

July 2012

Volume 1, Issue 4

NMSHMM Times

President: Vickie Maranville at vickie.maranville@amec.com

Join Us for Isotopes Night!

In This Issue:

Kirtland Jet Fuel Spill

Upcoming Events

AHMP Articles

EHMM Course

Save the date – The NMSHMM Essentials of Hazardous Materials Management (EHMM) will be held on October 15 thru 17. Visit the NMSHMM website for more info: www.nmshmm.org

AHMP Conference

The Alliance of Hazardous Materials Professionals (AHMP) National Conference in Anchorage, Alaska, will be held from September 9 thru 13. Conference and registration information can be found on the web at: http://www.ahmpnet.org/sites/conf/anchor_age2012/home.php.

It's time to make your reservations for the Annual Isotopes Night. Please mark your calendars for Friday, August 3, 2012 at Isotopes Park. The event begins at 6 PM, with a 7:05 PM game time. The Isotopes will be playing the Las Vegas 51's! This will be a joint event with the Rio Grande Chapter of the Health Physics Society.

Tickets include an all you can eat buffet dinner of hamburgers, hot dogs, pulled pork and chicken; with chips and salsa, baked beans and coleslaw; not to mention soft drinks, and cookies and brownies. The event will be held on the Fiesta Deck, which offers great views of the game from the Suite-level. If you have not attended this event in the past, please mark your calendars. This is a great opportunity to network, relax, enjoy good food, and support our local baseball team. Tickets are for sale on the NMSHMM website. Payment can be made

electronically on at www.nmshmm.org. The cost to attend is \$20 for members and \$25 for non-members. We look forward to a strong turnout.

We are also planning our first summer social event. The event is tentatively scheduled for July 19, 2012 from 5:30 to 7 PM. We will hold a brief, informational meeting to discuss the status of the chapter and upcoming social gatherings. The location is still being confirmed, so watch your email for additional details.

I would like to close with a safety moment. Summer has arrived and we are spending more time outdoors. It is important to remember to protect yourself from the sun. Sunlight contains ultraviolet (UV) radiation, which causes premature aging of the skin, wrinkles, cataracts, and skin cancer. The amount of damage from UV exposure depends on

the strength of the light, the length of exposure, and whether the skin is protected. There are no safe UV rays or safe suntans. There are several ways to protect your skin such as covering up, using sunscreen (and remember to re-apply if you outdoors for an extended period of time), wearing a hat (wide brim hat is ideal because it protects the neck, ears, eyes, forehead, nose, and scalp), wearing UV-absorbent sunglasses, and limiting exposure to the sun. Make it a point to protect your skin before setting out on your outdoor adventure or even doing yard work. Have a safe summer.

Congratulations to Sandra Martin for receiving the **AHMP 2011 Distinguished Service** recognition. This award will be presented at the AHMP 2012 National Conference in Anchorage. Sandra is NMSHMM Past President and has worked very hard organizing and promoting NMSHMM and AHMP activities.

Kirtland Jet Fuel Spill Creating Concern in Albuquerque

Albuquerque's most reported hazardous materials news event has been the Kirtland jet fuel spill. It is the story that seems to never go away. The May 23, 2012 edition of the *Air Force Times* began an article by comparing the spill to the Exxon Valdez: "A decades-old jet fuel spill threatening Albuquerque's water supply could be as large as 24 million gallons, or twice the size the oil spill from the Exxon Valdez." The article noted that the 1989 Exxon Valdez spill released 11 million gallons of crude oil into Alaska's Prince William Sound.

Since the spill is confined to groundwater, it has not attracted as much attention

as the Exxon Valdez. Nevertheless, there has been a regular flow of media reports on the groundwater contamination, and its potential to contaminate a couple of drinking water wells managed by the Albuquerque Bernalillo County Water Utility Authority (ABCWUA).

In 1999, the jet fuel spill was first discovered within Kirtland Air Force Base on the southeast edge of Albuquerque. The spill source is underground pipes at a Kirtland aircraft fuel loading facility that was constructed around 1952. The spill appeared to be confined to Kirtland Air Force Base until 2007.



The Ridgecrest neighborhood is located 500 feet above the jet fuel plume.

At that time, Air Force investigations determined that the jet fuel had impacted groundwater 500 feet underground with a plume that was moving off-base and affecting groundwater beneath Albuquerque's Ridgecrest neighborhood.

The New Mexico Environment Department (NMED) is responding under the Resource Conservation and Recovery Act's (RCRA) Correction Action Program. The spill is referred to as the "Bulk Fuels Facility Spill" and consist of Solid Waste Management Unit (SWMU) ST-106, the Former Fuel Offloading Rack, and SWMU SS-111, the Light Non-Aqueous Phase Liquid plume (LNAPL). The principal contaminant of concern is ethylene dibromide (EDB).

NMED's current focus is to install and operate soil vapor extraction systems at two wells and characterize the northern extent of the plume.

The Air Force has committed to covering the costs of remediation including drinking water according to Air Force Assistant Secretary Timothy Bridges: "If contaminants from the plume enter the drinking water and make it unsafe, the Air Force will assist the City and ABCWUA in providing safe drinking water until the situation can be remedied."

Sources: 5/23/12 and 6/20/12 *Albuquerque Journal* articles, 5/23/12 *Air Force Times* article, and information on the NMED web site at:

<http://www.nmenv.state.nm.us/HWB/kafbperm.htm#KAFBBulkFuelsFacSpill>



ABCWUA is concerned that the spill could affect drinking water wells such as this well on Zuni Road.

More info:

MAIL:
NMSHMM
P.O. Box 92132
Albuquerque, NM 87199

PHONE:
Eric Johnson
(505) 898-8848

E-MAIL:
eric@marroninc.com

We're on the Web!

See us at:
www.nmshmm.org

Upcoming NMSHMM Events

Date	Event	Location
July 17	Board Meeting	AMEC, 8519 Jefferson NE, 5:00 pm. Dinner served to all attendees.
July 19	Evening Social	To be announced, 5:30 – 8:00 pm
August 3	Isotopes Baseball	Isotopes Park, 6:00 pm, food will be served, \$20 for members and \$25 for non-members e-mail: treasurer@nmshmm.org , or pay on website: www.nmshmm.org
August 21*	Board Meeting	AMEC, 8519 Jefferson NE, 5:00 pm. Dinner served to all attendees.
Sept. 17	Board Meeting	AMEC, 8519 Jefferson NE, 5:00 pm. Dinner served to all attendees.
Sept. 19	Luncheon Meeting	Macaroni Grill, 2100 Louisiana Blvd. NE, 11:30 am – 1:00 pm, details to be announced.
Oct. 15-17	Essentials of Hazardous Materials Management (EHMM) Course	AMEC, 8519 Jefferson NE

The New Mexico Chapter of the Air & Waste Management Association holds its regular luncheon meeting the first Tuesday of every month at the Golden Corral Buffet & Grill, 10415 Central Avenue NE (@ Eubank), Albuquerque, NM 87123, Mike du Mond, e-mail: du_Mond@juno.com

* Note – There will be no NMSHMM luncheon meeting or social event in August because of the Isotopes Game on August 3rd.

About NMSHMM..

NMSHMM's mission is to provide environmental professionals in the Southwest with a forum for professional development, education

and networking opportunities; and to offer our community environmental, health, and safety expertise.

AHMP Articles of Interest

Hazard Alert Stresses Importance of Protecting Workers from Silica Exposure

AHMP Essential HazMat News - June 25, 2012

Based on a cooperative study by the National Institute for Occupational Safety and Health (NIOSH) and industry partners who identified overexposure to silica as a health hazard to workers conducting hydraulic fracturing operations, a hazard alert has been issued in conjunction with OSHA advising employers to take appropriate steps to protect workers. This action, which came after consultation with stakeholders including those in industry, meets the administration's focus on ensuring that this important resource continues to be developed safely and responsibly.

As noted in the alert, respirable silica is a hazard common to many industries and industrial processes. Since large quantities of silica sand are used during hydraulic fracturing, NIOSH began a cooperative effort in January 2010 to collect data regarding silica exposure at hydraulic fracturing operations. Working in cooperation with oil and gas industry partners to sample the air at 11 sites in five states where hydraulic fracturing operations were taking place, NIOSH identified seven primary sources of silica dust exposure during fracturing operations:

- Dust ejected from thief hatches (access ports) on top of the sand movers during refilling operations while the machines are running (hot loading).
- Dust ejected and pulsed through open side fill ports on the sand movers during refilling operations
- Dust generated by on-site vehicle traffic.
- Dust released from the transfer belt under the sand movers.
- Dust created as sand drops into, or is agitated in, the blender hopper and on transfer belts.
- Dust released from operations of transfer belts between the sand mover and the blender; and
- Dust released from the top of the end of the sand transfer belt (dragon's tail) on sand movers.

It also found that workers downwind of sand mover and blender operations, especially during hot loading, had the highest silica exposures. Transporting, moving, and refilling silica sand into and through sand movers as well as along transfer belts and into blender hoppers, can also release dust into the air containing up to 99 percent silica that workers breathe.

OSHA says that workers who breathe silica day after day are at greater risk of developing silicosis, a disease in which lung tissue reacts to trapped silica particles, causing inflammation and scarring, and reducing the lungs' ability to take in oxygen. Silica also can cause lung cancer and has been linked to other diseases, such as tuberculosis, chronic obstructive pulmonary disease, and kidney and autoimmune disease.

The alert goes on to describes how a combination of engineering controls, work practices, protective equipment and product substitution, where feasible, along with worker training, can protect workers who are exposed to silica. Engineering controls and work practices provide the best protection for workers, OSHA says.

The hazard alert can be viewed at http://www.osha.gov/dts/hazardalerts/hydraulic_frac_hazard_alert.html
<http://www.osha.gov/dts/hazardalerts/hydraulic_frac_hazard_alert.html>

Slow-reacting Refrigerant Gets Removed from EPA's list of VOCs

AHMP Essential HazMat News - June 25, 2012

On June 22, EPA released a final rule to revise the definition of volatile organic compounds (VOCs) under the Clean Air Act (CAA). The revision adds trans-1,3,3,3-tetrafluoropropene (HFO-1234ze) to the list of compounds excluded from the definition of VOC.

According to the Agency, it is removing the compound from the list because it "makes a negligible contribution to tropospheric ozone formation." As a result, the Agency says if a facility is subject to certain federal regulations limiting emissions of VOCs, its emissions of HFO-1234ze may not be regulated for some purposes. Further, EPA's action may also affect whether the compound is considered a VOC for state regulatory purposes, depending on whether the state relies on EPA's definition of VOC.

The rule will affect industries that manufacture or use refrigerants, aerosols, propellants, and blowing agents for insulating foams.

EPA cautions that the use of HFO-1234ze remains subject to other restrictions under the CAA. The use of the compound as an aerosol propellant, blowing agent, refrigerant, or any other use in which it would substitute for chlorofluorocarbons, or their substitutes, is regulated under the Significant New Alternatives Policy (SNAP) program. The SNAP program accepts HFO1234ze as an "acceptable foam and refrigerant substitute and as an aerosol propellant."

Tropospheric ozone, more commonly known as smog, is formed when VOCs and nitrogen oxides (NO_x) react in the atmosphere in the presence of sunlight. Because ozone can be harmful to human health, EPA and state governments limit the amount of VOCs that can be released into the atmosphere. Different VOCs have different levels of reactivity; they do not react to form ozone at the same speed or to the same extent. Some VOCs react slowly to form less ozone, so changes in their emissions have limited effects on local or regional ozone pollution episodes. EPA's policy has been to exclude these slow-forming compounds from the regulatory VOC definition "so as to focus VOC control efforts on compounds that do significantly increase ozone concentrations."

EPA also contends that these exemptions create an incentive for industry to use negligibly reactive compounds in place of more highly reactive ones. The Agency lists compounds that it has determined to be negligibly reactive in its regulations at 40 CFR 51.100(s).