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Region 6 LEPC Update

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In this issue we give you workshop opportunities to improve your LEPC, messages from CHEMTREC and PHMSA, Resources from NOAA and EERC, more pointers on identifying risks in your community, and some advice from Fred Cowie on Surviving Family Members. – Steve and Hilary

EPA Schedules LEPC Workshops Throughout Region 6, Summer 2014

For those of you that have been around for many years, you may remember that EPA/States held 12 Regional LEPC conferences, as well as state conferences (4-OK, 1-LA, 2-TX). However, the source of funding for those conferences became no longer available a few years ago.

Working with our State partners, EPA will conduct a series of one-day LEPC workshops throughout the Region from May through September 2014.

We hope these workshops will be useful for the chair of the LEPC, as well as officers of the LEPC, who choose to attend. By spreading the workshops out around each State, we hope to ensure that most LEPC members who want to attend will not have to travel extraordinarily long distances to attend one of the workshops.
Below the schedule of workshops is the agenda we will be following for each one of the workshops.

We will send out future emails with the location of each workshop. At that time, we will ask for people to RSVP if they will be attending a particular workshop, so we can estimate attendance at each one.

Louisiana	New Mexico
Lake Charles Area – 5/20/14	Las Cruces Area – 6/24/14
Alexandria Area – 5/21/14	Gallup Area – 7/8/14
Baton Rouge/New Orleans Area – 5/22/14	Albuquerque Area – 7/9/14
Monroe Area – 8/13/14	Clovis Area – 7/10/14
Oklahoma	**Arkansas**
Woodward Area – 6/17/14	Springdale/Rogers Area – 7/29/14
Oklahoma City Area – 6/18/14	Jonesboro Area – 7/31/14
Tulsa Area – 6/19/14	Little Rock/Jacksonville Area – 8/1/14
McAlester Area – 6/19/14	El Dorado Area – 8/12/14
Ardmore Area – 9/17/14	
Lawton Area – 9/18/14	
Texas	**Texas**
El Paso Area – 6/25/14	Abilene Area – 8/28/14
Del Rio Area – 6/26/14	Texarkana Area – 9/9/14
McAllen/Harlingen Area – 7/22/14	Tyler Area – 9/10/14
Corpus Christi Area – 7/23/14	Waco Area – 9/11/14
Dallas/Ft. Worth Area – 7/25/14	Beaumont Area – 9/23/14
Amarillo Area – 8/26/14	Houston Area – 9/24/14
Midland/Odessa Area – 8/27/14	San Antonio/Austin Area – 9/25/14

LEPC Workshop Agenda	
08:30-08:45 - Introductions / Workshop Purpose	11:30-12:45 - Lunch
08:45-09:30 - Requirements for LEPCs and Industry	12:45-13:45 - Keeping an LEPC Active /Reactivating a Dormant LEPC
09:30-09:45 - Local Government Reimbursement Program (LGR)	13:45-14:15 - What Can the State or EPA Do to Help Your LEPC?
09:45-10:00 - Break	14:15-14:30 - Break
10:00-11:00 - Software for Preparedness/Planning	14:30-15:45 - State Issues Discussions
11:00-11:30 - Does Your Emergency Plan Harmonize with EPCRA?	15:45-16:00 - Closeout

Detailed workshop locations will be announced at a later date.

RSVPs are not required, but are appreciated so that we can plan for attendance.

To be added to email notifications for future details, RSVP for a workshop, or for questions, please contact:

Hilary Gafford at Weston Solutions
hilary.gafford@westonsolutions.com
469-666-5524

Upcoming NASTTPO Conference April 22nd-25th in New Orleans, LA

The National Association of SARA Title III Program Officials (NASTTPO) Annual Conference will be held in New Orleans, LA April 22-25. Draft agenda topics for the 2014 Conference include PHMSA HMEP 101, NFPA 472 and HMEP, CAMEO Training and Tier II, MAP 21, EPA and OSHA perspectives on Executive Order 13650, as well as workshops discussing planning, emergency operations, and lessons learned. For a complete agenda and registration information, visit http://nasttpo.com/

Ethanol Emergency Response Resources Available from EERC

The Ethanol Emergency Response Coalition is a group of industry and fire service professionals dedicated imparting training and knowledge preparedness tools for ethanol emergencies. The EERC website provides a large body of ethanol related reference materials, including an extensive Training Toolbox, instructional videos, and a 7-module training course.

The reference materials are available through the EERC website at http://www.ethanolresponse.com/

CHEMTREC® Has Saved My Bacon More Than Once

By Donna L. Lepik, Director of Outreach & Special Programs, CHEMTREC®

You might imagine after serving as CHEMTREC®'s Director of Outreach & Special Programs for the past six years and engaging in hundreds of hazardous materials conferences from Sacramento, CA to Plymouth, MA, I have heard just about anything and everything. However, after meeting thousands of responders from coast to coast, the one comment that still seems to resonate the loudest and the one comment that best sums up CHEMTREC®'s value for the response community is without question the one that was shared with me during the FDIC Firefighting Training Conference in Indianapolis, Indiana. During this fire conference and exposition, a seasoned Midwestern Hazmat Technician casually approached the joint CHEMTREC®/TRANSCAER® booth, reached his hand out to secure his coveted traditional yellow CHEMTREC® key tag and shared: **"*CHEMTREC® has saved my bacon more than once!*"**

For the past four decades, CHEMTREC®, which is a service of the American Chemistry Council, has been ***"saving lots of bacon"*** as the definitive information resource and solutions provider for hazardous materials and dangerous goods response. "For over 42 years – 24 hours a day – every day, CHEMTREC has provided free, timely and crucial information to responders having to deal with hazardous materials incidents", said Randy Speight, CHEMTREC's managing director.

CHEMTREC®'s connection to industry links to the largest network of chemical and hazardous material subject matter experts in the world, including chemical and response specialists, public emergency services and private contractors.

CHEMTREC® offers a broad range of critical resources that can help emergency responders mitigate incidents involving hazardous materials, such as:

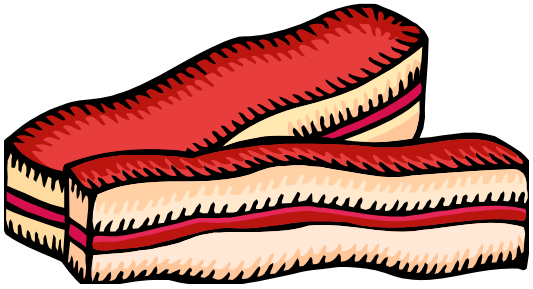
- A round-the-clock communications center staffed by trained and experienced emergency service specialists;
- Immediate access to thousands of chemical product specialists and hazardous materials experts through CHEMTREC's database of over 30,000 manufacturers, shippers, carriers, public organizations and private resources;
- A state-of-the-art telecommunications system that supports the virtual emergency response team, seamlessly linking on-scene responders with chemical experts, transportation companies, and medical experts;
- An expansive electronic library of over 5 million Safety Data Sheets (SDS);
- Immediate access to medical experts and toxicologists who provide advice and emergency medical treatment assistance to on-scene medical professionals treating victims of product exposure;
- Interpretation capabilities for more than 200 languages in the event of an emergency involving non-English speaking stakeholders; and
- In-country dial telephone numbers in more than 50 key countries around the world.

By having an on-going commitment to continue ensuring that all responders know and understand the value of including the CHEMTREC® into community response planning, three newly refreshed CHEMTREC® videos for Emergency Responders are now available on-line. These FREE instructional videos are available for download on the CHEMTREC® and the American Chemistry Council's web sites.

Video 1 – An Overview of CHEMTREC®

Video 2: - How CHEMTREC® Helps First Responders

Video 3: - What's Being Said About CHEMTREC®



All three of these videos are also available on one FREE DVD. If you are interested in receiving a copy of this DVD, send your request along with your proper shipping information to dlepik@CHEMTREC.com.

"CHEMTREC's vision is to continue to be recognized by emergency responders, industry, government, and others as the world's foremost emergency call center for information on hazardous materials and dangerous goods," stated Speight. "CHEMTREC® will be successful when every single emergency responder knows CHEMTREC®'s telephone number by heart and takes advantages of the resources we have to offer."

If you are interested in scheduling a FREE training drill or exercise with CHEMTREC®, call our customer service staff at 1-800-262-8200, or from outside the USA or Canada at +1-703-741-5500. During an incident involving hazardous materials such as spills, leaks, fire, exposures or accidents, call CHEMTREC®'s emergency center at 1-800-424-9300.

CHEMTREC® is a national sponsor of TRANSCAER®. CHEMTREC® is also a cost-effective method to assist shippers of hazardous materials with compliance with government regulations.

For more information about CHEMTREC®, visit us at www.CHEMTREC.com.

Local Governments Reimbursement Success

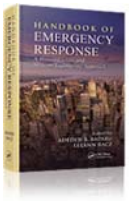
EPA Headquarters evaluated several applications submitted by Calcasieu Parish, LA to the agency under the Local Governments Reimbursement Program.

Based on our evaluation, Calcasieu Parish, LA is eligible for an award of $10,783.06 for costs incurred responding to multiple drug labs between March, 2011 and March, 2012.

Preparing Communities through All-hazards Planning and Analysis: Phase II – Assessing the Risk

Bob Campbell, PE
President, Alliance Solutions Group, Inc. (ASG)
www.asg-inc.org; robert.campbell@asg-inc.org

About the Author: Bob Campbell has been preparing communities as a responder and consultant for the last 18 years. After founding ASG in 2005, he has overseen the development of all-hazards plans with emphasis on hazardous materials in over 60 communities. ASG has conducted over 2,000 hazardous material response exercises while supporting 760 locations world-wide. Bob leads ASG with a focus on capturing and sharing lessons learned, best practices and case studies to improve community preparedness. He is a contributing author in the recently released book "Handbook of Emergency Response: A Human Factors and Systems Engineering Approach."



In my October 2013 article, I outlined a proven model for how communities can conduct all-hazards planning using a comprehensive, risk-based method. This has been used in over 60 communities around the US ranging from small, rural areas to large metropolitan areas. My last article tackled the first step in the model - identifying the hazards. I detailed potential types and sources of technological hazards that could impact a community, namely mobile and stationary sources. I recommended several different techniques for identifying hazardous materials which could impact your community. This article will focus on how to objectively assess the risks from these hazards. This step is critical to conducting risk-based planning.

Assessing the Risks

There are many ways to define risk, but the overall objective of a risk assessment is to prioritize hazards so that plans and resources can address the highest relative risks. So, as long as a consistent method that captures the contributing factors is utilized, the outcome will provide the intended result. Before conducting a risk assessment, it is important to determine how the output will be utilized so that the planning committee can select the most applicable and useful approach. To avoid bias and gain more specificity, communities may prefer to use the quantitative risk method outlined below. Regardless of the method chosen, it's critical that the risk assessor apply the method consistently across all hazards in order to attain a valid risk assessment.

There are several types of risks that may be considered. For the purposes of our discussion, we are calculating the risk of a hazardous materials release occurring and impacting the surrounding community's population. Since risk controls vary greatly and are difficult to measure quantitatively, communities might consider the risk to the surrounding community without considering the risk control measures. This can be considered when evaluating the controls and implementing risk management measures which will be discussed in next quarter's article. The remainder of this article illustrates how to determine the product of severity and probability of various events that could trigger a hazardous material release.

Severity

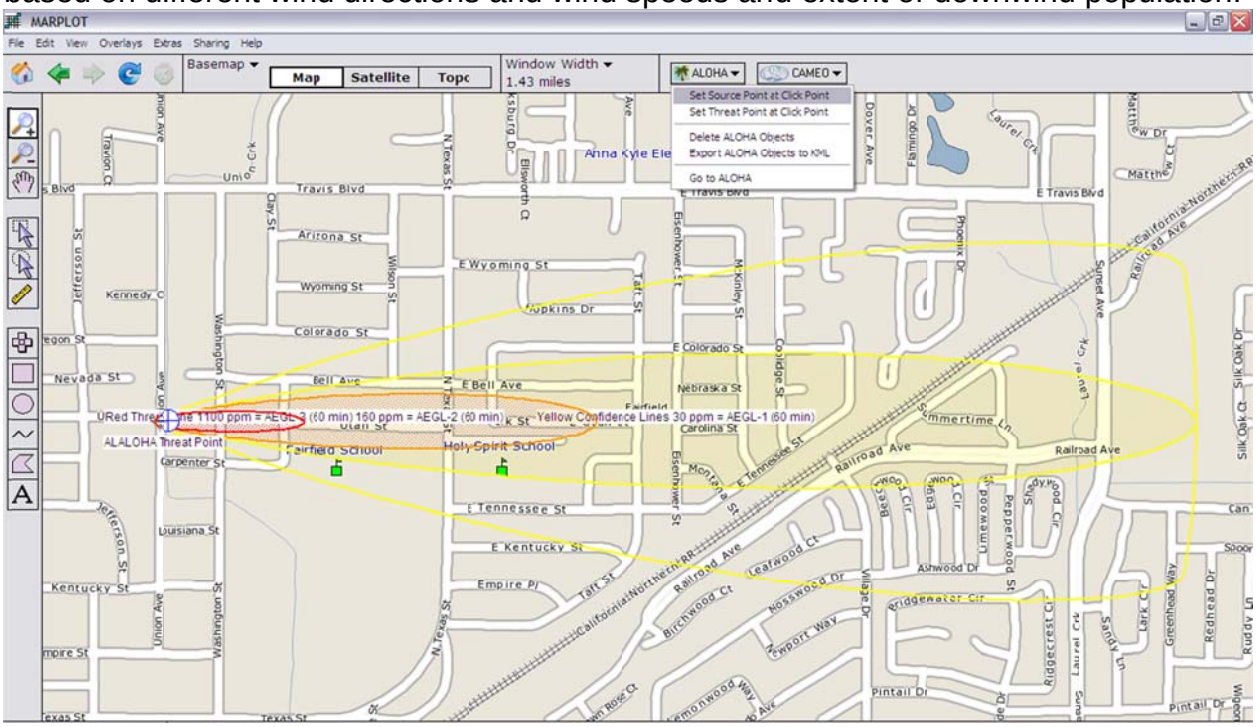
Risk = Severity x Probability

One of the most consistent and reliable ways to determine the impact of a hazmat release on a community is through dispersion or plume modeling. This method accounts for materials in sufficient quantity to pose a toxic inhalation hazard. Plume models enable technical experts to analyze and associate exposure levels with geographical areas and the corresponding populations at risk. Severity can be determined quantitatively as the total population at risk of exposure, or weighted by the exposure levels (i.e., Acute Exposure Guideline Levels – AEGL-3, AEGL-2, AEGL-1). In the example shown below, a release of chlorine was modeled using ALOHA and then imported to MARPLOT; this shows the area and population affected by the chlorine plume based on toxicity which is indicated by the red (AEGL-3), orange (AEGL-2) and yellow (AEGL-1) exposure levels. Planners may also run plume models based on different wind directions and wind speeds and extent of downwind population.

Severity = Population Affected

Ex: 555 people reside within the area of the chlorine when winds are blowing from the west.

Severity = 555



Additionally, planners should consider the impact of a chemical explosion through overpressure modeling. One pound per square inch (psi) of overpressure may cause light injuries. This distance can be calculated using an empirical model shown in the call-out box. The variables in the formula include the material mass in kilograms and the material's heat combustion in kilojoules per kilogram (obtained from NIOSH or chemical references).

Explosive Overpressure Distance to 1 PSI

Ex: 1698 kilograms (550 gal) of Diesel fuel

$1.6(\text{Mass X Heat Combustion})^{.33}$

$1.6(1698X45)^{.33}=65$

Distance: 65 feet

If the plume or overpressure model estimates an adverse impact on the surrounding community, then planners should continue the risk assessment for the specific hazard by determining the probability of the release.

Probability

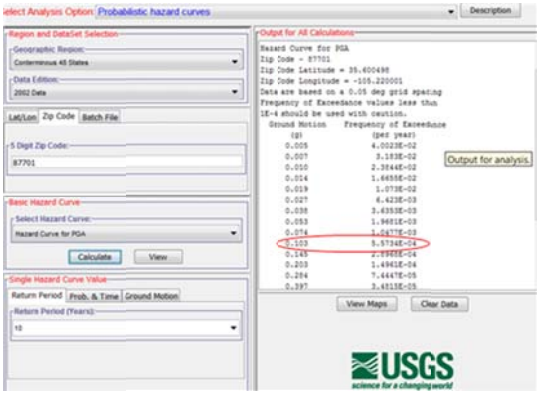
Hazardous materials releases can result from accidents, man-made incidents and natural disasters. While the probability of man-made incidents is difficult to predict, there is an abundance of statistical data available on natural disasters and accidents. This method estimates annual probability of these incidents that are capable of resulting in a release of hazardous materials. Despite the assumptions made throughout the process, this approach can be extremely helpful to planners in supporting allocation and prioritization of scarce resources for the trigger events as well as hazmat releases. The remainder of this article illustrates how to estimate the probability of following causal events based on government datasets:

- Floods,
- Earthquakes,
- Tornados,
- Hurricanes, and
- Accidental spills/uncontrolled releases (historical/statistical analysis).

The probability of each trigger event is based on location of the facility and statistical data for the hazard/trigger type.

First let's explore the probability of flooding that could rupture a storage tank, and cause a release. The flood probability method is based on the Federal Emergency Management Agency's (FEMA) 100-year flood zones and maps and facility location. The flood risk website (http://www.floodsmart.gov/floodsmart/) requires the facility's address, and then rates the flood risk for that location as high, moderate, or low. Facilities located in the "high" risk area can be assigned an annual flood probability of 1%. Those located in the "low to moderate" zone may be assigned an annual probability of 0.5%. This method assumes that a flood of this magnitude is capable of rupturing a storage tank resulting in a release.

The probability of an earthquake strong enough to cause structural damage and result in a release is estimated based on exceedance of 10%-gravity peak ground acceleration. The U.S. Geological Survey model can be downloaded from http://earthquake.usgs.gov/hazards/designmaps/grdmotion.php. Using the facility's zip code under the "Probabilistic hazard curve" analysis option, the corresponding annual frequency is shown for various ground motions. Since 10%-gravity (0.1) motion is capable of causing structural damage sufficient to rupture a tank, the associated frequency is used as an estimate of annual probability.



The probability of a tornado resulting in structural damage of a storage tank and subsequent release is determined by establishing a threshold based on wind speed force associated with an EF2 tornado or greater. The frequency of a tornado in a particular location can be estimated by using statistics from the National Oceanic and Atmospheric Administration,

http://www.ncdc.noaa.gov/stormevents/. This site enables users to select their location by county, and compile incident statistics over time periods for various weather-related events. Based on this historic data, the probability of an EF2 or greater tornado may be estimated based on the average number of tornados per year and the area of the county. The example shows there were three tornado events during the search period we selected, but no EF2 or higher tornadoes in San Miguel County, New Mexico.

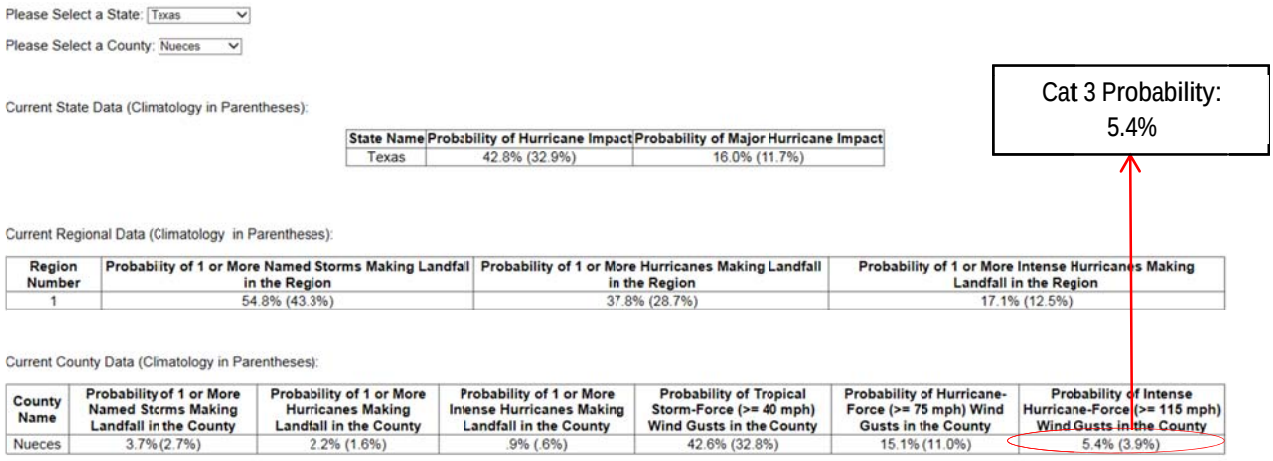
Tornado Probability =

Avg number of EF2 tornadoes (or greater) per year / total square miles in the county

Assumes area of facility and impact area of average tornado are both 1 sq mile.

Location	County/Zone	St.	Date	Time	TZ.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
LAS VEGAS	SAN MIGUEL CO.	NM	08/03/1998	12:55	MST	Tornado	F0	0	0	0.00K	0.00K
TECOLOTITO	SAN MIGUEL CO.	NM	05/28/2008	16:45	MST-7	Tornado	EF0	0	0	0.00K	0.00K
TRIGG RANCH	SAN MIGUEL CO.	NM	05/28/2008	19:27	MST-7	Tornado	EF0	0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

The probability of a hurricane impacting the community is based on the meteorology research of Prof. William Gray (http://www.e-transit.org/hurricane/welcome.html). The Interactive Landfall Probability Display shows the current year hurricane forecast probabilities for each county along the Atlantic and Gulf coasts. The wind associated with a Category 3 storm may cause sufficient wind damage and debris which can result in a storage tank rupture. The figure below shows the current data for Nueces County, Texas.



Please Select a State: Texas

Please Select a County: Nueces

Current State Data (Climatology in Parentheses):

State Name	Probability of Hurricane Impact	Probability of Major Hurricane Impact
Texas	42.8% (32.9%)	16.0% (11.7%)

Current Regional Data (Climatology in Parentheses):

Region Number	Probability of 1 or More Named Storms Making Landfall in the Region	Probability of 1 or More Hurricanes Making Landfall in the Region	Probability of 1 or More Intense Hurricanes Making Landfall in the Region
1	54.8% (43.3%)	37.8% (28.7%)	17.1% (12.5%)

Current County Data (Climatology in Parentheses):

County Name	Probability of 1 or More Named Storms Making Landfall in the County	Probability of 1 or More Hurricanes Making Landfall in the County	Probability of 1 or More Intense Hurricanes Making Landfall in the County	Probability of Tropical Storm-Force (>= 40 mph) Wind Gusts in the County	Probability of Hurricane-Force (>= 75 mph) Wind Gusts in the County	Probability of Intense Hurricane-Force (>= 115 mph) Wind Gusts in the County
Nueces	3.7% (2.7%)	2.2% (1.6%)	.9% (.6%)	42.6% (32.8%)	15.1% (11.0%)	5.4% (3.9%)

Cat 3 Probability: 5.4%

The probability of an accidental release from a stationary facility or storage tank can be estimated using the data collected by the National Response Center divided by the total number of chemical facilities (http://www.bls.gov/data). This method assumes a single accidental release rate without accounting for local conditions or specific facility control measures. (http://www.nrc.uscg.mil/incident_type_2000up.html)

Accident Probability =
reported releases / # facilities

Ex: In 2008, 18,420 accidents/ 438,576 facilities =

4.2%

For mobile sources such as railcars, the probability can be estimated by (1) apportioning the average annual releases (from NRC data) to a specific county based on length of rail in the county divided by the total miles of active rail in the US; and (2) reviewing the commodity flow study from the most recent year to obtain the frequency of each chemical being transported through the county. This method may also be applied to hazmat commodities being transported by other modes of transportation to the extent that the data is available. When the data does not exist, consider using national statistics from the bureau of transportation statistics.

Mobile Source Probability =
avg # releases x county rail miles / US rail miles x frequency of each chemical car / total cars

Ex: 718 releases/year x 200 rail-miles / 140,810 rail-miles x 12 chlorine cars / 200 cars =

The final determining factor in estimating the probability is wind direction and wind speed. A local wind rose should be used when running plume models to aid in selecting wind direction and speed. Regardless of the conditions selected, a wind rose can be used to determine the probability associated with a specific wind speed and direction.

The probability estimates for each trigger event can be compiled in a table (shown below). The total probability can be calculated using deMorgan's theorem: $probability = P_w\left[1 - \prod(1 - P_i)\right]$, where, P_w is the probability of wind direction and P_i is the probability of each event which could cause a release.

Threat	*Flood*	*Tornado*	*Hurricane*	*Earthquake*	*Winds (from)*	*Accident*	*Total*
123 Chemical Company Chemical: Chlorine	*0.01*	*0*	*0*	*0.00056*	*0 dg 2.5%*	*0.042*	2.37%
ABC Chemical Company Chemical: Isocyanate	*0.005*	*0*	*0*	*0.00056*	*270 dg 5%*	*0.042*	4.76%
123 Chemical Company Chemical: Chlorine	*0.01*	*0*	*0*	*0.00056*	*270 dg 5%*	*0.042*	4.74%
ABC Chemical Company Chemical: Isocyanate	*0.005*	*0*	*0*	*0.00056*	*0 dg 2. 5%*	*0.042*	2.37%

Risk Calculation

Risk = Severity X Probability

While the estimate of severity and probability is not intended to predict the actual number of casualties or probability of an incident, it is intended to generate a relative risk for each release scenario. The consistent, methodical approach is necessary to yield a valid risk assessment. Relative risk for each scenario is the product of each severity and probability. This data can be compiled, calculated and sorted in a spreadsheet as shown below. This prioritization of risks enables the planners and emergency managers to further investigate control measures at high-risk facilities and prioritize mitigation and preparedness resources according to risk. Note how risk varies for each potential hazard based on downwind population (severity), which is based on wind direction (probability).

Incident			*Most Probable or Worst Case Scenario*		
#	*Facility*	*Hazard*	*Severity*	*Probability*	*Risk*
1	*ABC Chemical Company(270deg)*	*Isocyanate*	*1000*	*4.76%*	*47.6*
2	*ABC Chemical Company(0deg)*	*Isocyanate*	*2000*	*2.37%*	*47.4*
3	*123 Chemical Company(270deg)*	*Chlorine*	*555*	*4.74%*	*26.3*
4	*123 Chemical Company (0deg)*	*Chlorine*	*50*	*2.37%*	*1.2*

Summary

The last two articles have presented methods for (1) identifying all-hazards and (2) assessing the risks. While there are many alternative methods to conducting risk assessments, the key is applying a consistent, methodical approach to support risk-based planning, allocation and prioritization of resources. A quantitative risk method was illustrated in this article. Once the risks are stratified, risk control measures can be evaluated. These apply to each facility and the community's response resources. This will be discussed in detail in next quarter's article.

NOAA Offers Updated Guidance for Spill Responders

Courtesy of Gulf of Mexico National Response Center Newsletter
March 2014

Two new/updated guidance documents for spill responders are now available on the NOAA OR&R website. The NOAA Shoreline Assessment Manual (4th edition), updated in August 2013, helps trained spill responders use a system known as SCAT (or Shoreline Cleanup and Assessment Technique) when spilled oil impacts shoreline habitats. The SCAT system allows responders to systematically survey affected areas to determine the appropriate methods to use in the spill response. OR&R also offers:

- Shoreline Assessment Forms, which are standard forms used to record observations during a shoreline survey. The forms are currently being updated, so check back soon for updated versions.
- Shoreline Assessment Job Aid, which was developed for use in the field and to supplement the manual. The job aid provides a visual guide to man of the terms used and conditions found during shoreline assessments.

In addition, you can review a new report, Oil Spills in Marshes: Planning and Response Considerations, jointly published by OR&R and the American Petroleum Institute. The report was written to assist those who work in spill response and planning where fresh and salt marshes are at risk of oil spills. The report is the fourth in a series of spill response publications prepared by OR&R, supplementing the companion reports: Oil Spills in Coral Reefs, Oil and Sea Turtles, and Oil Spills in Mangroves.

NOAA Shoreline Assessment Manual:
http://response.restoration.noaa.gov/erdpub/manual_shore_assess

Oil Spills in Marshes: Planning and Response Considerations:
http://response.restoration.noaa.gov/erdpub/marshes_oil

PHMSA Urges HMEP Grantees to Incorporate Crude Oil Rail Shipments into Local Preparedness Plans

Courtesy of PHMSA website, March 2014

As the rail and emergency response communities continue to examine the special hazards related to the increase of Bakken crude oil rail shipments across the U.S., PHMSA is urging HMEP grantees to consider incorporating this emerging hazard into their local preparedness plans. Dr. Magdy El-Sibaie, Associate Administrator at the U.S. DOT/PHMSA's Office of Hazardous Materials Safety, addressed HMEP grantees and future applicants in a letter this past February, encouraging them to develop emergency plans to account for crude shipments by rail.

Initial suggested steps recommended by the Associate Administrator include: developing or modifying emergency plans to account for bulk crude oil rail shipments, developing commodity flow studies to determine the frequency of crude shipments being transported through local communities, and training emergency responders to respond appropriately to bulk crude incidents. The letter from Associate Administrator El-Sibaie can be viewed at http://www.phmsa.dot.gov/hazmat

SURVIVING FAMILY MEMBERS

Surviving family members, whether of disasters, tragic accidents, or diseases, are, unsurprisingly, raw with sadness, anger, and disbelief. And although surviving-family management is a special area of incident and emergency management, this article is not about the view from the top, but the view from the bottom, from the perspective of we survivors.

Stress is the key element in the behavior of survivors, and stress management principles are the key elements in coming to thrive after the death of a loved one. No one as a survivor can hope to employ all of these strategies, but if one knows they exist, one has more hope of thriving, while surviving. Remember grieving is natural, personal, and intense, but it can be done better or worse.

Deep Breathing: Deep, conscious, purposeful breathing, with the desire to regulate blood pressure, heart rate, and diminish irregular breathing is the key to stabilizing behavior and initiating deliberate decision making. Deep breathing is indispensable.

Staying Home: While one might want to be at the scene, that is not a good idea. Survivors feel that proximity is important, but it is not. In fact, proximity aggravates your strained, tensed behavior and brings with it its own destabilizing circumstances. Surviving-family proximity also inhibits incident management. Proximity is not a good idea from any perspective.

Keep with Routine: Routine stabilizes and ritual normalizes. Nothing you do that is erratic, over-emotional, or reactive, will ever make anything any better. Stay with family, friends, coworkers. If you can, go to school, go to work, go to church. Making yourself miserable and crazy will not help you, your family, the incident, or life. Work is the best therapy, intensified waiting is the worst.

Get a Representative: If you want to impact the incident, use a trained, qualified professional. Someone who knows the emergency management and incident management business, who can interact with the response complex professionally, not emotionally. It's like getting a lawyer for court. Otherwise you have a fool for a representative or client.

When it is time, and only if you want, go to the scene: When they have found your loved one or the recovery phase is over, and you have made whatever arrangements were appropriate, you can go to the scene, if you find that personally necessary, many people don't. Nothing you do will mean you cared for or didn't care for your loved one. Don't worry about what other people might think. Someone will always criticize. Just do what feels right.

Surviving Family Members (cont.)

More could be said, but if you stay within the meat of the above bell-curve of activities, if you keep within one standard deviation from stability, you'll do fine.

But if you are out on the edges, either screaming or shut down totally, things will not bode well for your thriving and helping others to thrive.

*I have been involved in planning, hazmat safety, and emergency management since 1985; have survived the long-term disease and death of my son; and have worked as a mentor and stress manager for several decades.

State EPCRA / LEPC Coordinators

Arkansas	Kenny Harmon	501-683-6700	kenny.harmon@adem.arkansas.gov
Louisiana	Gene Dunegan	225-925-6113	gene.dunegan@dps.la.gov
New Mexico	Susan Walker (Interim)	505-476-9640	susan.walker@state.nm.us
Oklahoma	Tom Bergman Bonnie McKelvey	405-702-1013 405-521-2481	tom.bergman@deq.ok.gov bonnie.mckelvey@oem.ok.gov
Texas	Bernardine Zimmerman Chase Yarbrough	800-452-2791 512-424-2447	Bernardine.zimmerman@dshs.state.tx.us chase.yarbrough@dps.texas.gov

Emergency Response Numbers

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	**866-372-7745**
CHEMTREC	**800-424-9300**

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