The Emergency contact person's name, and day and night contact phone numbers.
4. A signature in Section C.
5. The common name or the trade name of the substance being reported.
6. The codes for the average amount (Avg Amt Code) and location maximum amount (Loc Max) of a substance cannot exceed the code for the maximum amount on site (Max Amt).


Chemical Form
2007
OREGON STATE FIRE MARSHAL
Hazardous Substance Information Survey
Facility ID Number
SECTION D
Cross off the old or incorrect information and type or print changes or additions in the [bracketed] area
Common Name or Trade Name:
Hazardous Ingredient:
No Longer Reportable
112R
EHS
PSM
1-Pure 2-Mixture
Physical State Use Table I
Units of Measure Use Table II
Avg Amt Code Use Table II
Max Amt Code Use Table II
Amt IN Code Use Table II
Amt OUT Code Use Table II
Days On Site 3 digits
Storage Code Use Table IV &
Hazard Class Table VI
UN/NA if known
EPA Pesticide Registration No:
CAS No. if known
LOCATION
In/Out
Building
Floor
Area
Room
Quadrant
Loc Max Use Table III
Delete

7. The number of days that the substance is on site.
8. The storage codes for the substance which indicate the type of container it is stored in.
9. The location information for a substance: this indicates if the location is inside or outside, which building, floor, area, and / or room; and / or the quadrant; and the maximum amount of the substance found at that location. (Loc Max)
10. Listing the same substance more than once on the survey. Each substance should be listed only one time.

If you still have questions about the survey, more information can be found in the survey instruction booklet available online or by calling the Hazardous Substance Information Hotline at 503-378-6835 Monday thru Friday, 8am-12 and 1pm-5pm.
Please visit our web site at http://egov.oregon.gov/OSP/SFM/CR2K.shtm

NATIONAL ASSOCIATION OF SARA TITLE III PROGRAM OFFICIALS
WHITE PAPER
"THE PRACTICAL EVALUATION OF LOCAL EMERGENCY PLANNING AND PREPAREDNESS"

"The National Association of SARA Title III Program Officials (NASTTPO) is made up of members and staff of State Emergency Response Commissions (SERCs), Tribal Emergency Response Commissions (TERCs), Local Emergency Planning Committees (LEPCs), various federal agencies and private industry. Members include state, tribal or local government employees with Emergency Planning and Community Right to Know (EPCRA) program responsibilities, such as health, occupational safety, first response, environmental, and emergency management agencies. Associate members are welcome and include anyone with an interest in effective EPCRA implementation. The membership is dedicated to working together to prepare for possible emergencies and disasters involving hazardous materials, whether they are accidental releases or a result of terrorist acts"

The objective of this paper is not to simply restate the requirements of the Emergency Planning and Community Right-to-Know Act (EPCRA). Rather it is intended to make observations on the practical aspects of local emergency planning and preparedness. It is assumed that the reader has some background in the provisions of EPCRA and those will not be restated here.

Local emergency planning committees (LEPCs) are the backbone of EPCRA. They are typically a collection of volunteers made up of local government employees, first response agencies, facility representatives and members of the public. While EPCRA does contain a list of desired membership background and representation, most LEPCs do not have members in all those categories. Rarely will an LEPC have a staff and even less often will that staff be either paid or applied to LEPC functions on a full-time basis.

The typical LEPC functions without a budget or with only a small amount of money frequently in the form of grants from the State Emergency Planning Commission (SERC). The chair and LEPC members often provide support from their own pockets or with discretionary funds from their employer's budgets.

LEPCs are frequently organized within the offices of a first response agency or local government office of emergency management. In such cases it can be difficult to identify where the parent agency's activities end and the LEPC's begin. The functions are obviously complementary and therefore that distinction is frequently misleading or of little importance in the day-to-day planning and preparedness of the community.

Planning

A limited reading of EPCRA gives the impression that the LEPCs are suppose to develop emergency response plans for hazardous substances. This can create a conflict if it is routine for such plans to already exist within first response agencies and local emergency management offices. An LEPC that is housed within one of these agencies will have typically been involved in its planning activities. More independent LEPCs will frequently be active in providing information and input to these agencies in order to help them improve the plans.

In some communities the LEPC has become a broader all-hazards emergency planning agency within the community. This happens when the cooperation and resources available within the LEPC make this the most efficient approach for that community. While not all SERCs have adopted policies on the coordination between LEPCs and other planning agencies, most encourage whatever arrangement is most productive for the community.

Most LEPCs consider and adopt projects based upon core missions they feel are important in the community. These may involve any

"The Practical Evaluation of Local Emergency Planning and Preparedness" continued...

variety of matters, but are generally focused on a desire to protect first responders and the public through better information and awareness of risks in the community. Consideration must be given to the resources available and the interests of the members. Most SERCs will support a vast range of LEPC activities as long as they have some relationship to the intent of EPCRA.

The greatest tool available to an LEPC is its very substantial information gathering power. However, most SERCs encourage LEPCs to do more than just collect boxes of paper. Many LEPCs focus their activities on information requests that bring facilities into closer cooperation with the first responder community. Examples are fire department approval of contingency plans, exercise organization and public awareness of expected behavior during an emergency.

LEPCs also perform a generalized role in community-wide efforts to improve public awareness of risks and preparedness for emergencies. They will encourage the very basic things such as 72-hour emergency kits, first aid training, and household safety. Often they will work on projects such as household hazardous waste collection, school lab chemical safety and the hazards of methamphetamine labs.

Most SERCs will encourage LEPCs to think expansively as there are a myriad of other activities that may be useful in a community. The late Jim Makris - widely called the "father" of EPCRA once said that its best to think of LEPCs as local "environmental" protection committees as he saw them working more broadly to improve conditions in their communities.

Organization & Membership

LEPC membership is approved by the SERCs. Once an LEPC is established, SERCs will have some procedure or policy by which the committees are responsible for advising the SERCs of their membership changes and seeking approval. Whether or not an LEPC has "officers" beyond a chair is a matter of state practice and policy. The chair typically functions as the point of contact for the SERC, the public and for regulated facilities.

Broad membership is encouraged. While there is a list of membership types in EPCRA, SERCs recognize that it is not realistic to find all of those types of people in every community. On the other hand, membership should not be limited. Anyone with an interest, a desire to assist with projects, and good manners should be encouraged to join and participate.

By-laws are not required in most states, but they are commonly used. The function of by-laws is primarily to provide some structure to membership decisions and the election of the chair. As a practical matter LEPCs tend to function in a consensus fashion rather than using a formal vote process. Exceptions would be the rare event when the LEPC intends to pursue legal enforcement of its information requests under EPCRA.

Dealing with Facilities

The power of LEPCs is to obtain information relevant to emergency planning. Both owners and operators of facilities are responsible for providing this information. While some reports, Tier II for example, are automatic under EPCRA and state laws, the real power in LEPC information requests is the ability to focus the request on the specific facility and community involved.

LEPCs should articulate why they are asking for information beyond the routine Tier II form. There are, of course, many potential reasons. The point is that when asking a facility for additional information it should be clear to that facility that the information is important to the community.

"The Practical Evaluation of Local Emergency Planning and Preparedness"

continued...

LEPCs will often look to provide facilities with the opportunity to demonstrate their good corporate citizenship. Many facilities try hard to reduce risks and support first responders. Through exercises, public meetings and other activities it is important for LEPCs to recognize and reward these activities.

Dealing with the Public

As a general rule, all EPCRA-related information in the possession of an LEPC is publically available. Requests for information, such as Tier II date and CAA Sec. 112r Risk Management Plans, can come to an LEPC. They should have procedures in place to notify the public that this information is available and instructions on how it can be obtained.

LEPCs should encourage the public to participate with the LEPC. If members of the public have questions about preparedness or facility safety, it is always appropriate to ask the public to attend a meeting to discuss their concerns. Often an LEPC will refer facility-specific inquiries directly to the facility. While this can be effective in improving facility/public relations in many cases, it is equally true that the involvement of the LEPC will be useful in creating some context for the discussion.

Accident prevention is primarily the responsibility of facilities. Nonetheless, LEPCs and first responder organizations are just as responsible to the public as the facility when it comes to community preparedness. Assurances of accident prevention programs only address part of the overarching community planning and preparedness equation. Effective preparedness involves the facility, the community and individuals merging answers to these three key questions:

-What are the accident risks of this facility and how are they being prevented?

-What are the plans and capabilities of the community should an accident happen?

-What do I do to protect myself and those I am responsible for during an emergency?

The Broader Mission

One of the most difficult tasks faced by an LEPC is creating a public awareness of risks and improving community preparedness. LEPCs should look for opportunities through the schools, civic groups, youth programs, churches and any other organization active in the community to accomplish this mission.

This means that LEPCs must embrace a broader sense of community responsibility for accident prevention and preparedness. It is not appropriate to be a passive collector of information. With this in mind the following "Golden Rules" are proposed for the broader community.

Preferably it is the LEPCs that should lead the process of addressing the goals stated in the Golden Rules, but that really is not the complete point. Whether or not an LEPC exists, leadership within a community needs to be focused on these issues. Leadership comes from various places depending upon the community, it may be elected leadership, first response agencies or community groups. Whether or not called an LEPC, the functions must exist or no community will be adequately involved in accident prevention or preparedness.

State and federal agencies along with facilities should have an expectation that communities will address these issues. They cannot be passive in this regard. The risk is shared and the responsibility is equally shared. Preparedness cannot be imposed on a community nor can it be provided from outside.

"The Practical Evaluation of Local Emergency Planning and Preparedness"

continued...

All stakeholders have a responsibility to find and encourage appropriate leadership within the community.

The era of passivity in accident prevention and community preparedness is gone. Whether facility, government, first response agency or members of the public, we are all connected and we all have a role. The best examples of local emergency planning and preparedness focused on trying to follow the Golden Rules will have the following attributes:

-A close relationship between emergency planners and first response agencies.

-A close relationship between facilities and these agencies and the public.

-Information sharing on hazards, accident prevention efforts and emergency response.

-Public involvement in developing expectations for public behavior during an emergency.

-Repeated exercises of emergency response plans including public education.

-Generalized all-hazards preparedness efforts developed with public involvement.

We are mindful that in the past the regulatory environment has tended to create an adversary relationship between communities and facilities. From topics as diverse as land use planning and environmental permitting through emergency response, the relationship is often confrontational. LEPCs are not regulatory agencies. They have the capacity to break through this barrier for the greater good of their communities.

Golden Rules For Communities

• **While the primary responsibilities lie with the industry, there are important responsibilities for stakeholders at the local level.** An important aspect of making the facilities safer to the community in which they exist is the communities' involvement with prevention and preparedness objectives

• **Be aware of the risks in your community and know what to do in the event of an accident.** Members of communities near hazardous installations, and others that might be affected in the event of an accident, should make sure that they understand the risks they face and what to do in the event of an accident to mitigate possible adverse effects on health, the environment and property (e.g., understand the warning signals, and what actions are appropriate). This involves reading and maintaining any information they receive, sharing this information with others, and seeking additional information as appropriate.

• **Communicate and co-operate with other stakeholders on all aspects of accident prevention, preparedness, and response.** The community should not pressure the industry, but instead there should be an open policy between the community and the industry, and a shared objective of reducing the likelihood of accidents. The potentially affected public should receive information needed to support prevention and preparedness objectives, and should participate in decision making related to hazardous installations, as appropriate.

• **Participate in decision-making relating to hazardous installations** The laws in many communities provide opportunities for members of the public to participate in decision-making related to hazardous installations, for example by commenting on proposed regulations or zoning

"The Practical Evaluation of Local Emergency Planning and Preparedness" continued...

decisions, or providing input for procedures concerning licensing or siting of specific installations. Members of the public should take advantage of these opportunities to present the perspective of the community. They should work towards ensuring that such opportunities exist whenever appropriate, and that the public has the information necessary for effective participation.

• **Know the hazards and risks at installations in your community where there are hazardous substances.** The community should undertake, in co-operation with other stakeholders, the hazard identification and risk assessments needed for a complete understanding of the risks to the public, the environment, and property in the event of an accident. Hazard identification and risk assessments should be undertaken from the earliest stages of design and construction, throughout operation and maintenance, and should address the possibilities of human or technological failures, as well as releases resulting from natural disasters or deliberate acts (such as terrorism, sabotage, vandalism, or theft). Such assessments should be repeated periodically and whenever there are significant modifications to the installation.

• **Prepare for any accidents that occur.** It is important to recognize that it is not possible to totally eliminate the risk of an accident. Therefore, it is critical to have appropriate preparedness planning in order to minimize the likelihood and extent of any adverse effects on health, the environment or property. The community should conduct, in co-operation with other stakeholders, any off-site planning including provision of information to the potentially affected public.

• **Co-operate with local authorities, and industry, in emergency planning and response.** Representatives of the community should take advantage of opportunities to provide input into the emergency planning process, both with respect to on-site and off-site plans. In addition, members of the public should co-operate with any tests or exercises of emergency plans, following directions and providing feedback, as appropriate.

• **Assist other stakeholders to carry out their respective roles and responsibilities.** The community should co-operate with management and employee representatives and public authorities in order to promote communication and involvement from all stakeholders involved.

See page 16 for a list of the 2007 OFFICERS AND BOARD OF THE NATIONAL ASSOCIATION OF SARA TITLE III PROGRAM OFFICIALS (NASTTPO)

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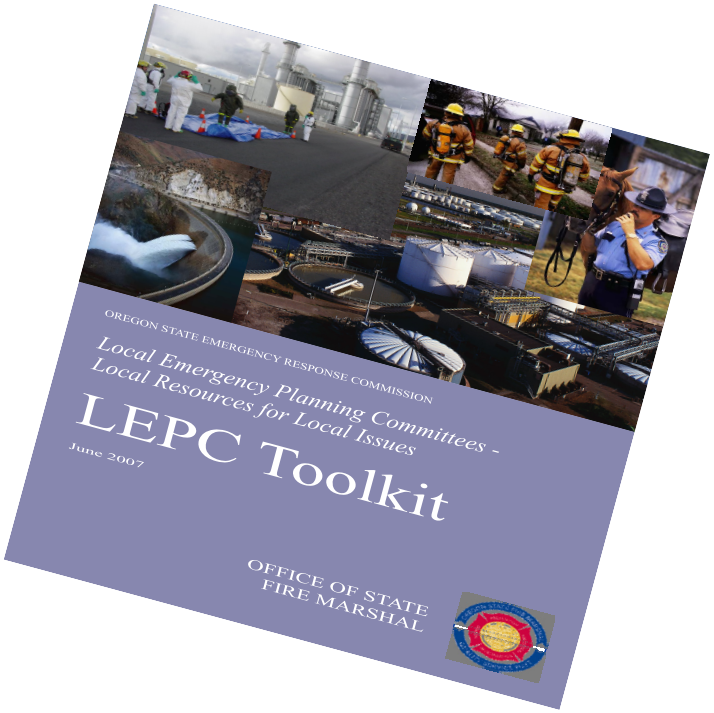
NASTTPO Home Page

Local Emergency Planning Committee Tool Kit

The Office of State Fire Marshal (OSFM) is currently restructuring Oregon's Local Emergency Planning Committee (LEPC). The move is being made from a single state-wide LEPC to multiple community based LEPC's to provide officials at the local level an increased ability to coordinate emergency planning and preparedness. OSFM staff has developed a LEPC Tool Kit designed to assist communities in establishing LEPC's. Included in the tool kit are sample documents and reference materials detailing LEPC responsibilities, ideas for committee governance, project ideas and guidelines, ideas for soliciting membership, and more. For more information about establishing a LEPC in your community, or to obtain a LEPC Tool Kit, contact Terry Wolfe at 503-373-1540 ext. 219 or e-mail at Terry.Wolfe@state.or.us.



Community Capability Assessment Program In Astoria

By: Bill Brauer, Community Planning Coordinator

The Planning and Training Assistance (PATA) group at the OSFM has been working with fire departments on HazMat related training and planning activities around the state since 2004. The program typically starts with training fire department personnel on the content and uses of the Hazardous Substance Information System (HSIS) CD. Our office provides this CD to fire departments, hazmat teams and emergency planners to use for emergency planning and emergency response activities related to hazardous materials.

The next part of the process is the Community Capability Assessment Program that usually consists of four major parts but can be easily customized to meet the needs of the community:

1. Joint Community Right-to-Know / Fire Department inspection of a facility within the community. Preferably it is a facility that has Extremely Hazardous Substances (EHS) on site or one that is of concern due to the hazardous substances they possess.
2. Phase 1 Plan Interface Evaluation between the facility and the first responding agency.
3. Phase 2 Plan Interface Evaluation between the first responding agency and other community resources (law enforcement, EMS, hospitals, public works, etc.).
4. Phase 3 Plan Interface Evaluation between the community resources and County and State resources.

In all three phases, a questionnaire is used to identify any open areas and inconsistencies that may exist between the participants hazardous materials plans. These questionnaires cover all nine of the essential planning elements as outlined in SARA Title III, Section 303 (c).

In Astoria, two Phase 1 Interface Evaluations were conducted; one with Bornsteins Seafoods and one with Englund Marine Products. Both facilities have quantities of anhydrous ammonia that exceed the Threshold Planning Quantities (TPQ) which require them to have a hazardous materials contingency plan in place. Both Phase 1 processes identified several action items that needed to be addressed to improve on the existing plans in place between Astoria Fire Department and the facilities. One of the most valuable components of this process is the one-on-one conversation that occurs between the first responders and the facility representatives. This helps to identify and address issues that exist and promote an open and positive working relationship.

Phase 2 and Phase 3 Interface Evaluations were also conducted and a meeting was held on June 6th involving all of the participating agencies and departments. Phase 2 participants included:

1. Astoria Fire Department
2. Astoria Police Department
3. Astoria Public Works
4. Medix Ambulance Service

COMMUNITY CAPABILITY ASSESSMENT PROGRAM IN ASTORIA

CONTINUED...

5. Emergency Dispatch (911)
6. Columbia Memorial Hospital
7. Providence Seaside Hospital
8. State Regional Hazmat Team #11
9. Pacific Power & Light
10. Northwest Natural Gas
11. Cannon Beach Fire & Rescue
12. Gearhart Volunteer Fire Department
13. Warrenton Fire Department
14. Knappa Fire District

Phase 3 participants included:

1. Clatsop County Emergency Management
2. Clatsop County Sheriffs' Office
3. Clatsop County Public Works
4. Oregon State Police
5. Oregon Department of Transportation

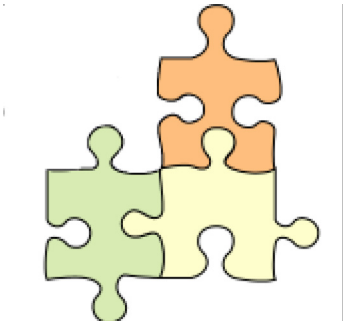
Participating agencies in a support role include:

1. Oregon Red Cross
2. Department of Environmental Quality

At this meeting each participating agency questionnaire was reviewed with the entire group which provided an excellent opportunity for agency representatives to discuss what they feel their individual roles would be in the event of a hazardous materials related incident as well as find out what other agencies expect from them. As a result of this meeting, seventeen action items and ten recommendations were identified and documented in a preliminary report distributed to all participants. Completion and implementation of these action items and recommendations will help validate emergency plans and if a significant hazardous materials incident occurs that exceeds the capabilities of the first responding agency, additional responding agencies will have a better idea of their roles and responsibilities.

To further test and validate agency emergency plans, a team of five volunteers was formed to design a community-wide exercise involving all applicable emergency response agencies. To be conduct by the end of October, 2007.

Upon completion and implementation of the identified action items and recommendations and conducting the exercise, a final report will be developed and distributed to all participating agencies. This report will be sent out annually thereafter to capture any updates or additions to agency plans, updated and re-distributed.



If you are interested in training and planning activities available through OSFM's Planning and Training Assistance Program (PATA) or conducting a Community Capability Assessment Program in your community, please contact Terry Wolfe, PATA Coordinator at: 503-373-1540, Ext. 219.

10 Steps to Great Exercises!

One of the most enjoyable things I have ever done is to work with small rural and tribal communities and their fire, law, EMS, public health and public works responders. Throw in railroads, co-ops, schools, hospitals, etc. and you have a great mix. But how do you develop realistic, helpful and enjoyable hometown exercises with a group like that? Here are a few of the things I have learned in three decades. Read! Enjoy! Prosper!

1. **The key to success is consensus!** No one really cares what you think. And there is always one pushy person in the group. You have to decide early on to control those two people (you and the other pushy one) and that the consensus of the group is the most important product. Consensus is not "That's the perfect exercise" but "It will be okay and I can live with it." Since your goal is to have community members individually doing good work together, you will probably have to take courses to pull this off (and they aren't exercise design courses!): consensus development, facilitation, mediation, arbitration.

2. Start in-house! Without decent in-house responses, from co-op to fire departments, from EMS providers to schools, you can't succeed. These in-house events are usually called drills. Don't expand from garbage, expand from quality! If the players don't see excellence from the other players, they won't play. It's impossible to build trust and confidence among groups if all individual groups are not trustworthy and confident. I have heard "They scare me!" and "They will get someone killed!" said of certain response groups by others. If you hear these types of comments, you are a long way from a good exercise, probably years.

3. **Start small!** I have seen far too many people decide not to play because some idiot decided to have a worst-case exercise or decided to blow up the train next to the hospital. You can have a complex, interactive exercise without making a "federal case" out of it. You don't have to stay small, but you have to build from small successes and if you start too big will create unnecessary and often irreparable damage. Do you really think Al Qaida is targeting your rural community?

4. **Whoever responds gets to decide! (Ask and you shall receive!)** Ask the key players, then push the decision making power down to the lowest effective level. And that would not be the state, tribal or federal level, the elected official level or the upper management level. It would be the field responder level. Ask the group what kind of incident they need to work on the most. Ask the EMTs what they really need to practice. Ask the trucker how accidents usually happen. Ask the pipeline person how they manage events and where their response equipment and supplies are located. Don't make someone else's decisions, it never works and makes people really, really mad. Trust me on this one!

5. **Make sure everyone has some real work to do!** If there is nothing for the public works or public health people to do, find something for them to do or they won't ever come back. We once needed a county commissioner around just for his signatory power, so we asked him to keep track of some critical data, so he wasn't just sitting with pen in hand, but was an active part of the exercise. People come to work. Find out what their skills are. We tend to only concentrate on their data banks. I loved my civil engineer to show up, for he could gather data, write well, draw well, and analyze data quickly, but we never had any civil engineering to be

10 Steps to Great Exercises! continued...

done. Why do we waste a person with fire fighting skills on a PIO skill area when PIO people exist in many organizations and the PIOs and the organizations would love to participate and help? Do you have something real for fire, law, EMS, public health and public works to do? Honor them, honor their skills, don't do "make work" with real players, or we won't come back!

6. **This is not a test!** Get rid of the military model. Get rid of the test model, the grading model, the evaluating model, the good/bad, right/wrong, the pass/fail model. The old model was for "defense" (as in Civil Defense under the Defense Department) where people were in military or paramilitary outfits, same uniforms, officers, guns, badges, discipline, etc. Many jurisdictions don't have working plans, so how could you test it? An exercise should be practice (not a test), with coaches and mentors (not evaluators), with learning to do it right (not practice doing it wrong and getting a bad grade). In-house drills can be tests (and this is indeed like the old military idea). If you use complex, multi-jurisdictional, multi-disciplinary exercises in rural areas as tests, simply put, you will fail those tests!

7. **Give them food and they will come!** Or hats, or something useful. Maybe we all now have too many cheap coffee cups with logos, but a nice polo shirt and a good meal, hell, that's real incentive. Agencies have discretionary funds, corporations have advertising budgets and concerned citizens will help. Make it so real players get rewarded and non-players don't get rewarded. You get the behavior you reward. And if you are in doubt about what motivates your group, well, you could ask them!

8. **No surprises!** This time we are talking surprise quizzes. This concept only works in-house for close knit teams. (Have you ever thought of asking if your team wants to be drilled or quizzed?) As for community exercises, everyone should know everything. The more people who know and the more they know, the better off your community, your agency and you will be. Why not put on a hazmat awareness course for citizens and explain the principles of response planning and exercising? Then if you have volunteers, find real things for them to do. CERT is good. It cuts down on the arrival of untrained and uncoordinated, spontaneous volunteers at real events. And remember, an exercise is learning, it is practice, it is a community event, it is not a test and it is not a surprise quiz.

9. **Build a plan!** If you have no plan, build an exercise around a real community concern, then you will have at least one coordinated action plan for one incident. After two or three of these action plans, the generic pieces will actually grow into a plan, almost on their own. I think it is better to have five good action plans which have come from exercises (transportation hazmat incident, big fire in apartment house or something similar, multi-casualty highway incident, school shooting/hostage incident and biological/radiological incident) than a make believe, fill-in-the-blank plan which sits on a shelf. I think training and exercises build good plans and not the other way around.

10. **It takes five years and it takes a village!** To go from non-caring and non-response to quality takes three to five years. And it takes a village, minus the village idiot of course! All it takes is a million small steps, realistic scenarios designed by the players, honor and trust, respect and real work, open communication, a little food or other reward and community consensus. If you quit you lose and if you don't quit you win!

Frederick J. (Fred) Cowie, Ph.D.
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GET WISER! (VER 3.1 NOW AVAILABLE):

This release applies to **WISER for Windows**, **WISER for Pocket PC**, and **Web-WISER** (http://webwiser.nlm.nih.gov) and includes an enhanced substance printing capability in WISER for Windows, which many have asked for. When printing WISER substance data, you will now be presented with a wizard that provides the option of printing all or any combination of the data for a substance.

This is also an important maintenance release, so WISER for Pocket PC and WISER for Windows users should download the latest version from http://wiser.nlm.nih.gov.

Your feedback is important to the future direction of WISER! Please submit any comments, suggestions, ideas, etc. in the feedback page of the WISER web site: http://wiser.nlm.nih.gov/feedback.html.

Please look for the following additional capabilities in future releases:

- The version 3 features made available in **WISER for Palm OS**
- Windows Mobile Smartphone support
- Expansion of the features introduced in 3.0:
- Additional substance category support, including more categories
- Additional tools/reference materials for radiologicals and chemicals
- Biological mode: biological substance data and related tools and reference materials And more!

NATIONAL FUNDING DATABASE

The Emergency Management and Response—Information Sharing and Analysis Center (EMR-ISAC) noted the launch of FireGrantsHelp, a national information resource and grants database of federal, state, local, and corporate funding opportunities for Emergency Services Sector (ESS) departments and agencies.

FireGrantsHelp features a searchable database and a range of grants news, announcements, and grant-writing tips, as well as a comprehensive listing of reference materials and links. It is designed to provide resources to those who have varying levels of grant application preparation experience. As it expands, the web site http://www.FireGrantsHelp.com will offer grant application assistance tools such as research guidance, a grants discussion forum, case studies, and columns on relevant subjects. Grants are a critical source of funding for the ESS, according to personnel at FireRescue1, a co-sponsor of the web site and of www.FireRehab.com. The EMR-ISAC supports resources that help responder organizations locate monies to augment their physical assets and critical infrastructure protection.

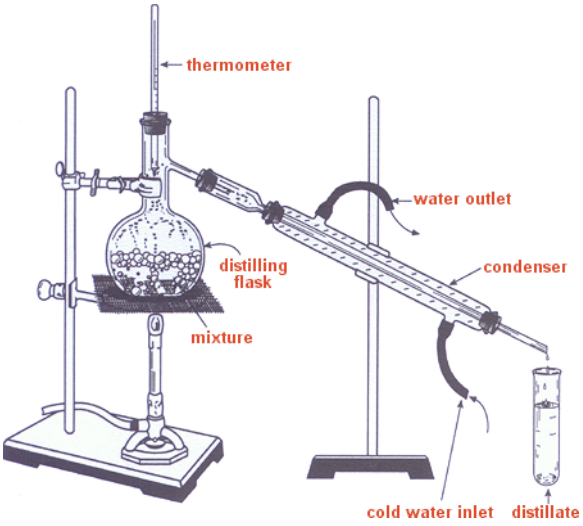
JUST ASKING ...

WHAT ARE PETROLEUM DISTILLATES AND WHERE DO THEY COME FROM?

In its simplest form distillation involves a separation process in which a liquid is heated to its boiling point where it becomes vapor and the vapor is then cooled (condensed) to become a liquid again. The condensed liquid is called the distillate.
Fractional distillation involves two or more chemicals in a mixture.

A mixture contains chemicals that boil at different temperatures. It is by heating the mixture to specific boiling points that results in the vaporization of a particular chemical within the mixture.

The drawing below shows a simple distillation apparatus

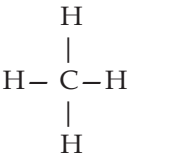


Distillation drawing courtesy of ChemSource, by Mary Virginia Oma

Petroleum distillation uses the same theory but is far more sophisticated.

Crude oil is composed of various hydrocarbons.
Hydrocarbons are composed of molecules of hydrogen and carbon in various arrangements. Methane is the simplest with four hydrogen molecules and one carbon.

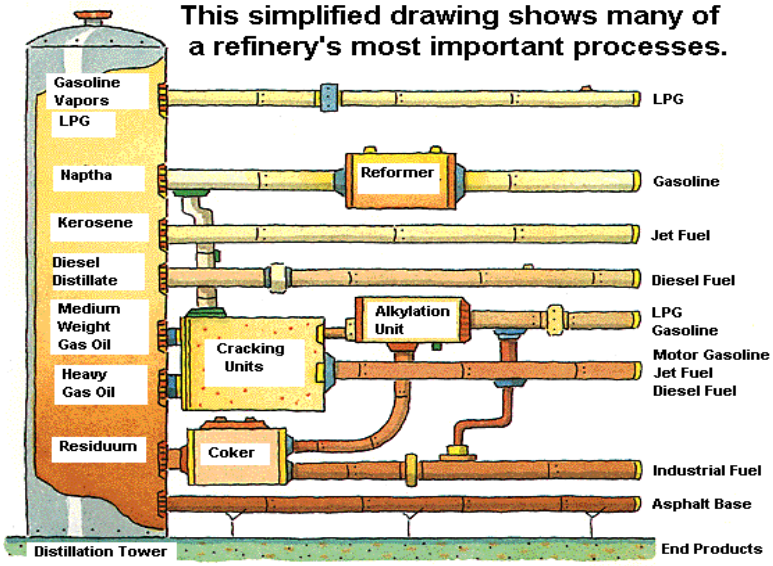
The molecular structure is shown below.



The chemical formula for methane is CH_4.

Gasoline has from 5 to 12 carbons
Diesel has from 13 to 16 carbons
As the number of carbons increase so does the boiling point.

A distillation column is shown in the image below.
The hottest temperatures are at the bottom.



For more information check out the following resources:

http://science.howstuffworks.com/oil-refining4.htm
http://www.chemheritage.org/EducationalServices/pharm/antibiot/activity/distil.htm
http://www.pafko.com/history/h_distill.html
http://www.osha.gov/dts/osta/otm/otm_iv/otm_iv_2.html
http://www.energyinst.org.uk/education/coryton/page7.htm

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Upcoming Events

October:

2008 HazMat Conference Committee Meeting October 9th at OSFM	Salem, OR
TTAC Quarterly Meeting October 9th at OSFM	Salem, OR
TAG Quarterly Meeting October 10th at OSFM	Salem, OR
Topoff 4 Week of October 15th	Portland, OR
Hotzone 2007 October 18th – 21st http://www.hotzone.org/	Houston, TX

November:

HazMat Explo November 5th – 8th http://www.hazmatexplo.org/	Las Vegas, NV
NASTTPO Mid-Year Meeting November 5th – 9th	Las Vegas, NV

December:

2007 Emergency Preparedness & Prevention & HazMat Spills Conference December 3rd – 5th	Pittsburgh, PA

January:

2008 OFIA Firefighter Safety & Survival Symposium January 11th – 13th http://www.ofia.net/	Salem, OR