

ENVIRONMENTAL MANAGEMENT DEPARTMENT

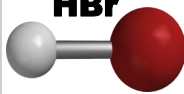
August 2016

Hazardous Chemical Release Has EMD's Incident Response Team At Aerojet

By Ryan Artz

On Tuesday, July 26, 2016 the EMD Incident Response (IR) on call representative received an Office of Emergency Services (OES) report notification regarding a leaking cylinder of hydrogen bromide at the AMPAC facility located near Hazel Avenue and Highway 50.

HBr Hydrogen bromide is a colorless, or sometimes faint yellow, highly toxic gas with a sharp, irritating odor. It is used to make chemicals and drugs, as a solvent and as a veterinary drug.



The EMD IR responder called and spoke with the AMPAC representative and the Aerojet Fire Battalion Chief who was functioning as the Incident Commander (IC). The IC stated that AMPAC and Aerojet Fire were planning to perform a Level A hazmat entry (procedures include full protective suit and air respirator, when the greatest level of skin, respiratory, and eye protection is required) to try and tighten the fuse plug valve on the cylinder as it

was leaking from the threads. This cylinder had reportedly just been delivered to the facility by a transportation company. The cylinder was located on a load-

... making this incident more difficult was the extreme local temperature which was approximately 108 degrees F.

ing dock at a chemical storage warehouse away from AMPAC's main process plant. This loading dock and warehouse had been evacuated of all employees and the leaking cylinder had been isolated.

The EMD IR representative responded to the AMPAC facility and met with the Incident Command group. The leaking cylinder in question was determined to be a 1 ton cylinder of anhydrous (without water) hydrogen bromide. Hydrogen bromide, which is a gas under high pressure, is toxic and highly corrosive. A noted external factor making this incident more difficult was

the extreme local temperature which was approximately 108 degrees F. AMPAC personnel and Aerojet Fire performed a Level A entry and were somewhat successful in stopping the cylinder leak when they tightened the leaking valve, but there was a problem noted with the threading on the valve.

After further evaluation later that evening, the valve on the cylinder appeared to be leaking again at an increased rate. AMPAC personnel and Sacramento Metro Fire Department Hazardous Materials Response Team (HMRT) 109 performed a second Level A entry and installed an emergency C Kit on the cylinder. An emergency C Kit is a metal mechanical device which isolates the valve on a cylinder head to prevent further release of the compressed material. These emergency C Kits are generally designed for use on compressed cylinders of anhydrous chlorine, another toxic and highly corrosive material. Once the entry team had installed the emergency kit on the hydrogen bromide cylin-

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der, the cylinder was carefully moved to one of AMPAC's temperature controlled locations with a large corrosive scrubber unit.

On Thursday, July 28, 2016 EMD IR personnel met with representatives from AMPAC, Aerojet Fire, and Metro Fire to discuss the next step to properly manage the damaged hydrogen bromide cylinder. It was agreed upon that AMPAC representatives would perform a level A entry to remove the emergency C Kit, install a modified bonnet cover to allow access to the main cylinder valving, and then reinstall the emergency C Kit. After

this operation was complete, the cylinder would be move to the normal facility hydrogen bromide skid where the product would safely be removed from the damaged cylinder.

At approximately 1:00 a.m. on Friday, July 29, 2016, AMPAC representatives initiated the hydrogen bromide cylinder operation as planned with Aerojet Fire and the Metro Fire HMRT standing by as backup if needed. The temporary removal of the emergency C Kit and modification of the cylinder bonnet and valving reportedly went as planned without issue. The cylinder was then carefully transported across

the facility to the hydrogen bromide cylinder skid where the material was safely off-loaded into a water tank system and turned into an aqueous solution.

On Tuesday, August 1, 2016 the EMD IR representative involved on this call met with AMPAC and Aerojet Fire staff to discuss the hydrogen bromide cylinder emergency response call. The meeting discussion focused on what went right during this call and what actions could be improved upon. An investigation into the hydrogen bromide cylinder faulty valve is currently ongoing.



Photos by Jack Bellan

Many funny and insightful things could be said about the turkeys who showed up at lunchtime at EMD....



COMPLIANT POOL AND SPA DRAIN COVERS SAVE LIVES by Tammy Derby and Jason Smalley

The Virginia Graeme Baker Pool and Spa Safety Act (VGBA) is a federal law passed in 2007 and named after Virginia Graeme Baker, a 7 year old girl who died in an accident in June 2002, when the suction from a spa drain entrapped her under the water. The law became effective in December 2008 and requires all public pools to be equipped with an approved safety drain cover to prevent suction hazards. In addition to a compliant drain cover, some pools and spas require additional devices or systems to include a safety vacuum release system (SVRS), or suction limiting vent system. The Environmental Health Division is responsible for collecting certification documents from all public pools and spas in Sacramento County, documenting the approved drain cover model, date of installation and a declaration that the cover was installed by an appropriately certified technician.

All approved covers have expiration dates. Many covers expire after 5 years; however the expiration dates range from 3-7 years depending on the manufacturer. Even if the drain cover looks ok, the plastics used in these covers are subject to water, chemical and UV exposure that can

reduce their strength. During the routine inspections of our EMD public pool inventory this season, our inspectors reviewed the documentation on file, in order to assess



compliance with the VGBA during the routine inspections. It was discovered that several pool operators have changed out their VGB covers without providing documentation to EMD. These pools were subject to immediate closure,

due to concerns that the covers in place were not approved, may not be capable of handling required flow rate, and/or may not have been installed to manufacturer's specifications and by a licensed contractor. Therefore these covers may not provide the required prevention of suction hazards. For the other pools, that haven't received VGBA cover replacements, Environmental Health inspectors informed pool operators to check their records to identify the manufacturer's expiration date, so that approved replacement covers can be installed properly, prior to next pool season.

Environmental Justice Around The World In countries where the majority of residents have no access to electricity (such as 77% of the population in Kenya) some companies have produced free standing solar power machines, eliminating the health risks associated with burning kerosene, dung and wood sources inside houses. These machines require no installation and no bank account to buy the machine. Households lease the machines and pay using their smartphones through M-pesa. These machines are scalable and sustainable.



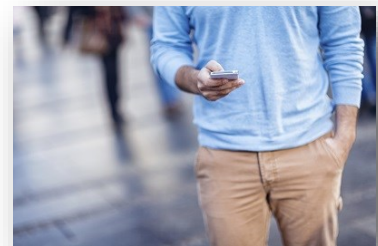
AUGUST SAFETY TIP

Take Steps to Avoid Injury or Death While Walking-Seriously!

We rarely are more vulnerable than when walking in urban areas, crossing busy streets and negotiating traffic. And we all are pedestrians from time to time, so it's important to pay attention to what is going on around us.

Cell Phone Distracted Walking

It has become such a big problem in recent years that *Injury Facts*® 2015, the statistical report on unintentional deaths and injuries published by the National Safety Council, for the first time has included statistics on cell phone distracted walking. According to *Injury Facts*, distracted walking incidents involving cell phones accounted for more than 11,100 injuries between 2000 and 2011.



Don't be this guy.

- 52% of cell phone distracted walking injuries happen at home
- 68% of those injured are women
- 54% are age 40 or younger
- Nearly 80% of the injuries were due to a fall

The Vehicle Factor

While many communities are implementing measures to become more "walkable," like adding more paths and traffic-calming measures, there still is a long way to go to keep pedestrians safe. Malls surrounded by parking lots, few sidewalks, blind intersections and high traffic areas all contribute to pedestrian fatalities and injuries.

According *Injury Facts 2015*:

- In 2013, 6,100 pedestrians were killed by motor vehicles
- That same year, about 160,000 pedestrian injuries required medical attention
- 23 percent of deaths and injuries result from pedestrians darting into the street, with the majority of those younger than age 15
- The number of pedestrian deaths has decreased significantly since the 1970s; during that decade, deaths were between 8,400 and 10,300
- During the decade from 2002 to 2013, death rates didn't change much; they hovered around 6,000, with a low of 5,300 in 2009

Head Up, Phone Down

While pedestrian-vehicle injuries are the fifth leading cause of death for children ages 5 to 19, according to SafeKids.org, no age group is immune. Here are a few tips from NHTSA and NSC for children and adults of all ages:

- Look left, right and left again before crossing the street; looking left a second time is necessary because a car can cover a lot of distance in a short amount of time
- Make eye contact with drivers of oncoming vehicles to make sure they see you
- Be aware of drivers even when you're in a crosswalk; vehicles have blind spots
- Don't wear headphones while walking
- **Never use a cell phone or other electronic device while walking**
- If your view is blocked, move to a place where you can see oncoming traffic
- Never rely on a car to stop
- Only cross at designated crosswalks
- Walk in groups

<http://www.nsc.org/learn/safety-knowledge/Pages/news-and-resources-pedestrian-safety.aspx>

By the Numbers July 2016	
	Jul-16
Food Facility Placards Issued	
A. Green – Pass	200
C. Red – Closed	8
B. Yellow – Conditional Pass	11
Inspections	
Abandoned Wells	13
Above Ground Storage Tank	0
Body Art	8
Food Protection (includes reinspections and food events)	463
Farm Labor Camps	0
Public Swimming Pools/Spas	1112
Solid Waste Facilities (landfills/transfer stations)	21
Liquid Waste	26
Medical Waste	8
Small Water Systems	3
Wells and Monitoring Wells	100
Businesses/Facilities Generating Hazardous Waste	62
Businesses/Facilities Storing Hazardous Materials	91
Underground Storage Tank Facilities	34
Underground Storage Tank Removal, Installations, Upgrades, Repairs	5
Storm Water Non Food Facility	20
Waste Tire	40
Tobacco Retailer	6
Commercial/Multi-Family Recycling	55
Refuse Vehicle Inspections/	2
Septic Tank Pumper Trucks	1
Total	2070
Investigations	
Body Art	3
Consumer Complaints	86
Food Borne Illness	14
Incident Response	44
Solid Waste	3
Storm Water	1
Waste Tire	0
Childhood Lead	0
Total	151
Class Attendance	
Food Safety Education (Food School)	104
Hazardous Materials Business Plan (HMP) Workshop	7
“How To Get A Green Placard For Food Inspection” Workshop Online Video	NA
Underground Storage Forms Workshop	5
Total	116
Plans, Permits, and Reviews	
Abandoned Wells	11
Hazardous Materials Business Plans	622
Body Art	3
Monitoring Wells/ Water Wells	134
Food Facilities	143
Public Swimming Pools/Spas	115
Underground Storage Tanks Plans and Permit Reviews	5
Land Use	20
Local Oversight Program	1
Cross Connection Permits (Blue Tags)	1762
Total	2816
Imaging	
Document Pages Imaged	13893

Hazardous Material Plan Workshops

The Environmental Management Department offered 2 Hazardous Material Plan Workshops for 7 attendees during July, 2016. EMD staff assisted each person with the process of submitting their Hazardous Waste Plans electronically, as mandated by the California Environmental Protection Agency, effective January 1, 2013.



EMD Workwear-Order Yours Today

ES Jannine Talusik shows off one of the new EMD workwear shirts, perfect for pool inspection season. Remember, you can order online 24/7.



Food Safety Education Classes July 2016

Attendees 104

Facilities Represented 24

Onsite 6
Offsite 3

Languages Represented

English 4
Spanish 1
Cantonese 2
Vietnamese 2

EC Division offered two **Underground Storage Tank (UST) Workshops** in July. During the workshops, EMD staff assisted 5 attendees with submitting UST forms electronically through the California Environmental Reporting System.

