



# FACILITY SAFETY & NEWS



**Nuclear Materials Technology Bulletin**  
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**Richard Schmude, NMT-1**  
*First Place, November Winner of the Safety Suggestion Contest*

Richard Schmude's winning safety suggestion combined several areas of concern with chemical storage and a multi-part solution for these concerns.

He noted that chemical storage areas contain unidentified chemicals, that some chemicals have been stored for several years but have a shelf life of only a few months or a

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year (this can alter the chemical properties of the chemical possibly leading to a future accident when it is used, and that many chemicals for disposal are being stored in storage areas for several months or even years thus creating potential hazards.

He suggested several ways these problems might be solved. The first would be to establish formal control over chemical storage areas. The chemical storage areas would be locked and individuals would be assigned the responsibility for the area. This would include security of the area and taking inventory. Inventories would be frequent and would include keeping track of the date the chemical was first placed into the storage area.

Richard suggested designing an identification label to be filled out for each chemical to be stored in the storage area. This would not only facilitate inventory control, but would also help to move chemicals designated for disposal out of the area and into the process for such disposal.

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**Bill Zwick**  
*Second Place Winner*

Second place was awarded to Bill Zwick for suggesting that broken glass generated outside PF-4 should be put in marked waste containers to caution janitors against getting cut.

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**Robyn Zaelke**  
*Third Place Winner*

Third place went to Robyn Zaelke for suggesting that signs on how to give first aid to choking victims be put up in the cafeterias.

December winners were chosen

**For Reference**

## Waste Minimization

by Carol Sohn

*NMT Waste Management*

*Control Officer*

*NMT-7 Group Leader*

Because we are sensitive about the short – and long – term effects of waste on our environment, we have redoubled our efforts to minimize waste of all kinds. Obviously, we are very careful about potentially radioactive waste. However, we must be equally conservative about even a single piece of paper. We at TA-55 have instituted a number of administrative and technical steps to reduce all types of waste generation.

For example, we are becoming accustomed to recycling waste paper. The ubiquitous collection boxes may be found in near every copier and in many offices.



Now, Why would you think that this office was the waste paper recycling area?

An important contribution you can make is to prevent generation of potentially hazardous and radioactive waste materials:

1. Generate only the minimum amount of waste necessary.
2. Segregate your waste categories.
3. Substitute the use of hazardous materials with non-hazardous materials.

In addition, three activities at the plant can greatly affect the amount of trash we generate daily.

**First**, did you know that a recent survey showed at least twenty newspapers and books each day were taken into PF-4? These were treated as being potentially contaminated. Consequently, they were monitored when they left PF-4. Or worse,



they were discarded inside PF-4 and treated as low-level waste. This type of waste is much more expensive to process than ordinary waste paper generated outside PF-4. For this reason, non-essential items such as newspapers and non-technical books **must be left outside**.

There are significant differences in the cost of disposal. A rough estimate would be the following:

- \$1 per drum for disposal at the county landfill
- \$700 per drum for disposal at the low-level landfill
- \$11,000 per drum for disposal at WIPP

**Second**, a problem area concerns the items that need to go into PF-4. Don't take in the packaging materials or cartons but, instead, place multiple items within bags or items that need to go into PF-4. Crafts should take into PF-4 only the minimum amount of supplies needed. This minimizes the amount of radioactive waste being generated from PF-4.

**Third**, on the technical side, we must pay special attention to mixed waste. Mixed waste is any mixture of radioactive waste and hazardous waste. This type of waste is regulated by both the Resource Conservation and Recovery Act (RCRA) and the New Mexico Hazardous Waste Management Regulations (persons who violate any of these regulations are subject to a \$10,000 fine and/or a prison sentence). Many of the chemicals and equipment we use routinely at TA-55 fall within the hazardous waste category. (See Administrative Requirements section of the Environment, Safety, and Health Manual, AR 10-3 for details in identifying different types of waste.

## To Your Good Health Preventing Frostbite

by *Jan Croasdell*  
TA-55 nurse



Protection of your hands and feet from frostbite is of utmost importance to those who work with their hands in a glove box or on a computer. Already the temperature has dropped to 9 degrees. Our first snow storm came in October. We can expect more winter weather for several months. There is nothing we can do about it, but we can learn how to protect ourselves from freezing temperatures. Here are some tips on how to stay warm and avoid chills:

**1. Dress** for your level of activity, not for the thermometer. Researchers have found that the clothes we need to keep warm while sitting quietly with the temperature at 70 degrees also will keep us warm at 40 degrees if we are walking briskly—or at 5 degrees if we are running. Consider, then, that you may be standing in line for a time. Bring along a warm head covering and gloves. Even though you may have warmed up the car for the drive to work, you still must walk some distance to the gate and wait your turn to enter. When we exercise, our muscles produce internal heat to keep us warm. If we're cold but aren't exercising to produce heat, our muscles take over and warm themselves by shivering involuntarily.

**2. Protect** your hands, feet and head. They get cold first. Army research into how to keep troops warm in the Arctic found that mittens will keep hands warmer than gloves (unless the gloves are especially designed for Arctic winters). If you're going to spend a lot of time out in the cold, a battery-operated hand or pocket warmer might be worth the investment. Keep your feet warm and dry with padded wool blend socks. A hat that covers the ears is important, and if you're going to be outside for a prolonged period of time, a face mask that protects the nose, cheekbones, and mouth will keep you warmer and make breathing of frigid air more comfortable. This is especially important if you have a cold or are recovering from bronchitis.

**3. Several layers** of clothing topped by a water-repellent jacket is better than one heavy coat.

**4. Staying dry** in cold weather is the key to staying warm and avoiding chills. Our bodies lose heat more rapidly when we're wet.

**5. We need to eat** a little more during cold weather. Since muscles must produce more heat in winter, they use up more food energy (calories). In fact, for every degree the temperature drops, we automatically take in about 15 more calories. Our bodies also crave certain foods during cold weather, particularly fat.

**6. To avoid chill** while you're asleep, always cover yourself. Even if the temperature of the room doesn't change, our internal heat production does.

**7. The best way to warm fingers, ears, and nose** numbed by subzero temperatures is warm—not hot—water. If you're with someone who has been exposed to freezing temperatures and you are worried about frostbite, give him a warm drink and wrap him in blankets or get him into a bath of warm—not hot—water. Avoid too much heat. Never use a heat lamp or a hot-water bottle. Never expose frost bitten areas to a hot stove. Severe frostbite actually destroys tissue. The skin will have white blisters in an extreme case. It is important since there may be progressive tissue deterioration.

Your best chance of escaping tissue damage from a thermal injury may lie with a new protocol that uses two traditional agents.

**Research by Dr. John P. Hegggers has shown the ancient herbal remedy known to Hippocrates, aloe vera, plus aspirin to be very beneficial.**

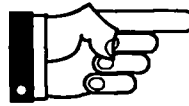
Aloe vera in "over-the-counter products" aren't suitable, says Dr. Hegggers. He adds that whether the frostbite is severe or minor, this treatment is effective as well as being effective for major and minor burns. He found that frostbite patients treated by the aloe vera-aspirin regimen are discharged sooner and cosmetically their extremities are less damaged than you would expect after other methods of treatment.

**\*DOE Order 5480.19****"Conduct of Operations****Requirements for DOE Facilities"**

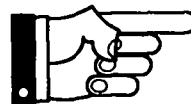
is to provide requirements and guidelines for Departmental elements to use in developing directives, plans, and/or procedures relating to the conduct of operations at DOE facilities. The implementation of these requirements and guidelines should result in improved quality and uniformity of operations.

**This Order applies to all Departmental elements and contractors performing work for the Department as provided by law and/or contract and as implemented by the appropriate contracting officer.**

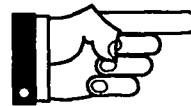
This 100 page order covers everything from policy to required reading and labels. It is to be used with the DOE 5500 series documents for guidance in operations.

**Safety Tips from the FSC Meeting**

You may get a first aid kit from VWR but you must maintain it. A poorly maintained kit could be a safety violation because someone could depend on it in case of emergency. Ordinarily, employees are expected to go to established HS areas for help. However, it could be handy to have a few bandaids for paper cuts. It would be better to put on a bandaid than to neglect it and risk infection.



Also make sure there is plenty of room behind or around your equipment to allow for repairmen.



The new TA-55 Safety Manuals are replacing the old manuals. Although exchanging the safety manuals in PF-4 was given priority, you may exchange your old safety manual for a new one by taking it to the Training office, PF-39.

## Annell Danczyk is First DOE Representative to TA-55

Annell Danczyk is the first person to be appointed by the Department of Energy, Los Alamos Area Office (DOE-LAAO) to serve as the TA-55 Facility Representative to the DOE.

She is located in PF-1, phone 665-6914. This position was created in response to the new safety culture. DOE Order 5480.19, Conduct of Operations\* provides a basis for her duties. Her duties are threefold:

- 1. To assure DOE that TA-55 is operating in an environmentally protective, healthful, and safe manner.**
- 2. To facilitate communications between DOE and TA-55.**
- 3. To help insure compliance with all other DOE regulations.**



Annell believes that a good way to establish a firm "communications bridge" between the two is to become familiar with all operations at the site so as to make knowledgeable comments and recommendations to management.

She first came to TA-55 in June 1991, but was required to spend some time away from the site to work on special assignments at LAAO. Of course, she was present and involved when the Tiger Teams were here. This was an intense time, but valuable in her own growth in knowledge of the plant and operations. Now that the Tigers are gone, she can devote more time to implementing her assigned duties.

When asked about her first impressions of TA-55, she said, "I am impressed with the cleanliness of the plant. People seem to care about their jobs and are excited about them. Most seem happy to be here. This is a unique and refreshing attitude!"

She added that she really appreciated the helpful kindness of people, especially in PF-4, in explaining the protocols of being in the plant. She noted their respect for safety rules and how good people were in helping her become accustomed to monitoring.

As for Los Alamos, she finds it to be a place unique in the world, and she feels fortunate to be assigned where there are so many things for her family to enjoy. She says she has a combination of a great job and a beautiful place to live.

Annell and her family live in Santa Fe. Her husband, Gary, also works at the Laboratory.

She was born in Manhattan, Kansas. She received her B.S. in Chemical Engineering from Kansas State. Before coming to New Mexico, she worked for ARCO in Midland, Texas and Anchorage, Alaska, and for Fort Ord (DOD) in Monterey, California.

The family also enjoys hiking, camping, and fishing. She also participates in running and swimming. She enjoys music and hopes some day to have time for singing.

\* See page 4 for an explanation of DOE Order 5480.19, Conduct of Operations.

*Dels Says*

**Post Tiger Team Update**

I believe that each and every one of us has felt the impact of the recent Tiger Team Audit of the Laboratory. I have heard many of you express that it was a positive learning experience, which it should have been. Others have expressed frustration with the process and the frustrations are warranted. The important thing at this point is to take the lessons learned—both positive and negative—from this largest audit in the Laboratory's history and move onward toward excellence in our operations.

A majority of your frustrations and mine was that we could not always “prove” to the auditors that what we had done was done right—we lacked formality. One thing we learned was that auditors do not have to prove you are doing it wrong but the burden of proof is on us.

The most positive aspect of the Tiger Team Audit from my perspective is that it has caused the Laboratory to unite! I believe we are in the midst of one of the most important transitions in the Laboratory's history. Our Laboratory self-assessment proved that we know where our problems lie. The action teams composed of individuals throughout the Laboratory are now formulating the actions required to put us firmly on the road to excellence. My thanks to all of you for your extra efforts both pre- and post- Tiger Team!

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**SAFETY**  
& NEWS

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