



# Haz Mat Release

THE OFFICIAL NEWSLETTER OF THE LOS ANGELES COUNTY  
FIRE DEPARTMENT HEALTH HAZARDOUS MATERIALS DIVISION



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## It's All About Team Work

By Jojo Comandante

The second annual Health Hazardous Materials Division (HHMD) drill was held on May 17, 18 and 19, 2011. It started with eight modules of classroom lectures and hands-on training that included hazard categorization, health and safety, sampling, recognition of IED's (improvised explosive devices), radiation, biological hazards and analysis, personal protective gear, and radio communications. It was an improvement from last year because the classroom training was extended to two days.

The third day was what everyone was excited about. Four different scenarios awaited the participants. This year, the proctors made the scenarios more challenging. Level B protective gear was required on at least one of the scenarios and a "dummy" and special effects were utilized to simulate the different scenarios. The objective was for the attendees to apply what they learned from the previous two days, including situational awareness, chemistry, and radiation. Four teams were formed, given different colored T-shirts (white, blue, tan and gray), and rotated on four scenarios. Each team simultaneously tackled one scenario



HHMD technical staff collaborating as a team towards achieving a common goal

after another and the team members rotated on the different responsibilities for an overall well-rounded training. Proctors graded the teams on how they resolved each case-scenario. At the end of the drill, the White Team got the least number of deductions during the exercises. Its members consisted of Kim Clark, Fernando Florez, James Ly, Jim McCarron, Bob Nasser, Alex Ng, Zenaida Songco, Gevork Terastvadsadrian, Stan Uyehara, John Vincent and Bruce Wojcik. The classroom and drill exercises had the added value of providing attendees with REHS continuing education credits and meeting HAZWOPER 8-hour annual refresher requirements.

Special thanks are due to our guests Mike Digby and Sergeant Mike Costleigh from the Sheriff's Bomb Squad; Joel Swanson, Jeremiah Gruidi, Travis Finch and Erin Frago from the Department of Energy; and Battalion Chief Mike Flocks of the Del Valle Training Facility for making this year's drill a success. The group wishes to express its gratitude to Deirdre Williams who provided the attendees, proctors and guests with drill T-shirts and to Jonathan, Susan, Dorothy, Bevie and Fia serving as the "Food Brigade."



In hot pursuit of the radioactive material.



The Proctors ensured that safety and protocols were followed.



The proud team with the bragging right for being the best.

### OUR MISSION

**"To protect public health and the environment from accidental releases and improper handling, storage, transportation and disposal of hazardous materials and waste."**

## DAMAGE INSPECTIONS TRAINING

By William Westcott

Members of the Health Hazardous Materials Division's (HHMD) Damage Inspections (DINS) Committee, including acting Special Operation manager Bill Westcott and Supervising Haz Mat Specialists Mario Tresieras, Fernando Florez and Karen Coddling, recently conducted the fourth annual training course for new and active DINS team members. This training is based on the curriculum of Firescope's Damage Inspections Technical Specialist Class. Firescope is a consortium of California firefighting agencies that provides recommendations and technical assistance to the California Emergency Management Agency. The training is required for all eligible HHMD technical staff who participate in DINS assignments.

Training was held on July 26, 2011 at Los Angeles County Fire Department Camp 2, and attended by 38 Haz Mat Specialists. Participants studied the Incident Command System (ICS) and DINS activation and deployment procedures. Instructions on the use of GPS instruments and handheld radios was conducted by Firefighter Specialist Jerry McClelland, an ICS Situational Unit Leader. Safety requirements and procedures, including the use of appropriate personal protective equipment, and completion of the damage inspection report form were reviewed. The use



of a new database for collecting and tabulating information from DINS inspection reports was demonstrated by HazMat Specialist Gevork Terastvadsadrian, who developed the program.

The training concluded with course participants demonstrating what they had learned by going through the DINS scenarios and transferring gathered information into the new database. All course participants passed the drill and expressed their optimism that the refresher trainings will give them the confidence and the ability to carry out their duties when the call for mobilization comes.

## NEW CELL SITE REPORTING REQUIREMENTS

By James Ly

In the Los Angeles County (LAC), there are about 2189 cell sites that are regulated by the this Department's Certified Unified Program Agency (CUPA). These sites have banks of batteries which provide backup power in the event of a sudden loss of electrical power. This contingency assures a continuous flow of services to the public consumers during electrical outages. Usually there are 16-24 batteries inside of a cell site building.

Throughout California, the CUPA Forum Board's Hazardous Materials Business Plan Technical Advisory Group (TAG) has developed a different reporting requirements for batteries at these sites. In LA County, the total weight of the batteries is used to determine if the cell sites must submit a business plan. Other jurisdictions have based reporting requirements on the total volume of liquid chemicals or the weight of the lead in the batteries.

The lack of consensus throughout the State necessitated the development of a standard for consistency of regulatory implementation. AT&T and several corporations requested the California Environmental Protection Agency (Cal/EPA) assistance in developing a statewide reporting standard for lead acid batteries. The Hazardous Materials TAG, composed local CUPA representatives, the CUPA Forum Board, Cal/EPA, California Emergency Management Agency and several private corporations, were tasked with developing the standard.



Photo courtesy of <http://www.imexbb.com>

The TAG decided to recommend the quantity of the electrolyte, the component of the battery which presents the primary immediate hazard to emergency responders, as the standard to determine if the batteries have exceeded the reporting threshold (e.g., lead acid batteries become reportable when the aggregate amount of electrolyte reaches 55 gallons). The percentage by weight of soluble lead compounds in battery electrolyte is negligible that only sulfuric acid's weight in gallons is calculated. This new standard will cause the majority of the cell sites currently permitted in Los Angeles County to fall below the reporting threshold.

This guidance however, will help the reporting of lead acid batteries consistent statewide and would streamline the electronic reporting of this chemical as the implementation of the California Environmental Reporting System gets closer to January 1, 2013.



## BILL'S CORNER

We are now in a new and exciting time!

Every day we are bombarded with news and information that creates negativity and pessimism. In today's complex

world, there is so much going on and there is also a multitude of information sources hitting us from all sides. One moment you are minding your own business trying to get through the day, and the next moment, the world seems to be crashing around you. New assignments, new directions, a misspoken word, changes that do not occur fast enough, orders that go unfulfilled for months, difficulties with co-workers or bosses – all can easily and quickly change your mood and outlook.

From a Department perspective, and looking at similar agencies like our own, governing bodies and decision makers are looking at fire departments and asking whether what we provide can be done differently and cheaper. Do we need to have certain types of employees doing what they have always been doing, or are there others that could do the same job at a lower cost? The answers might surprise you, and in fact certain cities and counties have already made bold moves to reduce costs through the elimination, shifting or reprioritization of responsibilities.

Amid all the negative reports, there is always an optimistic side. There is a desire by many to stay on track, look at the positive side of things, fix what they can, and move on beyond the things they cannot influence or change. Indeed in these difficult times, there are often opportunities for personal and institutional reviews that could ultimately lead to improvements. In this Department, with our new Fire Chief Daryl Osby, there is an important effort moving forward to plan strategically and to map out our future instead of "waiting for it to happen". Certainly, this is a bold and new approach in an agency that prides itself with being the best at "fighting fires" when they occur. In the Health Hazardous Materials Division (HHMD), I have always believed that our "ship" requires a rudder and a sense of where it is headed with a vision of the end game and how to get there. With our own strategic plan, many of the same processes and intentions are displayed in the final product, but what is most important, just like in golf or baseball, is follow through. We all need to see the final result, or perhaps even the smaller successes along the way. I believe that our current Chief has every intention and is equally as excited about not only finalizing a worthy strategic plan, but in following through to ensure things get done and happen.

So how does that affect HHMD and all that we do? In some

cases, the strategies and ultimate products of our collective efforts will have no bearing on us. In other cases, we need to find the nexus to not only improve the services that we all provide as part of our collective mission, but also find the way to share that responsibility with all our colleagues and personnel throughout the Department. The ultimate goal is to impart a message to our stakeholders that this Department is *their* Department, and that everything we do furthers the notion that we are what they need and want.

In HHMD, we may be called upon to distribute information or assist in certain efforts that might lie outside our normal assigned responsibilities. When we conduct an inspection, can we inform or distribute information on other services that this Department offers? This can be done with pamphlets or directing them to our website. There are other programs, ideas, or information that we can disseminate through our website via short video clips, shorter verbiage, information links or photographs. We can and should participate in other educational opportunities for the public such as first aid, disaster preparation, pool chemical safety, or household hazardous waste. We need collaborative efforts from each other to achieve our goals.

As the Department's strategic plan is finalized and components and individual objectives laid out, it will be easy for some to suggest that all this additional work cannot be done with the resources currently available. I would submit that we cannot afford not to take on this challenge and to move forward aggressively to plan and prioritize our own collective future. In developing the strategic plan, the Chief has recognized the importance of all players and contributions throughout the Department and has invited comments from all quarters. In recent months, chief officers have met to discuss different elements of the strategic plan and how everyone can contribute. I am excited! This is both positive and important for the future of our Fire Department. Get involved where you can and feel good about the direction we are headed! We are "the Department", both as individuals and as the HHMD and are a valuable member of the team. Find ways to make it happen for you and I think your outlook and lives will be much fuller, enriching and satisfying!

*"We must accept finite disappointment, but we must never lose infinite hope."*  
-Martin Luther King

### DID YOU KNOW?

The "Hazmat City" in Del Valle Training Center in Castaic will have a state of the art props and equipment in August 2011. It is funded by Homeland Security grants. It will provide our personnel and other first responders with realistic HazMat Technician training based on consequence driven scenarios that were developed by Fire Captain Randy Alva and his group of experts. "Hazmat City" awaits everyone who wants to take the challenge.

The Health Hazardous Materials Division (HHMD) reached an enforcement milestone with its 200<sup>th</sup> Administrative Enforcement Order (AEO) filed this month of August 2011. The number of enforcement cases have increased due to efforts to streamline the AEO filing and submittal process, along with a stronger stance on enforcement. The following cases settled this past fiscal year:

- ◆ **A 2 Z Plating** in Los Angeles was fined for the unauthorized treatment of hazardous waste. *Case submitted by S. Uyehara.*
- ◆ **WinMEMS Technologies, Inc.** settled for failure to prevent the release of hazardous waste from mixing incompatibles. *Case submitted by J. McCarron.*
- ◆ **Conoco Phillips** in Wilmington settled for failure to maintain a facility to prevent a release, illegal disposal of waste to the ground, failure to certify the treatment system, tanks, and secondary containment, and failure to maintain a waste analysis plan. *Case submitted by R. Garcia.*
- ◆ **Stork Garwood Laboratories** was fined for failure to maintain a facility to prevent a release, and failure to properly label and close hazardous waste containers. *Case submitted by J. Ly.*
- ◆ **Mega Steel & Tube** in Gardena settled for failing to prevent the release of cooling oil and water into the storm channel. *Case submitted by J. McCarron.*
- ◆ **Los Angeles Galvanizing** settled for failure to prevent the release of acid into the storm channel. *Case submitted by P. Biren.*
- ◆ **United Pumping** was fined for disposing of hazardous waste to the ground. *Case submitted by J. McCarron.*
- ◆ **General Industrial Repair** in Commerce was fined for failure to properly label and keep hazardous waste containers closed, and exceeding accumulation storage periods. *Case submitted by T. Zehdar.*
- ◆ **Coast Plating Holding, Inc.** in Gardena settled for failure to properly label and keep hazardous waste containers closed, improper disposal of hazardous waste and not meeting tank standards. *Case submitted by M. Mekasha.*
- ◆ **Al's Plating Co, Inc.** was fined for failure to maintain and prevent a release of hazardous waste, failure to properly label and keep hazardous waste containers closed, and not meeting tank standards. *Case submitted by M. Mekasha and E. Gebresilasie.*
- ◆ **Reuland Electric, Inc** settled for improper disposal of hazardous waste. *Case submitted by E. Bald.*
- ◆ **General Testing & Inspection** in Cudahy was fined for failure to implement the Contingency Plan, improper employee training, and failure to report a release to the local agency. *Case submitted by M. Whitehead.*



- ◆ **Pep Boys** settled for failure to prevent the release of waste oil into the street. *Case submitted by J. McCarron.*
- ◆ **Gladstone Finishing, Inc.** in Sylmar settled for failing to meet tank integrity standards. *Case submitted by G. Caballero.*
- ◆ **Real Plating 2** in Pomona was fined for failure to obtain a valid EPA ID number, improperly labeled containers, unauthorized treatment, improper employee training, failure to prevent a release and failure to submit an updated Business Plan. *Case submitted by M. Molina and Z. Songco.*
- ◆ **DC Logistics, Inc.** in Industry settled for failure to dispose of hazardous waste within 180 days of accumulation. *Case submitted by E. Bald.*
- ◆ **Cal Chem Corp** was fined for the improper storage of incompatible waste that resulted in an exothermic reaction. *Case submitted by B. Nasseri.*
- ◆ **PXP Company** in Montebello settled for failure to maintain and prevent a release of crude oil into the storm channel. *Case submitted by J. McCarron.*
- ◆ **Bowman Plating Co, Inc** settled for failure to maintain and prevent a release, failure to provide a Phase I and a Closure Cost Estimate, failure to provide a tank certification and improper disposal of paint. *Case submitted by M. Ordenez.*
- ◆ **BG Auto Body** in Los Angeles was fined for failure to maintain and prevent a release of hazardous waste. *Submitted by G. To.*
- ◆ **Sears Auto Center** settled for the improper disposal of waste oil unto the ground. *Case submitted by A. Mico.*
- ◆ **Automotive Baja** in South Gate was fined for failure to recertify the annual chemical inventory. *Case submitted by C. Ogunnaya.*

**Total Fine and Penalties= \$233,250.00**



## Winning The Battle Against Cancer

By Dan Zenarosa

In 2011, about 571,950 Americans and more than 7 million humans around the world are expected to die of cancer. In the same year, about 1,596,670 new cancer cases will be diagnosed in the United States. Cancer is the second most common cause of death in the US, exceeded only by heart disease. Cancer as a nineteenth-century surgeon once wrote truly emerges as “the emperor of all maladies, the king of terrors”.

The American Cancer Society statistics show that one in three women and one in two men will develop cancer during their lifetime. This predicts that most people are going to be a victim or a loved one of a victim. If this is the future, what can we do now? In order to defeat cancer, we have to know what we are against with. As a military strategist once said, “Know your enemy and know yourself and you can fight a hundred battles without any danger of defeat.”

As of 2007, the International Agency for Research on Cancer has identified 415 known suspected carcinogens. The term “carcinogen” is most often associated with substances that are toxic to our genes which initiate the process of carcinogenesis by causing a mutation in our genetic materials (DNA). Other chemicals do not act directly with DNA but nonetheless damage proteins and nucleic acids which induce cell proliferation in target tissues and can lead to carcinogenesis and cell death.

In 2006, a cancer mortality study was conducted by the University of California (Berkeley) School of Public Health on 3992 firefighters in State of California. The study suggested that firefighters may be at risk for, among others, brain, bladder and colorectal cancers, leukemia, non-Hodgkin lymphoma, leukemia, multiple myeloma, and skin melanoma. Another study in November 2006 by researchers at the University of Cincinnati (UC) on 110,000 firefighters revealed that firefighters have a 100 percent higher risk of developing testicular cancer, a 50 percent higher risk for multiple myeloma and non-Hodgkin's lymphoma and 26 percent increased risk for prostate cancer. Their analysis showed that these firefighters are exposed to many compounds designated as carcinogens by the International Agency for Research on Cancer (IARC)—including benzene, diesel engine exhaust, chloroform, soot, styrene and formaldehyde. These substances can be inhaled or absorbed through the skin and occur both at the scene of a fire and in the firehouse where idling diesel fire trucks produce diesel exhaust. The researchers believe that there's a direct correlation between the chemical exposures firefighters experience on the job and their increased risk for cancer. These findings helped trigger the International Agency for Research on Cancer to review the risk of firefighting and classify the profession as an



occupation with "potential cancer risk." The UC research team recommended the increase use of breathing apparatus in toxic, hazardous environments and reducing exposure to skin contaminants, such as soot, by showering thoroughly after fires and by decontamination of turnout gear after incidents.

A review of chemical exposures reports of hazmat inspectors from the Health Hazardous Materials Division's (HHMD) from 2002 to 2010 shows a total of 60 chemical exposures encountered during their regular work inspections and investigations of facilities with hazardous materials and hazardous wastes. Various chemicals and carcinogens such as benzene, methane, formaldehyde, carbon tetrachloride, toluene, xylene, styrene, chlorine gas, ammonia, acetone, methyl ethyl ketone, among others were identified in the exposure reports.

While there's no absolute way firefighter or hazmat inspectors could insulate themselves from chemical exposures, there are basic prevention and detection measures that can be taken to minimize their risks. These include:

- ◆ Taking the annual wellness fitness or medical check-up.
- ◆ Maintaining a balanced, healthy diet, regular exercise and reducing stress.
- ◆ Arming themselves with knowledge especially on cancer awareness and risk prevention.
- ◆ Paying close attention to any changes in their body through self-examination procedures.
- ◆ Seeing a doctor if one notices anything unusual and getting a medical screening or test for early detection.
- ◆ Using personal protective equipments especially SCBA whenever operating in a hazardous environment.
- ◆ Following the Department's guidelines on the use of Personal Protective Equipment and the Injury and Illness Prevention Program.

Cancer causation is extraordinarily complex. It is caused by a web of multiple interacting factors. The fact that only 5-10% of all cancer cases are due to genetic defects and that the remaining 90-95 % are due to environment and lifestyle provides major opportunities for preventing cancer. A typical example is the drop in male lung cancer cases from the reduction in tobacco smoking or the drop in bladder cancer among dye workers from the elimination of exposure to specific aromatic amines.

These are simple changes that we can make to reduce our risk of cancer. If we limit our exposure to avoidable environmental and occupational carcinogens in combination with observing a balanced diet and a healthy lifestyle, cancer deaths can be avoided. Life is too precious to lose to an enemy that can be beaten if only we act on what we know now.

*For other prevention measures, visit the American Cancer Society website at <http://www.cancer.org/Research/ctsFigures/CancerPreventionEarlyDetectionFactsFigures/index>*

## Buried Secrets: The Pierce College Incident

By Jojo Comandante

**H**ave you ever stored an item in your garage or closet and forgotten about it, putting more and more stuff over it until the item was buried underneath? Years go by and the buried item is totally forgotten. Pierce College in Woodland Hills did just that.

On May 6, 2011, construction workers doing a renovation project for Pierce College discovered an underground vault in the old Chemistry 800 building. The vault measured two feet square and around three feet deep. One worker saw what he thought was a conduit or piping and picked it up. It was an old vial containing an unfamiliar substance. When he saw the radioactive symbol, he called for help. This triggered an all-out response from local agencies.

Los Angeles City Fire Dept. (LAFD) responded with HazMat Squads 4 and 87. LAPD and Los Angeles County Sheriff's Department (LACSD) HazMat Units also responded because the incident involved a potential crime. The Department of Public Health was also there with Jeff Day, acting head of the Radiation Management Unit (RMU) taking the lead in identifying the unknown radioactive materials. LAFD did the initial entry in level B protective gear. (Note: Level A is for corrosive vapors, not radioactive chemicals). Mr Day identified the chemicals as low level radioactive thorium nitrate (liquid), uranium oxide (solid), and radium-226 (solid). He then turned over the incident to Health HazMat for clean up. Exposed workers were examined and counseled on scene. They were held in a secure area until cleared by RMU that their exposure was not dangerous.

The thorium nitrate vial was not completely sealed and leaked onto the concrete. This complicated the clean up because the concrete needed to be chipped off to remove the contamination. Superfine absorbent was not enough. Health HazMat (HHMD) had to delay the clean up for the next day

## The Hidden Danger of Old First Aid Kit

By Nancy Parson

**H**ealth Hazmat and the Sheriff Bomb Squad recently learned about a little-known potentially deadly danger that some of us may have in our homes, sheds and garages: old first aid kits.

In the early twentieth century, through World War II, it was common for gauze bandages in first aid kits to be soaked in a one percent aqueous picric acid solution. The pads, which were packed into many commercial first aid kits, were intended to be used mostly to treat burns. In fact many of the victims of the Hindenburg disaster were treated with picric-soaked bandages. However, as the pads age, the picric acid dries out and crystallizes into an unstable, shock sensitive compound with a distinctive yellow residue.

On June 24, 2011, a Torrance resident was cleaning out her house when she discovered some medical 3 x 4 inch gauze pads labeled *Picric Acid*. She did a little internet research and found that like other highly nitrated compound, picric acid is an explosive. She put the box of pads out in the garage and



because the clean up contractor needed some tools to break up the concrete (pick axe, chisel, sledgehammer and crow bar) and the home improvement stores were already closed for the night. The process was meticulous and tedious. HHMD set the clean up standard of  $\leq 100$  counts per minute (cpm) over background on the surface, and  $\leq 200$  cpm over background inside the vault. To monitor the radiation levels, HHMD radiation meters were used. The concrete was covered with chemical duct tape and was pounded to pieces. This method prevented the concrete dust pieces from flying out and spreading. After a few rounds, the radiation level was checked. If it was above threshold, the pounding was repeated. HHMD stopped the process when the levels went down to 60 and 120 cpm on the surface and inside the vault, respectively. Altogether, HHMD worked nine hours on May 6<sup>th</sup> and five hours on May 7<sup>th</sup> to mitigate the incident completely.

One college official speculated that back in the 1960's, when there were fewer regulations on hazardous materials/wastes, some professor may have kept the radioactive chemicals in the vault for possible future use and forgot about them, leaving his successors uninformed. Had somebody been aware of that vault, the response to the incident could have been on a much smaller scale. One may wonder. Los Angeles has a slew of schools, colleges and universities. Do any of them have buried secrets?



called 911. When Health Hazmat arrived, Torrance Fire and Los Angeles County Sheriff bomb squad had come up with two options to dispose of the dried picric acid: either burn it (and leave a hazardous waste residue) or blow it up. Health Hazmat advised the bomb squad to detonate.

Torrance PD evacuated nearby residents. The bomb squad wrapped approximately four ounces of C3 explosive around the pads in a burrito fashion and detonated it in the backyard of the residence. The lesson learned is to be wary of old first aid kit where gauzes or bandages may have crystallized picric acid which could explode if not properly handled.

## Measuring the Risks of Cal ARP Facilities

By Mike Whitehead

**A**mong the responsibilities of the department's California Accidental Release Prevention (CalARP) Unit of the Health Hazardous Materials Division (HHMD), is to measure the threat of exposure or contamination of certain chemicals to the public and environment. This assessment, known as a risk determination inspection, is conducted at facilities that handle a particular class of hazardous materials, called regulated substances (RS), which have threshold quantities listed in Title 19 of the California Code of Regulations.

From this inspection, staff derive a quantitative risk ranking value of the facility's CalARP program based on the following conditions: the characteristics of the RS, condition of the process equipment, use of engineering controls to contain uncontrolled releases of regulated substances at secure location at the facility, implementation of administrative procedures to maintain the CalARP processes in good condition, qualifications of operators assigned to the processes and the proximity of public and environmental receptors.

CalARP uses this inspection at qualifying facilities that have not submitted a Risk Management Plan (RMP). Referring to the results of this inspection, CalARP coordinates with the owner or operator of the facility to determine the level and type of accidental prevention program for its RMP.

A business owner may be challenged in making a determination whether he or she is required to develop an RMP due to the difference between federal and state regulations on RS threshold quantities. California businesses are mandated to follow State RS standards (Table 3 in Title 19 CCR), which are stricter than those of the Federal government. If the quantity exceeds the CCR threshold quantity, then the facility must follow CalARP Program regulations under the State statute.

The implementation of a risk determination inspection is not standard among all of the unified program agencies (UPA). As a result, CalARP developed a report with important items to review:

- ◆ A comparison between the amount of a regulated substance at the facility and the threshold quantity on Table 3.
- ◆ A classification of the regulated substance into a type of reaction, such as chemical reaction, flammable or explosive reaction, or exothermic reaction.
- ◆ An assessment of physical traits such as the upper limits of temperature and pressure of the regulated substance.
- ◆ An observation of whether or not there are ignition sources and incompatible hazardous materials stored next to the regulated substance.
- ◆ A description of the type of piping, such as lined, non-metallic pipe, or stainless steel pipe, that is used to transfer regulated substance from the component of one process to a different



component of the process.

- ◆ An evaluation of the equipment condition used in the CalARP process such as age, the presence of corrosion or other signs of deterioration, and the use of alarms.
- ◆ An evaluation of records of inspection, reports of preventive maintenance, history of accidents or close calls, training reports on the operations of the process, and an emergency response plan.
- ◆ An observation of management support for the provisions of safety, training, meetings, operating procedures, and qualified staff for the process.
- ◆ The locations of public receptors such as schools, hospitals, long-term care facilities, and environmental receptors such as parks, recreation areas, animal habitations, and monuments.

In order to achieve objectivity, CalARP developed a worksheet to determine the risk of a release of RS. That is, numerical values are assigned to the risk factors, such as the type and quantity of the RS, the equipment condition, the quality of documentation and record keeping, the degree of management support, and the plot of public receptors and environmental receptors that exist within the zone between the process and the toxic endpoint, a boundary that identifies the part of the population that would suffer adverse effects from a RS release.

Software programs ALOHA, RMP Comp, Landview, and Marplot are used to generate graphs and reports of offsite zones of toxic exposure to RS in order to determine the risk to public and environmental receptors.

Risk determination substantiates the RMP requirement, and is also State requirement imposed upon UPA. Most importantly, risk determination inspections serves as a reference during deliberations with owners, operators and consultants over the components required in the RMP to ensure that the facility is prepared to prevent releases and respond to unplanned releases of RS to protect the public and the environment.

## The Training Framework For Unified Program Inspectors

By Dan Zenarosa

In the State of California, there are 58 counties and 25 cities that have been approved by the Secretary of the California Environmental Protection Agency (Cal-EPA) as Unified Program Agencies (UPA). These agencies are responsible for implementing the hazardous waste and hazardous materials management regulatory program within their jurisdictions and employ about 900 staff. Training requirements are regulated under Title 27 of the California Code of Regulation, sections 15260 and 15270. However, due to the diversity of programs and resources among these agencies, training tends to be geared toward the needs of each local jurisdiction.

On May 25, 2010, Cal-EPA and the CUPA Forum Board undertook a major step in pursuing the development of a framework that would eventually standardize training for CUPA technical staff. To facilitate the development of this framework, Cal-EPA was assisted by the Center for Collaborative Policy of California State University of Sacramento. The materials and specifics of the training framework came from the UP Steering Committee which is composed of management representatives from Cal-EPA, US-Environmental Protection Agency (US-EPA), Cal-CUPA Forum Board, and State agencies (State Water Resource Control Board (SWRCB), Office of the State Fire Marshall, California Emergency Management Agency (Cal-EMA), Department of Toxic Substances Control (DTSC)) with UP responsibilities. This committee is co-chaired by Cal-EPA and the Cal-CUPA Forum Board.

The Unified Program Administrative and Advisory Group (UPAAG) exercised oversight on this project and was responsible for providing direction and guidance to the Training Steering Committee relative to the implementation of the Unified Program Technical Training Framework and Improvement Strategies. UPAAG is jointly chaired by the Cal-EPA assistant Secretary for Local Programs and the Cal-CUPA Forum Board Chair. In addition, the UPAAG membership consists of representatives from the Cal-CUPA Forum Board, Cal-EMA, Office of the State Fire Marshal, SWRCB, DTSC, and the US-EPA. UPAAG was also responsible for the final approval of the work plans of the Steering Committee and together with the Training Steering Committee constituted the Training Task Group (TTG).

The kickoff meeting for the TTG occurred on September 2, 2010, and was followed by monthly meetings until a final draft was completed in January 2011. This draft was presented to the management group at the 2011 CUPA Conference in Orange County for review. The reviewed framework was finalized and completed in March 2011 and will be the starting point for the second phase.

The training framework is a voluntary program to assist Unified Program Agencies (UPA) with staff development and training. It provides a tool for managers, supervisors and staff to determine appropriate training based on their jurisdiction's program and individual career paths. The training matrices are streamlined to reflect the nationally accepted framework



making the knowledge and skills learned transferable to any part of the State. New and established inspectors will receive training consistent throughout the State, i.e., those trained by the Los Angeles County CUPA will be recognized and accepted by Santa Clara County CUPA without a need to put them through a complete academy. The inspector's job then would have portability and recognition throughout the State. For staff preparing to move to another level or future job duties, they may enroll in courses at intermediate or advanced training level until all required courses for the higher level position are completed.

The training is categorized as basic, intermediate, and advanced in each matrix. Topics appropriate for each category are listed and described as State or federal requirements or recommended for developing and maintaining UPA staff proficiency. By following this framework, the career growth and pathway for advancement is laid down for everyone to follow.

When this training framework is implemented, an electronic tracking system similar to the CUPA Forum Conference Management System will be developed to document staff training for easy access and verification. This tracking system will hopefully be developed and managed by the CUPA Forum Board

As a whole, the development of the Unified Program Technical Training Framework and Improvement Strategies will be a much needed boost to meet the future needs of the CUPAs and PAs as they ensure consistency and excellence in the implementation of its regulatory program.

### DID YOU KNOW?

On May 25, 1982, the Los Angeles County Board of Supervisors authorized the implementation of a Hazardous Waste Control Program by the Department of Health Services. The purpose of the program was to control the improper handling, storage, and disposal of hazardous waste in commercial and industrial activity. This program was transferred to the Fire Department on July 1, 1991 and later became known as the Health Hazardous Materials Division.

## Confused by Soil Screening Levels

By Richard Clark

**I**n the realm of site mitigation, which involves the environmental assessment and remediation of contaminated properties, many people are confused by the purpose of contaminant screening levels. Let's propose, for example, that the soil at an industrial site in Los Angeles is contaminated with 24,000 parts per million (ppm) zinc. Is this an environmental concern? Or, more pointedly, is this concentration of zinc a health risk to people, and is there a quick reference list of chemical concentrations one can use to screen such risks? As it turns out, there are several lists of screening levels available from numerous government agencies. For our scenario, an appropriate list would be California Human Health Screening Levels (CHHSLs) *for soil*. I emphasized "for soil" because some people presume that "human health screening" refers to medical examinations, not soil evaluations. So, people can actually be confused by the titles of screening level lists. "Why not call them soil screening levels?" they ask. Well, some agencies do call them that.

CHHSLs for soil include hazardous chemicals that the California Environmental Protection Agency (Cal/EPA) considers to be below thresholds of concern for risks to human health. They were developed using standard exposure assumptions and chemical toxicity values published by the United States Environmental Protection Agency and Cal/EPA. CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, the presence of a chemical in soil at concentrations below the corresponding CHHSLs can be assumed to not pose a significant health risk to people who may live (residential CHHSLs) or work (commercial/industrial CHHSLs) at the site.

Once you know what CHHSLs apply to, you can begin to screen soil contaminant levels. The residential CHHSL for zinc is 23,000 ppm, which means the concentration of zinc in our scenario soil exceeds the CHHSL by 1,000 ppm. So, does this mean the soil must be cleaned-up, and if known, can the person who contaminated the site be sued by the property owner? Well, the answer is most likely "no" for both questions. CHHSLs are for guidance purposes only. They are not regulatory cleanup levels. In addition, they are not intended, nor can they be relied upon, to create any rights enforceable by any party in litigation in the State of California. CHHSLs serve as "red flags". The presence of a chemical at



concentrations in excess of a CHHSL does not indicate that adverse impacts to human health are occurring or will occur but suggests that further evaluation of potential human health concerns is warranted. It is up to the regulatory oversight agency to manage human health risks at contaminated sites. In our scenario, the zinc contamination does exceed the residential CHHSL, but it does not exceed the commercial/industrial zinc CHHSL of 100,000 ppm. Therefore, since the property is an industrial site, it can be assumed that the zinc in the soil does not pose a significant health risk to people that work there as long as there are no other contaminants present to contribute to additive/increased health risks.

One last word of caution, CHHSLs pertain to human health; whereas, hazardous waste levels pertain to both human health and the environment (e.g., ecotoxicity). Waste soil with a zinc concentration of 5,000 ppm is a California hazardous waste, which is much less than the zinc residential and commercial/industrial CHHSLs. Meaning, if someone dug up some of our scenario soil and threw it in the trash, they could be guilty of illegal disposal of hazardous waste. This demonstrates the differences between human health risk management and hazardous waste management.

### DID YOU KNOW?

**T**he Site Mitigation Unit of our Division was formed in 1985, three years after the Hazardous Waste Control Program was created under the Department of Health Services and its first supervisor was no other than Bill Jones, who is the current Chief of our Division.

## The 14th Annual California Unified Program Agency (CUPA) Conference

agency San Francisco Airport, Burlingame, San Francisco on February 6-9, 2012. This will be a great opportunity again to learn more about our profession, update our knowledge and network with the experts in the field of hazmat, health and the environment. Twelve concurrent tracks are offered over four continuous days. See and meet the new CalEPA Secretary and other leaders in the profession. For further details, check out [www.calcupa.net](http://www.calcupa.net). The cut off date to apply for scholarship is October 31, 2011.

Check the conference page on [calcupa.org](http://calcupa.org) for more information about the 2012 Conference.

**T**he next CUPA conference will be held at Hyatt Re-



## The Making Of The HHMD Video

By Mario Tresieras

The Health Hazardous Materials Division (HHMD) has completed a five minute video overview on its missions, responsibilities and objectives, and guidelines on securing a Unified Program permit. The video has been posted on the internet in to guide all qualifying businesses to obtain appropriate permits related to the handling, storage and disposal of hazardous materials and hazardous waste. Business owners are given step by step guideline on how to determine if they need to get a permit from the Department and the consequences of not complying with regulations.

The production of the video was made possible through the cooperation of businesses that allowed their operations to be taped and the Department's Video Unit, which provided editing services.

A committee headed by Mario Tresieras, Supervising Health Hazardous Materials Specialist of the West Office, was responsible for generating the ideas and concept presented in the video. Danny Yniguez, Hazardous Materials Specialist in the Inspection Section's North Office, took the Video Unit to the field and obtained permission from the business operators to videotape some of the facilities' operations.

The final cut was completed after a number of hours of conferring with the Video Unit to determine which scenes were

appropriate for the approved script. Inspector Danny Yniguez contributed film content to the project including footage of a violent chemical reaction of sodium as it explodes in the background of a portion of the video.

The narrative portion of the video came from the soft-spoken voice of Monica Raya, the Senior Typist Clerk from the West Inspection Office in Culver City.



This video was completed on June 10, 2011, and posted to the Division's website ahead of its June 30, 2011, deadline. The web link to the video will be included in flyers to be sent to various city business license desks. Inspection staff are encouraged to provide the link to newly permitted businesses for an overview of their permit responsibilities. See the video at the following web address:

[http://www.fire.lacounty.gov/HealthHazMat/HealthHazMat\\_current\\_events.asp](http://www.fire.lacounty.gov/HealthHazMat/HealthHazMat_current_events.asp)

## LEGISLATIVE UPDATES

By Editor

**A B 408 (Wieckowski)-**  
Environment: hazardous substances and materials: hazardous waste transportation: paint recycling.

This bill would provide that emergency response expenses could be applied when negligence caused the incident if the incident necessitated an evacuation or the incident results in the spread of hazardous substances or fire beyond property where the incident originates.

This bill would allow the consolidating manifesting procedure to be used for the receipt, by a transporter, of one shipment of used oil from a generator whose identification number has been suspended, if certain requirements are met.

This bill would revise provisions to allow a location that accepts recyclable latex paint to also accept oil-based paint under the architectural paint recovery program.

This bill would require a business to adopt the plan or inventory for specified lesser or greater amounts of various classes of hazardous materials if the hazardous materials meet certain requirements. The bill would add exemptions for certain oil-filled electrical equipment and mineral oil contained within certain electrical equipment. The bill also would revise the exemption for the on-premise use or storage of propane.



Photo courtesy of Wikimedia Common

This bill would include, in the unified program, persons operating a collection location that has been established under an architectural paint stewardship plan approved by CalRecycle.

**SB 456 (Huff)-** Household hazardous waste (HHW): transportation

This bill authorizes a door-to-door HHW collection program to transport HHW to a treatment, storage and disposal facility or to a transfer facility, as specified and authorizes the use of a consolidated manifest that is used while the waste is in transit to either the HHW collection facility or to the treatment storage and disposal facility. It also requires a public agency, or its contractor, if it transports HHW to a treatment storage and disposal facility, as specified, to start a manifest when the first item is collected.

**AB 681 (Wieckowski)-** Aboveground storage tanks (AST):

This bill originally started as an omnibus cleanup bill for the aboveground storage tank statute including clarification of underground vaults, designation of the Office of the State Fire Marshal to become the lead State agency and addition of enforcement provisions consistent with other programs within the unified programs. There was strong opposition from an industry group on the lead agency status and enforcement was seen not as a consistency issue but as an issue of enhancing enforcement in troubled economic times. The final product was a bill that extended the dates to utilize and implement use of the APSA grant money to July 1, 2013 and other provisions that were removed will be revisited next year.

## HHMD Retirees

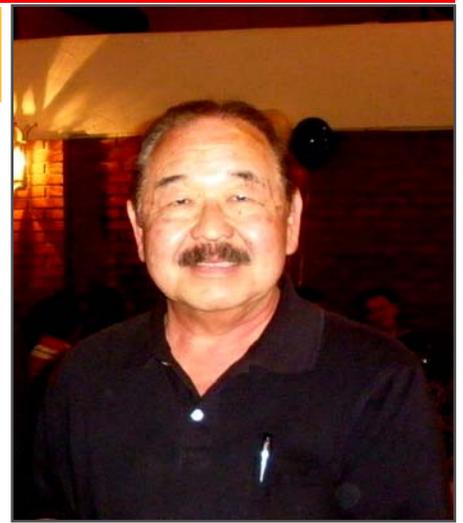
**E**iji Watanabi retired on March 30, 2011 from his position as a Supervising Hazardous Materials Specialist after 34 years of service to the citizens of Los Angeles County.

After having honorably served in the United States Army from 1967-1968, Eiji completed his Bachelors of Science Degree in Microbiology at California State University at Los Angeles, received his professional license as a Registered Environmental Health Specialist. On January 19, 1977, he began his career with the County as a Health Facilities Evaluator for the Department of Public Health, evaluating the quality of care provided by primary care clinics and acute care centers to ill or injured citizens.

In 1995, Eiji accepted the position of Hazardous Materials Specialist in the Inspection Section of the Health Hazardous Materials Division (HHMD), and he inspected businesses with hazardous materials and hazardous waste programs in the Central District office. Because of his experience and knowledge about the complexities of the Certified Unified Program Agency, Eiji earned the position of a Supervising Hazardous Materials Specialist in 2005.

Eiji's contributions to the HHMD are numerous. He demonstrated fairness during routine inspections and showed respect when he had to enforce against owners and

operators who violated hazardous materials or hazardous wastes laws or regulations. He showed patience while helping colleagues and new Hazardous Materials Specialists to determine the best way to bring owners and operators of unified program facilities into compliance with the State laws and regulations.



### DID YOU KNOW?

**W**hen HHMD officially started the inspection of hazardous waste handlers in 1982, 12 inspectors were brought on board to inspect and regulate businesses. Of the twelve original inspectors, only three remain.....can you name them? (See answers below)

1. Bill Jones 2. Walter Uff 3. Bruce Wojcik

**M**iguel E. Garcia retired after 32 years of dedicated service with the County of Los Angeles. He began his career in Los Angeles County as a health inspector routinely inspecting apartments and restaurants in the Department of Health Services, Environmental Services Division. In 1984, Miguel was transferred to the Hazardous Waste Control Program. He was a Hazwaste Program Inspector and subsequently as an inspector in our District offices. Miguel was promoted to the position of Supervising Hazmat Specialist in 1990 and became the supervisor for the Central Inspections office.

In 2001, he transferred to the Emergency Operations Section (EOS) as the East Unit supervisor. While he was in EOS, Miguel brought in many vendors and lead the evaluation of many of the instruments and materials that we now use in EOS.

In the past 15 years, Miguel taught at LA Unified School District and at Rio Hondo College. His other hobbies and interests are investing in the stock market and real estate. From his interests, Miguel's developed his second career as a real estate agent.



### RETIREMENT QUOTES

***"Don't wait for retirement to be happy and really start living. Invariably, people who try this find out that they have waited much too long." — from Life's Secret Guide to Happiness***

***"Dare to live the life you have dreamed for yourself. Go forward and make your dreams come true."***  
— ***Ralph Waldo Emerson***



## California Electronic Reporting System (CERS) Update

By George Terastvadsadrian

The Health Hazardous Materials Division (HHMD) CERS Transition Plan and Grant Application have been approved by the California Environmental Protection Agency (Cal-EPA). The

total amount for HHMD as a Certified Unified Program Agency (CUPA) is \$592,904. Twenty five percent of this amount or \$148,226 has been requested as an advance and is expected to be funded in September 2011. HHMD has applied for an additional \$60,000 as a Participating Agency to Orange County, Santa Monica, and LA City CUPAs. Cal-EPA has finally released the long awaited data exchange standard, which will allow existing data systems to exchange data with CERS.

HHMD will upgrade the existing Envision Connect system to a

newer version compatible with CERS and capable of exchanging data with CERS in the last quarter of 2011. System configuration and testing is expected to be completed by March to April of 2012 whereupon facility, owner and hazardous materials data will be uploaded from HHMD's Envision Connect database into CERS. A pilot project involving a small number of facilities will be conducted after the uploading of data. CERS itself will be upgraded to CERS version 2 in the later part of 2011. CERS 2 features the additional capabilities of an extensive chemical dictionary and an organizational level record which facilitates the management of access rights for business users within their organization.

Upon the availability of a field inspection system that will capture the greater level of violation data required by CERS, HHMD will conduct a pilot study to evaluate the feasibility, and expected impact of this type of field inspection system. The field inspection pilot testing will involve one inspector from each district office, two Technical Services Unit staff, and one Information Management Division staff. Existing field inspections software is inadequate and difficult to use. New field inspection system software is anticipated sometime in the later part of 2011 to the early part of 2012.

## New Employees



The new clerical staff in the Administration Planning Section are from upper left to right: Sarah Shaw (Senior Typist Clerk), Kimberleigh Lundwall (Senior Typist Clerk), Arlene Carlos (Student Professional Worker), Natasha Gallardo (Student Worker), Sheyla Maldonado (Student Worker), and Jonathan Moya (Student Worker).

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Bill Jones

Chief

Health Hazardous  
Materials Division

*Haz Mat Release is a collective effort to foster an exchange of information. We welcome any questions or comments.*

Dan Zenarosa

Editor

(323) 890-4026

Technical Services Unit  
5825 Rickenbacker Road  
Commerce, CA 90040