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Colorado

DEPARTMENT OF LOCAL Affairs

Division of Emergency Management

Emergency

Management

Association

Bill Ritter, Jr. Governor

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EMERGENCY MANAGEMENT NEWS

Colorado's Newest Incident Management Team Has Busy 2008 Lined Up

By Larry Helmerick, Information Officer, Eastern Colorado Incident Management Team

he coming year is filling up with assignments and training for the Eastern Colorado Incident Management Team (ECIMT). Members served in Command and General (C&G) Staff and teaching positions at the Colorado Wildland Fire & Incident Management Academy (CWFIMA). Team members also expanded their knowledge by taking classes at the seven-day Academy

in Sterling that began on January 12th. Over 700 students, faculty, and staff from 26 states attended.

The 20-member ECIMT officially went on-call January 1, 2008.

"It's going to be a busy first year of exercises, training and assignments for the team" said Incident Commander and Eastern Colorado Division of Emergency Management Regional Manager Chad Ray.

After the CWFIMA, the group participated at the Colorado Governor's Emergency Management Conference in Denver from February 26-28. Members were posted to all C&G positions.

Also on the horizon is the Democratic National Convention (DNC) in August 2008. The team will be available to support the DNC and the State Emergency Operations Center (EOC). Of course, the all-hazard team will be available to handle emergency assignments in the 22 county area that is Eastern Colorado, or as needed by the State.

The ECIMT formed in late 2007. In October 2007, the Team had their first training opportunity at the Colorado State EOC in Centennial. The members participated in a Green Cell assessment with elements of the Colorado National Guard. This was an activation of the ECIMT with the Guard for an exercise involving a severe weather event in Limon.



Members of the Eastern Colorado Incident Management Team.
Pictured are Riley Frazee (Baca County Emergency Manager),
Shane Doyon (Berthoud Fire Protection Dist.), Chad Ray (CDEM),
Todd Manns (Berthoud Fire Protection Dist.), & Kevin Kuretich (CDEM).

Unit members come from a multitude of disciplines including law enforcement, fire EMS, and public health.

Members come from the Northeast, Southeast, and South Regions which encompasses 22 counties and literally a third of the State. Members of the ECIMT have a mixture of Incident Management Type I, Type II, and Type III certifications from both the State all-hazards certification process and the National Wildland Fire Coordinating Group (NWCG) certification process.

The team has a web-site available at: www. ecimt.info.

Notes from the Colorado Emergency

Management Association President



nother year has passed and much has happened since the 2007 Governor's Emergency Management Conference. The State has wrestled with reorganization and the Colorado Emergency Management Association (CEMA) has found its footing representing the emergency management community of Colorado.

In 2007, CEMA moved forward with rewriting and adopting new bylaws and a Code of Conduct tailored to our profession. We adopted Prevention as the "5th Element" in the Phases of Emergency Management emphasizing the importance of not only Mitigation's role in lessening the impact of disasters, but actively working to prevent disasters, especially those manmade. The Association involved our membership in the decision making process by actively soliciting member comments and opinions and will greatly increase the ability of a member to influence the Association through our new web site. During the second day of our 2008 conference, we once again honored our colleagues and co-workers with CEMA awards recognizing outstanding service to association and the Colorado emergency management community in 2007.

In the coming year, we will see the new CEMA web site (CEMAColorado.com) become the place to go for information sharing, membership opinion surveys, and a place to showcase your organization.

CEMA is nearing completion of another long term goal, set by my predecessors, to chart CEMA's future with a comprehensive Strategic Plan. The process of building our Strategic Plan has shown us that the future of the Colorado Emergency Management Association is full of opportunities.

We will continue to build upon the strong partnership we have enjoyed with the Colorado Division of Emergency Management and the State's Homeland Security Coordinator. With the appointments of Hans Kallam as the Director of the Colorado Division of Emergency Management and Mason Whitney as the Governor's Homeland Security Coordinator, Governor

Ritter addressed the State's need for strong, capable leadership in his efforts to make the citizens of Colorado safe from the hazards we all face.

CEMA enters 2008 as a more robust, cohesive, goaldirected organization that will continue to provide the best possible service to its members and we will be atthe-table to influence the Emergency Management and Homeland Security efforts in the State of Colorado.

Jim Lancy, President Colorado Emergency Management Association

Did bridge house prisoners?

Akron News-Reporter – Stories abound about an old concrete bridge along Highway 36 at the west end of Washington County.

The bridge crossing Beaver Creek near Last Chance includes a large, empty concrete room containing only concrete support pillars. Two small windows with steel bars offer a view into the room.

Some say the room was used to hold prisoners who worked on construction of the bridge in the mid-1930's.

One resident who wished to remain anonymous claimed to remember locals being upset about prisoners taking jobs away from them during the Depression. Another said that a large steel door, since covered with concrete, provided access to the room. Still another said prisoners were never used during the construction.

What's looming under your bridges?



Kevin Kuretich CDEM Regional Manager

Animal Emergency Management Update

By Kevin Dennison, DVM, Director of Colorado SART and Unit Coordinator for CO VMRC

he Colorado Veterinary Medical Foundation's Emergency Management Programs (CVMF-AEMP) now includes three intersecting efforts in the Colorado State Animal Response Team (SART), the Colorado Veterinary Medical Reserve Corps (VMRC), and biodefense outreach program as part of the Rocky Mountain Regional Center of Excellence in Biodefense and Emerging Infectious Diseases. CVMF AEMP is guided by a steering committee that includes the Colorado Division of Emergency Management, the Colorado Department of Agriculture, Colorado State University, the Colorado Department of Public Health and Environment (including the Medical Reserve Corps program), the Colorado Veterinary Medical Association, the Colorado Association of Certified Veterinary Technicians, the Colorado Federation of Animal Welfare Agencies, the Colorado Association of Animal Control Officers, and the U. S. Department of Agriculture.

The Colorado SART program is supporting the development of Community Animal Response Team (CART) programs throughout the state. Some of these programs are developing at the county level, while some are targeting regional efforts. In addition, Colorado SART is supporting the development of local plans and the State plan for companion animals and non-commercial livestock (ESF #11, part E). This plan mirrors the draft National Response Framework in placing the safety and welfare of pets primarily within ESF #11. A sample local animal emergency plan available for use by counties and municipalities is available online at: http://dola.colorado.gov/dem/plans/ plans.htm. With the Pet Evacuation and Transportation Standards Act of 2006 adding provisions to the Stafford Act pertaining to household pets and companion animals, each community in Colorado needs to have both a reasonable plan to address these issues and trained personnel to lead the implementation of that

In the North Central Region (NCR), the NCR/Urban Area Security Initiative (UASI) Animal Emergency Committee has been instrumental in applying funding for a trailer and sheltering equipment that will double the mobile animal sheltering capability of the region in 2008. In addition, the committee has facilitated productive discussions between counties, cities, and non-governmental agencies to help better prepare the North Central Region and UASI jurisdictions.

I would personally encourage other All-Hazards Regions to consider formally adopting animal issues committees to help move these issues forward productively.

The newest addition to CVMF AEMP is the Colorado Veterinary Medical Reserve Corps. The program provides an opportunity for veterinary professionals to become involved in local and state emergency planning and response efforts, supporting issues related to both animal and public health. It is open to veterinarians, veterinary technicians, support staff, and students. With over 60 veterinary professionals already started through the initial training since June, we are well on our way to the 300 we hope to train within the first three years. In addition, we have two caches of veterinary equipment and supplies dedicated to disaster response.

Training and volunteer credentialing is a significant issue and CVMF AEMP and our steering committee is working to help create workable standards. The Colorado VMRC uses a three-part initial training program that includes two standard FEMA courses (IS-700 NIMS and IS-100 ICS) which can be taken online or in a classroom. Additionally, Colorado VMRC members are required to attend a one-day training session that includes four modules and an interactive disaster scenario discussion:

- Introduction to Emergency Response for Veterinary Professionals
- 2. Biodefense and Zoonoses
- 3. Chemical, Biological, Radiological, Nuclear, and Explosive Issues
- 4. Personal and Business Preparedness

CVMF is also offering Community Animal Response Training, a somewhat similar full day of training with a more generalized curriculum. We are recommending local communities adopt CART, ICS-100, and NIMS-700 as their basic pre-credentialing standard for animal response personnel.

Whether a wildfire, flood, influenza pandemic, foreign animal disease outbreak, or terrorist attack, Colorado's veterinary community, animal care and control professionals, agricultural professionals, and volunteers must stand ready to provide an organized and competent response within our communities and our State!

For further information or assistance, please visit www.cosart.org, email KevinDennison@colovma.org, or call CVMF Animal Emergency Management Programs at 303.539.7633 (toll free: 1.866.854.7278).

Information Sharing in Fire and EMS

By Division Chief Norris Croom, Castle Rock Fire, and Major Brenda Leffler, Colorado State Patrol, Director, Office of Preparedness and Security

s we continue to learn from events around us, one of the key areas that continues to be a challenge in fire/EMS and emergency management is the sharing of information. While we typically share information amongst ourselves, information sharing between fire/EMS, emergency management, and other public safety agencies remains poor. Why is information sharing important? Because information and intelligence can directly impact the way we prepare for and respond to incidents.

In October 2007, the White House released the National Strategy for Information Sharing, www. whitehouse.gov/nsc/infosharing/. While this is a far reaching document about how information should be shared at all levels, it emphasizes the need for information sharing at the local and State levels. Not only are first responders critical to the efforts of prevention and response, we are also in the best position to identify potential threats within our communities. Remember that information sharing is a two-way street. Fire/EMS and emergency management need to ensure information flows up with the intent of gaining a good information flow back down.

One method of sharing information is through the use of State fusion centers. There are currently 58 fusion centers nationwide that are either operational or in the process of being established. These centers provide an excellent opportunity for fire/EMS and emergency management agencies to become involved.

Fusion centers are critical to the effective sharing of intelligence information among State, local, and federal government agencies. Today's terrorist and criminal threats are increasing, and it has become critical that local and State agencies have the ability to act upon valid intelligence information.

According to the U.S Department of Justice and the U.S. Department of Homeland Security, a fusion center is defined as a collaborative effort of two or more agencies that provide resources, expertise, and/or information to the center with the goal of maximizing the ability to detect, prevent, apprehend, and respond to criminal and terrorist activity. The intelligence component of a fusion center focuses on the intelligence process where information is collected, integrated, evaluated, analyzed, and disseminated.

Nontraditional collectors of intelligence, such as public safety entities and private sector organizations, possess important information that can be "fused" with law enforcement data to provide meaningful information and intelligence about threats and criminal activity.

Some fire/EMS and emergency management agencies are actively involved in their State fusion centers. California, Arizona, Colorado, and Georgia are just a few examples of States that have fire/EMS and emergency management participation in their fusion centers. Addressing issues that range from hazardous materials to public health to "all-hazards" analysis, the fire/EMS and emergency management component offers a unique, and sometimes missed, perspective of the information gathering and sharing process. Recently, the Department of Homeland Security and the International Association of Fire Chiefs (IAFC) released a statement that they are working to place firefighter personnel at State and local fusion centers in order to provide awareness to firefighters responding to calls. The intent is that these firefighters will receive training in recognizing suspicious or questionable items so that when they respond to incidents, they can recognize if the source of a fire is an act of terrorism. More importantly, these fire/EMS and emergency management personnel can offer the fusion center a connection with the personnel in the field. This can be accomplished by implementing the Terrorism Liaison Officer, or TLO program.

In July 2007, the Colorado Information Analysis Center (CIAC, pronounced "kayak") staff launched a TLO Program for law enforcement and first responder agencies throughout Colorado to strengthen information sharing and enhance multi-jurisdictional partnerships. The Colorado TLO Program mirrors the Arizona Counter Terrorism Intelligence Center (AcTIC) TLO Program, and has been developed to provide a platform of local representatives to share information related to local and global terrorist and criminal threats and potential incidents. The TLO Program creates an expansive, statewide network of personnel by training local emergency personnel and linking them to federal and State assets, in order to provide an effective and viable two-way flow of information.

A TLO is an identified person within a law enforcement, fire service, emergency management, or other cooperating agency who is responsible for coordinating terrorist and other criminal intelligence information from their local agency to the CIAC. The information is shared with the FBI and the Department of Homeland Security to ensure an inclusive and coordinated information sharing architecture for the State of Colorado.

(Continued on page 5)

Information Sharing in Fire and EMS

(Continued from page 4)

The inaugural TLO Course included 62 law enforcement, fire service, communications

personnel, and emergency managers from across the State. The class was developed by the CIAC staff and taught by a combination of instructors from the CIAC, AcTIC, the Colorado State Patrol Rubicon Team, the Castle Rock Fire and Rescue Department, DHS, and the FBI.

The TLO is the direct point of contact for the fusion center at the local level and will serve as a resource and subject-matter-expert within their local area. The TLO can assist with the following activities at the local level:

- Collect and report relevant field intelligence from the local area to the fusion center
- · Assist with local terrorism awareness training
- Disseminate information to field officers during roll call or team meetings
- Disseminate information to specialty task forces or field units
- Provide intelligence briefings to agency executive staff
- Provide intelligence briefings to local representatives with a valid "need to know"

The "need to know" issue is where most fire/EMS and emergency management agencies lose out. Somewhere, someone determines that the information is "Law Enforcement Sensitive" or "For Official Use Only," and fire/EMS and emergency management are not in the "need to know" group. However, through the TLO program, not only have we become part of the "need to know" group, we have the ability to influence information and intelligence dissemination by providing the portal to send information to the fusion center. With fire/EMS and emergency management personnel in the fusion center, the information is then truly analyzed from an "all-hazards" perspective, and thus we have become part of the "need to know" group.

Some fire/EMS and emergency management agencies, such as Los Angeles, Phoenix, and Atlanta have already overcome this barrier.

They are not only active in their State fusion centers, they are also involved in publishing monthly Homeland sScurity reports, working directly in the FBI's Joint Terrorism Task Forces (JTTFs), or in the Terrorism Early Warning Groups (TEWG). The positive impact these departments have had in information sharing has set the stage for the rest of the fire/EMS and emergency management agencies.

So, this brings us back to why is information sharing important to fire/EMS and emergency management? As stated previously, information can directly impact how we respond to incidents. It also allows us to be better prepared for incidents that could occur in our jurisdictions. Regardless of the size and scope of your jurisdiction or department, information and intelligence enhances our knowledge base and we all know that knowledge is power.

Whether the information is on stolen brass couplings on fire department connections, an outbreak of a communicable disease in a specific population or area, or specific threats of an attack, the knowledge gained by this information can affect our daily operations. This knowledge may cause us to purchase a specific piece of equipment, seek out additional training, make contacts with critical infrastructure representatives in our area, or just pay a little closer attention when responding to or returning from calls.

As first responders, we are the eyes and ears of our community. We have the ability to see things State and federal agencies may not. It is our responsibility to ensure this local information is sent to a fusion center and not stove piped as has been past practice. And yes, we need to learn to work better with our law enforcement partners. We need each other at all levels to prevent the mistakes that have been listed in documents like the 9-11 Report.

Every agency can be affected. Even if you think, "It can't happen here," it really can. In western Douglas County is a small town where the organization "Recreate 68" is based. Visit their website at www.recreate68.com, and you may be surprised at what you find. Rural in nature, but close to Denver, this small town is finding that it can happen here.

"The most important thing in communication is to hear what isn't being said."

Peter Drucker (1909 - 2005)

South Central Region Exercises

By Lori Hodges
Park County Emergency Manager

he South Central All-Hazards Region has dedicated a significant amount of time over the last several years developing common procedures, equipment, and response activities for large-scale events within the five-county region. Additionally, the region has developed several new planning documents, including a regional Emergency

Operations Plan, a Strategic Plan, and a Tactical Interoperable Communications Plan. Over the last year, emergency services personnel within the region have been given the opportunity to test these procedures and plans by participating in a series of large-scale exercises.

The first exercise was a tabletop exercise in December 2006, focusing on an intentional hazardous materials spill at the Buena Vista Correctional Facility. This exercise was discussion-based and helped the region identify risks, vulnerabilities and plans for the future. There was representation from first responders who were assigned command tasks and there was representation from mutual aid

agencies within the region that collectively managed the hazardous materials detection and operations. Additionally, the region had representation from elected officials who were able to learn their role as policy makers during an event that would possibly attract national media attention.

The second exercise built upon the tabletop exercise and was conducted in February of 2007. Using the same scenario, the region conducted a hazardous materials drill, utilizing all regional HAZMAT resources. This was an excellent opportunity for jurisdictions without equipment to see how the regional decontamination equipment is utilized. This exercise was a huge success, with representation from all five counties. Many lessons were learned that will ultimately improve emergency response in the region.

The third exercise was a functional exercise tying all county and city Emergency Operations Centers (EOCs) together to test various communications capabilities.

This was an excellent opportunity to test the region's Tactical Interoperable Communications Plan and make changes for future incidents and exercises. It was also the first time the region has attempted to tie all EOCs together during a large event. Out of all of the exercises conducted, this exercise probably saw the most glitches and areas of improvement, allowing each jurisdiction the opportunity to strengthen communications systems. The EOC concept is new to some members of our region, so it was beneficial to have the assistance of neighboring counties to share ideas and coordinate systems. This exercise assisted the region in developing the framework for EOC management in future events.



Finally, the South Central Region held a full-scale exercise, bringing regional resources and lessons learned from the first three exercises, and using them to manage a large-scale incident staged in Chaffee County. Several citizens volunteered to act as victims of an intentional HAZMAT spill, allowing hazmat teams from Teller County, Lake County, El Paso County, and Colorado Springs to decontaminate, triage, and treat real victims from the scene. The Park County Incident Command Trailer was used by command staff, a GIS group used a tent and other portable equipment to create maps and gather data, and communications were provided by the Colorado Springs Communications vehicle and staff.

The South Central All-Hazards Region works on an ongoing basis to develop common procedures, equipment, and response activities for large-scale events, and these exercises were an excellent opportunity to learn from each other and to strengthen systems, while utilizing equipment from multiple jurisdictions.

2007 CERT SUMMER

GAMES

By Deanna Erstad North Central Region

he second annual Community Emergency Response Team (CERT) Summer Games took place on September 14 - 15, 2007, at the Parker Joint Services Facility. This year's event had seven teams and over 50 participants! Participants came from both rural and urban areas and there were two All-Hazard Regions represented.

More than 30 staff were on hand to ensure things ran smoothly—all on donated and volunteer time. The weather was gorgeous as the event got underway and the location proved to be perfect! Over the two days, participants took part in training, skill enhancement, and team building.



First Place Team from Adams and Clear Creek Counties

This year's event was sponsored by the North Central Region and Colorado Division of Emergency Management.

A special thank you to the following agencies for their contribution of time and energy: Adams County Citizen Corps, Aurora Citizen Corps, Arapahoe Citizen Corps, Boulder County Citizen Corps, Clear Creek County Citizen Corps, Denver Citizen Corps, Douglas County, Elbert Citizen Corps, Englewood Citizen Corps, Jefferson Citizen Corps, Mile High Red Cross, NCR Fire Corps, Parker Fire Department, READYColorado, Salvation Army, and Weld County Citizen Corps.

DHS Training Update

By Mike Gavin – Fort Collins Emergency Manager

everal issues ago, I wrote a short article about training the Department of Homeland Security provided to local, tribal, and State jurisdictions through their "training consortium." This training is part of the ongoing and growing program that G & T (Grants & Training) financially support. Recently, two new members have been added to the "consortium." They include the University of Hawaii which will focus on natural hazards and the Transportation Technology Center which resides in Pueblo and will focus on hazardous material/transportation.

Another member, Texas Engineering Extension Service (TEEX), has recently added several courses to their program. These courses include a 12-hour training program titled: "Planning and Protecting Medical/Hospital Infrastructure and Personnel." This course brings together those emergency management personnel from within a jurisdiction who would be required to manage or react to a natural or manmade event within their community as it relates to the medical and hospital infrastructure and its personnel. Participants represent medical and hospital staff along with those who share a supporting role in mass casualty, mass fatality, and surge capacity events within a jurisdiction. Topics covered include an introduction to disasters, hospital emergency response plans, response issues, recovery issues, and future direction and action plans.

Two other recently developed courses reside in the water utility area. It includes a course titled: MGT 342 "Disaster Management for Water and Wastewater Managers" which is a four-hour course. Chapters in the course include: An Overview of All-Hazard Terrorism Threats to Water and Wastewater Utilities and Recommended Guidance Using USEPA Response Protocol Toolbox and Unified/Incident Command.

The second course is titled: MGT 343 "Disaster Management for Water and Wastewater Utilities" which is a 16-hour course. Topics of facilitation include Threats to Water and Wastewater Systems, Major Legislative Requirements, Mitigating Threats to Water / Wastewater Systems, Responding to Threats Against Water/Wastewater Systems, and Recovery From Disasters.

For more information or to schedule these and other courses, contact Vince Slominski (vince. slominski@teexmail.tamu.edu) or Robyn Knappe (robyn.knappe@state.co.us)

Program Trains Students in Emergency Response By Loretta Sword, Special to

the Pueblo Chieftain

the shrapnel victims huddled in another spot behind the announcer's booth Monday morning at Pueblo West High School's football field. There was a rush for "the blue leg stuff," fake blood, baby powder, skin glue, and rubbery facsimiles of broken veins and arteries, open gashes, and road rash.

"OK, guys. I need all of the compound fractures over here, and the walking wounded over there!"

"Harley! You're pukin', OK?" barked Haley Rich, one of the leaders of the emergency drill that is the practical final exam for students in all sections of the Teen School Emergency Response Training (SERT) program, which comprises the second half of teacher Pat Smith's freshman health classes every semester.

Advanced students spent at least a half hour making themselves up to act as the victims that other students would have to evaluate, triage, treat, and evacuate from the field. They also formulated the drill and were responsible for every detail of its execution.

Smith, a former firefighter and certified EMT, started the SERT training nearly five years ago and Rich soon joined up as a volunteer and grant writer. Since then, the two have trained other education professionals in the logistics of setting up their own SERT programs. The Pueblo West program has become a model for programs in

600 schools and 39 States. Smith said.

Monday's drill involved a "lightning strike" during a girls soccer game. The premise: Multiple strikes hit the home stands and announcer's booth, sending glass and metal flying everywhere, and causing severe burns and other injuries.

Harley Vaught-Burner (the kid who had to puke, using dry oatmeal for the effect) "is drunk. He's a parent who made the mistake of getting drunk before he came to the stadium and when the lightning strikes started, all

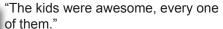
that alcohol acted as a conductant," Rich explained before gathering up more of the students before the first drill.

"OK, I need some walking wounded over here, and those of you who have lacerations, stage where you were until the responders come."

At that point, scores of students scattered to their assigned places on the football field and in the stands. As the "victims" scattered, Smith reminded them: "You get tapped, you go. I'm not training a bunch of ultimate fighters here. If the responders tell you to get up and go, you get up and go."

Smith said Tuesday that two guest observers, Jim Cody from the county's emergency preparedness team, and Tony Reidell from the Colorado Division of Emergency Management, "were very supportive of the exercise and were impressed by how well the students did."

Smith said that he also was pleased with how the drills



He also said he is proud of two advanced students who were recognized by the School District 70 school board on Tuesday night for using the skills they've learned in the SERT program.

Damen Romero recently "used a basic head tilt method to clear the airway of a small child" who had fallen into a swimming pool and nearly drowned, Smith said. None of the adults on the scene when Damen arrived knew what to do," and Damen literally saved this child's life."

Ashley Gonzales "recognized a gas leak in her home and safely extricated

her mother and sister from their home" before either suffered permanent health damage.

He said Ashley got her sister out first, and found her mother dialing 911 on the phone just before she passed out from the fumes. Ashley used a "blanket-drag" technique - wrapping her mom in a sheet and then dragging her from the home - to get her to safety.

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DEPARTMENT OF HOMELAND SECURITY CHEMICAL FACILITY ANTITERRORISM SECURITY STANDARDS (CFATS)

...and new final Appendix A

Chemical List By Timothy R Gablehouse

he Department of Homeland Security Chemical Facility Anti-Terrorism Standards (CFATS) adds to the current regulations established by the Emergency Planning Community Right-to-Know Act (EPCRA or SARA Title III) and Risk Management Plans under the Clean Air Act, by establishing risk-based performance standards for chemical facilities. Just final in November, the final CFATS Appendix A adjusts the Screening Threshold Quantity (STQ) for certain Chemicals of Interest (COI), defining the security issues implicated by each COI, and adding new provisions instructing facilities how to calculate the quantities of COI in their possession.

The scope of this article is too brief to get into the details of the program. Useful information comparing the three programs and the chemical lists is available at http://www.gcgllc.com/NASTTPO%20CFATS%20information%20Nov%2007.pdf

Facilities should go to www.DHS.gov/chemicalsecurity and follow the registration instructions to access the CSAT. Once DHS validates a facility's registration, DHS will notify the facility about how to access the Top-Screen and other CSAT tools. A list of CSAT Top-Screen questions and user instructions are also available online at http://www.dhs.gov/xprevprot/programs/gc_1169501486197.shtm.

A full text version of the Chemical Facility Anti-Terrorism Standards Interim Final Rule (6 CFR Part 27) and Proposed Appendix A: DHS Chemicals of Interest are available online at http://www.dhs.gov/xprevprot/laws/gc 1166796969417.shtm

CFATS establishes risk-based performance standards for the Nation's chemical facilities and requires facilities to identify facility security vulnerabilities and develop and implement site security plans. The chemical facilities regulated include "any establishment that possesses or plans to possess, at any relevant point in time, a quantity of a chemical substance determined by the Secretary to be potentially dangerous or that meets other risk-related criteria identified by the Department."

As defined in CFATS, chemical facility also refers to the owner or operator of the facility and "where multiple owners and/or operators function within a common infrastructure or within a single fenced area, the Assistant Secretary may determine that such owners and/or operators constitute a single chemical facility or multiple chemical facilities depending on the circumstances."

Chemical facilities regulated pursuant to the Maritime Transportation Security Act of 2002, Public Water Systems under Section 1401 of the Safe Drinking Water Act, Treatment Works under Section 212 of the Federal Water Pollution Control Act, facilities owned or operated by the Department of Defense or the Department of Energy, or facilities regulated by the Nuclear Regulatory Commission are not regulated under the CFATS.

...security issues include: (1) release; (2) theft and diversion; (3) sabotage and contamination; and (4) critical to government mission and national economy...

Under CFATS, the Secretary may request information from regulated chemical facilities reflecting potential consequences of, or vulnerabilities to, a terrorist attack or incident in order to determine the security risk posed by the facility. In addition, a chemical facility must complete and submit a Top-Screen process if the facility possesses chemicals listed in the CFATS Appendix A at or above the STQ for any applicable security issue. The security issues include: (1) release; (2) theft and diversion; (3) sabotage and contamination; and (4) critical to government mission and national economy. If a regulated chemical facility fails to provide information requested or complete the Top-Screen process within 60 days of when Appendix A is published in the Federal Register (the week of November 19, 2007), the Assistant Secretary may determine, based on the information then available, the facility is presumptively high-risk. Furthermore, the Assistant Secretary may make an initial determination at any time based on any information available that a chemical facility is high-risk.

The CFATS chemicals of interest are listed in Appendix A. The Chemical Security Assessment Tool (CSAT) Top-Screen questionnaire collects information on the chemicals manufactured, processed, used, stored or distributed at the chemical facility to determine whether the facility "may be regulated" or is "not regulated."

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DEPARTMENT OF HOMELAND SECURITY CHEMICAL FACILITY ANTITERRORISM SECURITY STANDARDS (CFATS) ...and new final Appendix A Chemical List

(Continued from page 9)

See CSAT Top-Screen User Manual, Sept. 2007, Version 1.1.2, 28-35 available at http://www.dhs.gov/xlibrary/assets/chemsec_csattopscreenusersmanual.pdf. However, the CSAT Top-Screen is currently offline and being updated to align with the CFATS final Appendix A, therefore the CSAT calculations may change. This is likely to be a complicated process as not all locations and all containers need be included in the calculation.

Facilities must include COI in vessels, magazines, underground storage facilities, fuel stored in aboveground tank farms, specified transportation containers, natural gas or liquefied natural gas stored in peak shaving facilities, and COI present as process intermediates, by-products, or incidental production materials. However, a facility need not include releasechemicals manufactured, processed, or used in a laboratory at the facility under the supervision of a technically qualified individual unless the use or process is specialty chemical production, pilot plant scale operations, or activities outside the laboratory. Facilities must only include theft and diversion COI that are in a transportation packaging. A facility meets the STQ for a sabotage and contamination COI if the facility ships the COI and is required to placard the shipment pursuant to the provisions of DOT regulation.

After the Assistant Secretary determines a chemical facility is high-risk, the facility must complete a Security Vulnerability Assessment. In addition, each regulated facility must submit a site security plan addressing vulnerabilities identified in the facility's Security Vulnerability Assessment and security measures selected to address the applicable risk-based performances standards. Regulated facilities must also satisfy the eighteen risk-based performance standards identified in the regulation.

Under the CFATS, Department of Homeland Security officials are authorized to enter, inspect, and audit the property, equipment, operations, and records of regulated facilities to assess compliance with the CFATS requirements. Regulated facilities must keep records of training, drills and exercises, incidents and breaches of security, security equipment, security threats, audits, and letters of authorization and approval for at least three years. Regulated facilities must also keep records of submitted Top-Screens, Security Vulnerability Assessments, Site Security Plans, and all related Department of Homeland Security correspondence for at least six years.

Fort Collins is Training

By Mike Gavin – Emergency Manager

he City of Fort Collins Office of Emergency
Management, in conjunction with the Colorado
Division of Emergency Management, recently
hosted several courses sponsored by the National
Domestic Preparedness Consortium. These courses
were delivered by subject matter experts from the
National Center for Biological Research and Training
(NCBRT - Louisiana State University) and the National
Emergency Response and Rescue Training Center
(TEEX/Texas A&M).

TEEX first delivered MGT 312, Senior Officials Workshop. This is a one-day workshop delivered by several outstanding instructors. Senior Officials Workshop is for local jurisdiction elected and appointed senior officials. Its purpose is to provide a forum to discuss strategic and executive level issues relative to disaster preparedness, share proven strategies and best practices, and enhance coordination among officials responsible for emergency response to a disaster. The participant manual and executive handbook, which are part of the reference materials, are a great resource.

The NCBRT then delivered PER 220, Emergency Response to Biological Incidents which is a 3-day course. Its purpose is to provide emergency response personnel and local, tribal, and State government officials information so that they may develop a plan of action to deal with potential bioterrorist attacks in their community. This performance level course provides detailed technical information and includes hands on practice of actions required by emergency responders and medical personnel in biological incident situations.

(Continued on page 11)

Fort Collins is Training

(Continued from page 10)

This is the second time we have hosted this course and the second time we have had Mr. William Patrick (Father of the US Offensive Biological Weapons Program) as our lead instructor.

NCBRT also brought their PER 222 course to Fort Collins. Public Safety Sampling Techniques is an intensive three-day training with two days of hands on experience. The course is delivered by several instructors with extensive hazardous materials backgrounds. It helped in preparing our hazmat team, law enforcement, fire, and other government officials the necessary skills to conduct public safety operations at a WMD site in a safe and efficient manner consistent with established crime scene/evidentiary guidelines established by the FBI. It challenged participants to develop a systematic approach to managing a WMD scene in which public safety is at risk. The course evolves from traditional problem based classroom activities into a series of scenario based practical exercises. Equipment, including suites, detection equipment, and safety equipment are provided to participants. PER 222 is a pre-requisite for the Advanced Chemical/Biological Integrated Response course held at Dugway Proving Grounds.

And finally, TEEX returned to deliver the MGT 317 Public Works: Planning, Response, and Recovery to a WMD/CBRNE Terrorism Incident. Fort Collins has hosted this course four times and will continue to host this course and others like it as a means of preparing emergency responders for large scale incidents. MGT 317 provides a unique opportunity for individuals to acquire the knowledge, skills, and attitudes necessary to help them protect public safety and infrastructure from the threat of a terrorism incident or natural disaster. Course participants, using their extensive professional experience, work together in multidiscipline teams to apply the information presented during the course in a variety of hands-on, small-group activities as well as realistic, multi-media scenarios. Specific areas covered include an overview of terrorism, vulnerability assessments, response issues, recovery issues, and preparing for terrorism and large scale incidents.

All of these courses are DHS funded through the Grants and Training Program which eliminates costs to the local jurisdiction hosting the course. As a local entity, all we were required to provide was a location for instruction and the participants. If you are interested in hosting these or other similar courses, contact Robyn Knappe at CDEM at 720-852-6617.

Compliance To Performance:

Using the Incident Command System In The Carter Lake Filter Plant Explosion

July 20, 2007- Berthoud, Colorado



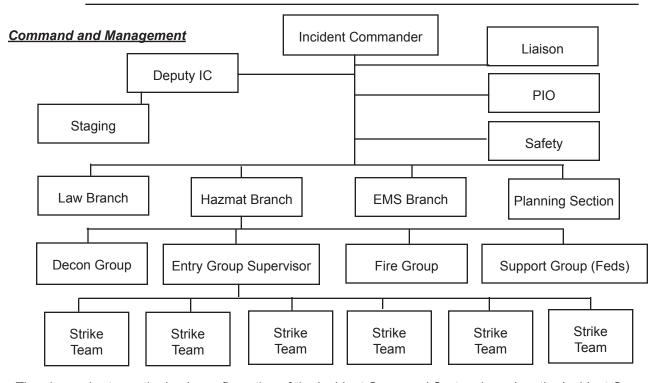
A chlorine explosion at the Carter Lake Filter Plant, a water treatment plant, injured four people that day and heavily damaged the facility. In response, 136 responders supported or performed 20 level A hazmat entries in 34 hours. There were 38 total agencies involved in the response, which included resources from the State of Wyoming and four federal agencies.

The Incident Command System for this event took on the following unique and advanced aspects:

- The use of the Deputy Incident Commander position opposed to going to Unified worked very well.
- The concept of Branch Tactical Planning was utilized and was reflected in the construction of the incident action plans, contents, and size.
- There was no Operations Section Chief assigned due to the effectiveness of the Deputy Incident Commander, Hazmat Group Supervisor, and the check-in recording and resource tracking functions at the command post.

(Continued on page 12)

Using the Incident Command System In The Carter Lake Filter Plant Explosion (Continued from page 11)



The above chart was the basic configuration of the Incident Command System based on the Incident Commanders intent for the first operational period.



Using the Incident Command System In The Carter Lake Filter Plant Explosion

(Continued from page 12)

COMPLEXITY ANALYSIS (ICS 209 EXCERPT) Impacts to life, property, and the economy Yes Community and responder safety Yes Potential hazardous materials Yes Weather and other environmental influences Yes Likelihood of cascading events Yes Potential crime scene Yes Yes Political sensitivity, external influences, and media relations Area involved, jurisdictional boundaries Yes

<u>Resources:</u> Regional and/or national resources are required to safely and effectively manage the operations. Many Command and General Staff positions are filled. Operations personnel typically do not exceed 200 per operational period and the total does not exceed 500.

<u>Time Span:</u> The incident is expected to go into multiple operational periods. A written IAP (Incident Action Plan) is required for each operational period.

Based on the above complexity analysis and the definition above from NIMS, this incident appears to have risen to the criterion of a Type II incident.

Takeaways....

 When Vulnerability and Risk Assessment Modeling and Prediction is used as the foundation for training direction and equipment acquisition—and when all components of your organization understand these processes—it alleviates indecisiveness when an incident of similar nature occurs.

Availability of resources

- There is a direct correlation between Vulnerability and Risk Assessment, Incident Command System training, and the Homeland Security Exercise and Evaluation Program.
- From a preparedness perspective, doing all that can be done to test and use the Incident Command System is critical on planned events and incidents to instill confidence and competencies in its usage.
- Move all training and exercising that is currently accessible to performance level standards opposed to compliance level standards. Having a check in the box at grant time is great, but performance level training with the right talent is the key to truly finding success when real world events happen.

In this incident, the Incident Command System proved that it is the ultimate tool in the hands of leaders who know how to use it.

Yes

The Berthoud Fire Protection District would like to thank the numerous agencies who responded to this incident, and in particular, the Loveland Fire Department, the County Emergency Operations Centers in both Weld and Larimer Counties, and the State of Colorado Emergency Operations Center.

About the Author: Todd Manns is the Emergency Management Coordinator for the Berthoud Fire Protection District. In addition to his duties in Berthoud, Todd is Colorado's most active ICS instructor through the 400 level. To date, Todd has trained over 5,000 students, more than anyone in the history of the State. He is a Certified Type III Planning Section Chief and is the Plans Chief for the Eastern Colorado Incident Management Team, a regional all-hazards Type III team serving 22 counties.

B. Ready: Made the Rounds!

he READYColorado Committee, in coordination with the North Central Region Citizen Corps Council and the Mile High Red Cross, created a new Preparedness Project for



National Preparedness Month last year. B. Ready is similar to the Flat Stanley Project and gets passed from person-to-person promoting preparedness.

One hundred 12" B. Ready cutouts (the yellow mascot shown above) began traveling around the state on September 1, 2007. Along with the cutout, a journal for participants to make notes on activities they have taken to be ready was also sent around. B. Ready traveled across Colorado and even to other states.

Please visit the www.bready.com site to view the numerous fun and exciting places B. Ready traveled.

Book Review: Emergency Management Lucien G. Canton, 2007, John Wiley & Sons, Inc.

By Mike Gavin, Fort Collins Emergency Manager

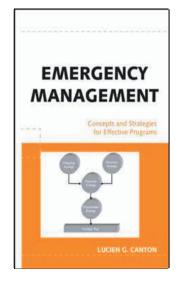
ast November, I attended the International Association of Emergency Managers annual conference in Reno. The conference was well worth the cost and time invested. One of the breakout speakers was Lucien Canton, who spoke on Concepts and Strategies for Effective Programs. It focused on strategic planning for emergency management. Not only was Lucien a good speaker, but he knew his subject. Mr. Canton was the former director of emergency served for the city of San Francisco, where he coordinated the emergency management program and serviced as a policy advisor to the mayor on emergency management programs. Prior to that position, he served as a regional hazard mitigation branch chief with FEMA.

Although his presentation was only an hour in length, I later found out that he is also the author of a book titled: EMERGENCY MANAGEMENT.

Wiley and Sons Publishing was one of the vendors I visited while at the conference and, through them, I was introduced to this text.

In 10 short chapters, Canton discusses Emergency Management from a historical perspective to a social perspective. Most emergency management texts focus on the short-term response and recovery to individual specific threats. This book suggests it is time to change to an approach supported by social science and by new national recognized standards for emergency management programs. The concept of community involvement is highlighted throughout the text. Mr. Canton stresses the fact that instead of a technical expert on emergency operations, the emergency manager

becomes a program coordinator whose job is to facilitate the development of a community emergency management strategy and oversee its implementation. As mentioned, the text starts with a historical and social science perspectives on emergency management and then looks at the historical and evolving roles of the emergency manager.



Risk assessments, developing strategies,

planning concepts, planning techniques and methods, along with coordinating response and managing crisis are a few of the topics he discusses in this book.

It is one of the more enlightening and enjoyable books on emergency management strategic planning I have read in quite some time. I believe you would also enjoy listening to Lucien Canton's ideas.

"Success has nothing to do with what you gain in life or accomplish for yourself. It's what you do for others."

—Danny Thomas

Community plays out a devastating scenario in a tabletop exercise

By Kati O'Hare, Montrose Daily Press Writer

he question faced by local law, emergency, and health officials in January during a pandemic tabletop exercise was, "What if?"

Montrose County Health and Human Services collaborated with Montrose Memorial Hospital to present a devastating scenario involving the avian flu. The exercise was to test the readiness of important community entities including the police and sheriff departments, the hospital, health and human services, Montrose County and city, the fire department, and school district.

"The outcome for us was to get the conversation started and get different players working together," said Dr. Dick Gingery, MCHHS facilitator for the event. "We would all have to work together in this situation if it was a reality."

Representatives from the different organization were given a packet that laid out a series of events which participants found daunting and overwhelming to their department. The scenario started with an explosion at a chicken farm outside of Montrose. At the same time, there is "buzzing" in the community about the discovery of the avian flu virus in a chicken farm in Delta.

In 1918, a "Spanish" influenza pandemic broke out, killing millions of people, one-third of the world's population, according to the Centers for Disease Control and Prevention (CDC). Now, with more accessible modes of transportation, a pandemic could spread even quicker, forcing emergency responders to think faster.

"Personally, I got a lot (out of the exercise), and department-wise it was pretty valuable," Montrose Police Chief Tom Chinn said. "Dr. Gingery did a good job and hit on the need for in-depth planning. We can't wait for it to occur and then wonder what to do."

While emergency responders such as the fire department and police handled the explosion, more information became available. The flock inside the barn may have been suffering from avian flu and the men injured may have had contact with the disease.

With each new piece of information, the group decides what actions to take.

As the scenario continues, the hospital has to work with a high stream of patients. They must go through a list of who is already at the hospital and who is arriving, deciding which patients will receive care.

"Part of the reason for this exercise is to make the hospital aware something like this could overwhelm their resources," Gingery said. "It gives them thought on how to handle something that is too big to handle."

As the day plays out, news about a strain of Avian Flu called the "English Flu" has been detected in Leeds, England. Then the hospital learns some of their patients may have returned from England recently, and then attended a movie at the Montrose theater — possibly exposing local residents.

The groups worked together to answer questions such as: When do you post an alert? When do set up a command center? When do you contact the media?

Many of the organizations involved have similar plans, Gingery said. Barbara Hunt, risk manager for Montrose County School District Re-1J, said the school has an epidemic plan in that would be similar to a pandemic emergency. She said the plan has been discussed with school administration. However, if a similar scenario did arise, the district would work closely with Health and Human Services.

Gingery said the department has taken on the task of "running the show," but would work closely with other entities such as the county's Emergency Response Committee.

"We'd be organizing how businesses respond, how grocery stores keep their shelves stocked ... looking at forms of social distancing," Gingery said.

Chinn said the exercise showed the police department where the holes are in its plan.

"I think law enforcement is going to be extremely overwhelmed and the public is going to have to realize that," he said, adding that the department needs to consider a plan that involves less staff due to illness.

"There is more to be addressed," he said. "That is one of the things everyone was saying is that it needed more work. The reality of this type of thing is major and it's going to have some major, major impact on how we survive."

The exercise was part of federal requirements that health and human services and the hospital have to comply with, Gingery said. This was a prelude to a full-scale exercise on emergency preparedness Jan. 31.

Reprinted with permission from the Montrose Daily Press.

Park County Clean Up By Erin Duran, Homeland Security **Project**

Coordinator, South Central Region

roject Background: In early 2006, the Colorado South Central Region (SRC) received a State Homeland Security Grant with the purpose and scope to create a "Framework for Prevention." The project's aim was to create more capability for all-hazards planning, response, mitigation, and recovery. The framework was created by providing Emergency Managers a better GIS (Geographic Information Systems) data inventory and tools to help them visualize the data and make more accurate consequence assessments and critical, time-sensitive decisions. The data necessary to create an accurate base map of the region included primary and secondary addresses, street centerline, access points, and travel impedances (gates and bridges). Multiple versions of these data already existed for some areas while other areas, including entire counties, didn't have any at all.

Problem: The problems for Park County were already on the way to being understood before the grant was awarded. Initial reports of street name duplications. address numbering issues, and gaps/delays in the addressing process had been discussed and documented by the Park County GIS staff and other government officials. As the Park County GIS database grew, the GIS staff was able to begin classifying known problems and describing them in a spatial manner that could be more easily understood and communicated. However, these assessments were based on GIS data that were not as accurate or complete as the GIS staff, County, or Region would like. Park County needed better, more complete data, a thorough review of their address inventory, and solutions for any and all addressing problems found.

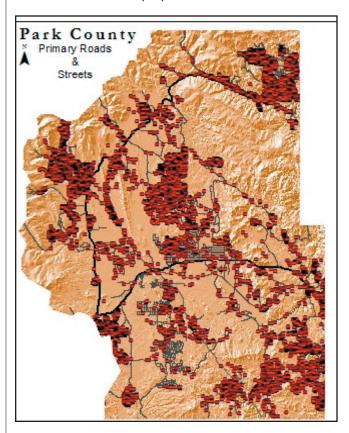
Solution: The 2005 and 2006 Homeland Security Grants provided the South Central Region the resources necessary to create an accurate and complete seamless (one five-county) dataset. It also allowed Park County to use the new dataset to analyze the County's addressing issues, identify problems, and create a correction strategy.

GIS Data	Features Before Project	Features After Project
Road Signs	0	2,008
Primary Addresses	4,257	13,372
Secondary Addresses	0	1,636
Access Points	0	12,169
Points of Interest	153	3,000
Intersections	0	7,538
ESN Zones	0	16

This table offers a summary of the GIS data created.

Before the project started, Park County had a partial primary address GIS layer and a somewhat accurate GIS street centerline. The project delivered additional primary addresses, new secondary addresses, new access points, new points of interest, new street sign data, new intersection data, relationships between all of the data.

With the newly created data in hand, the SCR and Park County hired Spatial Focus Inc. to review and analyze the data. The Region asked Spatial Focus Inc. to organize an address stakeholder community, review and define address problems and issues, create a single address database repository, collect and clean data as necessary, run quality checks on all pertinent address data, resolve or propose resolutions for any problems found, and initiate and manage a public awareness campaign to let Park County citizens know about the issues and proposed solutions.



Sample of data created for the project.

Using their expertise, Spatial Focus identified more problems than anyone had anticipated. They found 644 road segments (a segment is a single road record in the GIS database) with multiple sections where one or more could be renamed. Of the 644 sections, 438 required new street names. These sections also affected 545 addresses.

(Continued on page 17)

Park County Clean Up Project (Continued from page 16)

Spatial Focus also ran a series of reports to discover internal inconsistencies in the addresses; identified a series of private roads that needed names; and created lists for addresses that are out of parity, addresses that are in sequences that fall out of order, new address ranges for ranges that were not usable, and other potential address points.

Conclusion: The 2005 and 2006 Homeland Security Grants allowed the SCR to complete a one and a half year GIS project. The project created GIS base data pertinent to all-hazards risk and public safety. The data was created with public safety in mind and has many uses. It can be used in dispatch centers for finding addresses and routing emergency equipment; on incidents for consequence assessment; and in planning, mitigation, response, and recovery as a common operating picture. For the first time, the SCR has a solid base map of addresses that is useful on a daily basis and in long-term planning. The dataset has also allowed Park County to begin the process of correcting hundreds of addressing errors which have impeded emergency responses for years.

The data opens the door for other Counties to initiate their own address clean up. Chaffee and Lake Counties are in an excellent position, with their new data, to document and clean up the many suspected addressing issues that they have. Lastly, the data facilitates communication between the five Counties as data is continually updated and shared within the Region and as new GIS participants and data holders become active in the SCR.

For more information you can contact: Robert Stansauk SCR GIS Project Manager rstansauk@springsgov.com

Martha M. Wells, GISP Director of Consulting Services Spatial Focus, Inc. Geo-Data Architects www.spatialfocus.com

Craig Barraclough Director of Mapping/GIS Park County cbarraclough@parkco.us 719-836-4288 (phone) 719-836-4351 (fax)

La Plata County Emergency Response

By Dan Bender, La Plata County Sheriff's Office & Danni Lorrigan, La Plata County Office of Emergency Management

uring the second week of January 2008, La Plata County was hit by the second of three snowstorms in a three-day period. The second storm dropped 40 to 50 inches of heavy, wet snow in a line just north of Durango and across the county. Many breaks in the power grid took place due to weight of the snow, trees across power lines, broken power poles, etc. Up to 10,000 customers (not people, but customers; e.g., households and businesses) were without power. By day two, 4,000 were still without power and it took days to get it fully restored.

For most people, no power also meant no water—well pumps were out—and no heat or telephone service in many cases. We had to make do ourselves without power for five days both at home and at work. La Plata Electric Association (LPEA) brought in repair crews from New Mexico, Utah, and Grand Junction to assist.



The County Office of Emergency Management (OEM), with Butch Knowlton as director, and Danni Lorrigan as coordinator and PIO, spearheaded recovery efforts.

Two shelters were opened, one in Durango and one in Bayfield. Attendance was moderate due to trouble getting the word out to the public since all the local radio stations were knocked off the air without backup generators. Also, two fire departments, as well as La Plata County Road and Bridge, lost their primary radio channels for two days. In addition, E-911 was knocked out in Ignacio although their Dispatch remained operational. The greater Bayfield area, including Vallecito, was without ceelular phone service, in addition to no power or AM / FM radio for four days.

(Continued on page 18)

La Plata County EMERGENCY RESPONSE

(Continued from page 17)

The Durango-La Plata Emergency Communications Center was swamped with calls for service. Volunteers from La Plata County Search and Rescue were brought in to help answer the "hotline" phones and respond to non-emergency calls. They also provided radio communications support to help in coordinating the sledders and the Sheriff's deputies in checking on folks.

The Emergency Communications Center was activated and operational 24/7 for four days straight. A Public Information Officer (PIO) team was formed and coordinated emergency information and press releases with LPEA for a consistent message.

Fortunately, there were no injuries or deaths related to the storm and extended power outage.

One problem discovered early on was how to address special needs folks who, for example, had no power to recharge their in-home oxygen. We were able to get the special needs registry from La Plata Electric, which our GIS department then plotted on county maps.

Using this information, we were able to coordinate with local snowmobilers, the San Juan Sledders, and the Sheriff's Office who provided support for these teams, to go into the affected areas door-to-door to make sure people were okay. With the lack of radio (AM/FM) infrastructure, failure of telephone and cell phone communications, and deep snow, snowmobiles were the only way to get into some neighborhoods. The total communications blackout (both two-way as in phones, or one-way as in local AM/FM radio stations) was a challenge that was unexpected.



Another challenge was the rescue of over 70 horses. The owner lived five miles up a U. S. Forest Service road north of Vallecito Lake—in the middle of nowhere. She was already short of feed when the storm hit, leaving snow up to the bellies of the horses.

Over a three-day period, food and water was taken in by snowmobile with assistance from the Department of Wildlife (DOW) and a local snowmobile club.

After an on-site assessment by La Plata County Animal Protection, it was determined the horses needed to be moved to a lower elevation. This meant bulldozing a six mile path to the horses then forming the equivalent of a cattle drive to move them six miles to a point where they could be loaded on horse trailers provided by Colorado Mounted Rangers Troop D and volunteers.



All horses were safely evacuated and moved to an area 30 miles south and 3,000 feet lower than where they were trapped.

Heavy snow loads on rooftops, which could result in building collapses, were also an issue after response and recovery efforts were addressed. La Plata OEM put out a request through the media to collect data on snow shoveling and plowing contractors and the United Way of Southwest Colorado organized the data and posted it on their website: http://www.unitedway-swco.org/.

United Way also partnered with Helping Hands to provide snow services for those low income families who were unable to afford them.

There are many folks who deserved a lot of thanks for their help and their efforts. Community support and volunteers mean everything!

Disaster Trivia

for the Disaster Trivia contest in the last newsletter. Brandon Lawrence, Broomfield Emergency Management; Amanda Vargas, Adams County Emergency Management, and Pat Mialy, City of Loveland Emergency Management...with an honorable mention to Chris Sorensen, Kiowa County Emergency Management.

The hint was: This disaster was the result of a combination of legal, technological, organizational, and human errors. Thousands of people were killed (estimates ranging as high as 4,000) in their sleep or as they fled in terror, and hundreds of thousands remain injured or affected (estimates range as high as 400,000) to this day.

The Answer: Bhopal, India Industrial Disaster. During the night of December 2-3, 1984, a storage tank containing methyl isocyanate (MIC) at the Union Carbide pesticide plant leaked gas into the densely populated city of Bhopal, India. It was one of the worst industrial accidents in history.

Union Carbide India, Ltd. built a pesticide plant in Bhopal, India in the late 1970s in an effort to produce pesticides locally to help increase production on local farms. However, sales of pesticide didn't materialize in the numbers hoped for and the plant was soon losing money. In 1979, the factory began to produce large amounts of the highly toxic methyl isocyanate (MIC), because it was a cheaper way to make the pesticide carbaryl. To also cut costs, training and maintenance in the factory were drastically cut back. Workers in the factory complained about the dangerous conditions and warned of possible disasters, but management did not take any action.

On the night of December 2-3, 1984, something began to go wrong in storage tank E610 which contained 40 tons of MIC. Water leaked into the tank which caused the MIC to heat up. Some sources say that water leaked into the tank during routine cleaning of a pipe but that the safety valves inside the pipe were faulty. The Union Carbide company claims that a saboteur placed the water inside the tank, although there has never been proof of this. It is also considered possible that once the tank began to overheat, workers threw water on the tank, not realizing they were adding to the problem.

By 12:15 a.m. on the morning of December 3, 1984, MIC fumes were leaking out of the storage tank. Although there should have been six safety features that would have either prevented the leak or contained it, all six did not work properly that night.

It is estimated that 27 tons of MIC gas escaped out of the container and spread across the densely populated city of Bhopal, India, which had a population of approximately 900,000 people. Although a warning siren was turned on, it was quickly turned off again so as to not cause panic.

Most residents of Bhopal were sleeping when the gas began to leak. Many woke up only because they heard their children coughing or found themselves choking on the fumes. As people jumped up from their beds, they felt their eyes and throat burning. Some choked on their own bile. Others fell to the ground in contortions of pain.

People ran and ran, but they did not know in which direction to go. Families were split up in the confusion. Many people fell to the ground unconscious and were then trampled upon.

Estimates of the death toll vary greatly. Most sources say at least 3,000 people died from immediate exposure to the gas, while higher estimates go up to 8,000. In the two decades following the night of the disaster, approximately 20,000 additional people have died from the damage they received from the gas.

Another 120,000 people live daily with the effects from the gas, including blindness, extreme shortness of breath, cancers, birth deformities, and early onset of menopause. Chemicals from the pesticide plant and from the leak have infiltrated the water system and the soil near the old factory and thus continue to cause poisoning in the people who live near it.

Just three days after the disaster, the chairman of Union Carbide, Warren Anderson, was arrested. When he was released on bail, he fled the country. Although his whereabouts were unknown for many years, recently he was found living in the Hamptons in New York. Extradition procedures have not started because of political issues. Anderson continues to be wanted in India for culpable homicide for his role in the Bhopal disaster.

One of the worst parts of this tragedy is actually what has happened in the years following that fateful night in 1984. Although Union Carbide has paid some restitution to the victims, the company claims they are not liable for any damages because they blame a saboteur for the disaster and claim that the factory was in good working order before the gas leak. The victims of the Bhopal gas leak have received very little money. Many of the victims continue to live in ill health and are unable to work.

(Continued on back page.)

We'd like your input....

Have you had success with awareness campaigns?

Do you have a best practice to share with citizen preparedness?

Did you learn lessons from a recent exercise?

Have you been successful with a mitigation project?

Is there a story you'd like to share with Colorado's emergency management community?

This newsletter isn't possible without the stories you share with us.

Please send any articles or story ideas to: polly.white@state.co.us

Another Trivia Quiz

This disaster occurred in the last century and was a natural disaster. It resulted in the suffocation of 1,700 people and 3,500 livestock. It did not occur in the United States. It was a rare occurrance and some headway has been made on mitigation efforts.

If you'd like to take a shot a guessing what this disaster was, you must name all of the following correctly:

The **type** of disaster.
The **location** of the disaster.
The **year** the disaster occurred.

Email your answer to Polly White (polly.white@state. co.us) no later than **April 18, 2008**. Three prizes will be awarded for the first three correct answers. Winners will be notified via email.

CDEM Web Address: http://dola.colorado.gov/dem/

Colorado Department of Local Affairs Division of Emergency Management 9195 East Mineral Avenue, Ste. 200 Centennial, Colorado 80112

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