President’s Message

I hope everyone had a happy holiday season and the New Year is starting off on the right foot!

The topic of our January meeting was an overview of the NJ Fire Prevention Code (2006 International Fire Code – NJ Edition). Our guest speaker was Bob Davidson of Davidson Code Concepts. For our February meeting, we have the NJ Chapter’s very own John Cholin, to provide us with a case study regarding a saw mill dust explosion.

Now that the cold weather is here in full force, here are some safety tips regarding electric space heaters for the home and the workplace:

1. All heaters should be Underwriters Listed or Factory Mutual approved for their intended use.
2. Heaters should have a thermostat to automatically shut down the unit when the desired temperature is achieved.
3. Heaters should have a tip-over automatic shut down feature.
4. Heaters should have guards, control knobs, feet, etc. intact;
   4.1 Missing guards, control knobs, feet, etc. must be taken out of service immediately and repaired by a competent person.
5. Heater must be placed on a level, hard and nonflammable surface, not on rugs or carpets.
6. Never place heaters on furniture, since they may fall, dislodging or breaking parts in the heater, which could result in a fire or shock hazard.
7. Heaters should be kept at least 2 feet from all surfaces and 3 feet from all combustible materials, (e.g., wood paneling, file cabinets, desks, trash cans, and paper boxes).
8. Unless certified for that purpose, do not use heaters in wet or moist places, such as bathrooms; corrosion or other damage to parts in the heater may lead to a fire or shock hazard.
9. Never place anything on top of or touching the space heater.
10. Heaters must be monitored when in operation.
   10.1 Do not use portable space heaters if children or pets are expected in the area.
   10.2 The space heater is in plain sight.
   10.3 The space heater is always turned off when the area being heated is not occupied.
   10.4 Location does not impair exit ways.
11. The space heater is plugged directly into a wall outlet.
   11.1 Ground plug is intact.
   11.2 Cord is in good condition; not frayed, no wires showing or pulled from sheath.
   11.3 Do not use extension cords or power strips.
   11.4 Do not hide cords under rugs or carpets.
12. Space heaters of any type are prohibited in laboratories.
13. Flammable liquids are not stored (any quantity) in the same room.
14. Smoke detector is in the same room.
15. Fire Extinguisher is in the same room (within 50 ft).

I look forward to seeing everyone at the Hanover Manor on Monday, February 2.

David Gluckman
NJSFPE Chapter President

http://www.sfpe.org/Chapters/NewJersey.aspx
The January 2009 meeting was held at the Hanover Manor our normal venue. Chapter president Dave Gluckman presided. The minutes of the December 2008 meeting were read by the Secretary and accepted by the membership. The Treasurers report was read and accepted by the membership. Scott Beverly a current NJ/NY SFPE scholarship recipient attended this meeting and briefed the membership on his current activities and course studies at the University of Maryland and his planned future studies and career goals. We wish him well in his educational endeavors. Members also had a short briefing by Rich Reitberger on the upcoming Spring Technical Seminar - “Fire Protection Technology and Going Green” to be held on Friday April 24, 2009 at the Holiday Inn, 160 Frontage Rd., Newark Liberty Airport, Newark, NJ.

The Guest speaker for the evening was Robert Davidson of Davidson Code Concepts of Tinton Falls, NJ (www.davidsoncodeconcepts.com) 732-643-1799. Mr. Davidson gave a very informative presentation on the NJ Fire Prevention Code - Update to the IFC 2006: NJ Edition code. He took us through select chapters and discussed applicability and gave real world examples on how the code applies and related to previous situations and code requirements. The meeting adjourned at the end of the presentation.

Vicki Serafin—Get Well Soon
We wish our Chapter Executive Assistant a speedy recovery from her double knee replacement surgery. Before you know it, she will be doing the double black diamonds at Killington.

Congratulations to Fellippe Galletta, the Chapter’s Newest P.E.

We just received word from one of our Chapter members, Fellippe Galletta, that he passed the FPE test. The following is his letter:

I just received word that I’ve passed the Fire Protection P.E., and naturally I’m elated!

I wanted to thank everyone in the chapter for their support and guidance in helping me get there. Every bit of advice has been useful.

Best,

Fellippe Galletta, PE
Electrical Systems
Joseph R. Loring & Associates, Inc.
21 Penn Plaza, 14th Floor
New York, NY 10001-2727
T: 212.563.7400 (Main)
T: 646.674.6154 (Direct) F: 212.563.7382
FGalletta@LoringEngineers.com
Fire and Explosion Loss Investigation - Portable IBC FL Tank

The attached is a loss investigation report conducted by US Chemical Safety and Hazard Investigation Board in Sept 2008

PART II (The first part contained in the January 2009 Edition)

The nozzle was made of nonconductive plastic, but it housed a stainless steel ball valve and was fitted with a steel quick-connect fitting. The steel weight (suspended from the ball valve handle with a length of steel wire) was intended to prevent the nozzle from being ejected from the tote during filling. All these conductive objects were isolated from ground and were susceptible to static accumulation and discharge. The manufacturer’s technical documentation for the nozzle and hose revealed that they were not intended for flammable service.

Top-Filling

Barton top-filled (splash-filled) its totes and drums in the packaging area. Ungrounded metal parts on the fill equipment likely accumulated a static charge and sparked to the external wall of the steel tote, igniting the vapors around the fill opening. Proper bonding and grounding, or other safeguards, would have reduced the likelihood of static ignition.

A metal fill nozzle or dip pipe that is bonded to a grounded metal tote will not accumulate a static charge. NFPA 77, Recommended Practice on Static Electricity, states that portable metal tanks and IBCs (Intermediate Bulk Containers) should be bottom-filled if possible, using a slow velocity of 1 meter per second (3.3 feet per second) or less until the dip pipe is submerged to about 150 millimeters (6 inches). Figure 3 illustrates a dip pipe arrangement using a metal (conductive) fill nozzle and fill hose designed for flammable liquid service.

Companies should address the hazards associated with static electricity and flammable liquid transfer and handling operations by applying these and other good practice guidelines to determine if their facilities are properly designed and being safely operated.

Information Resources

The following references provide additional information on the safe handling of static-accumulating flammable liquids:

- National Fire Protection Association (NFPA), "NFPA 77: Recommended Practice on Static Electricity," 2007 ed. NFPA 77 can be viewed, free of charge, on the NFPA website (www.nfpa.org). Access directions: At the NFPA Homepage, go to the "Codes and Standards" pull down tab, then click on "Code development process" and scroll down to "Online access."

8 The length of wire used to suspend the steel gear from the fill nozzle handle allowed the gear to swing freely. According to witnesses, the gear would intermittently contact the tote as it swung.
9 Other safeguards include reducing the fill (pumping) velocity to minimize static electricity generation, and adding an inert gas to the tote/drum headspace, which displaces the oxygen, thereby reducing the chance of ignition.
10 NFPA 77, Section 8.13.1.5.
11 When purchasing equipment for flammable service, companies should verify that it is designed for use with flammable liquids and capable of being bonded and grounded.
Fire Separation and Suppression

The packaging area was adjoined to the flammable storage warehouse. A wall separating the two areas was not fire-rated, and large non-fire-rated doors between the warehouse and packaging area were kept open and were not equipped with self-closing mechanisms. The CSB believes that this lack of effective separation aided the fire to spread rapidly into the warehouse area.

The warehouse had an automatic sprinkler system, which did not extend into the packaging area where flammable liquids were routinely stored. Barton’s property insurance company had recently recommended that Barton install an automatic fire suppression system in the packaging area.

The fire started in the packaging area and quickly spread to the warehouse. The warehouse sprinkler system activated after the fire had gained momentum in the packaging area, but was incapable of extinguishing the blaze.

If a fire suppression system had been installed in the packaging area and that area had been separated from the warehouse by fire-rated walls and doors, this fire likely would have been extinguished or contained before engulfing the entire warehouse.

Key Lessons for Safe Handling and Storage of Flammables

- **Ensure that equipment such as fill nozzles and hoses are bonded and grounded and designed for flammable service.**
  The fill nozzle and hose used at Barton were not designed to be bonded and grounded, and were not intended for flammable service.

- **Use bonded and grounded metal dip pipes when top-filling portable tanks.**
  Although the lack of a dip pipe for filling the tank was not a cause in this incident, use of grounded metallic dip pipes is recommended by NFPA 77.

- **Install fire suppression systems in flammable packaging areas.**
  A fire suppression system in the packaging area likely would have stopped the rapid spread of the fire to the warehouse.

- **Separate flammable packaging from bulk storage areas.**
  Proper separation from the warehouse by fire-rated walls and doors would have helped prevent the fire from spreading to the warehouse.

Regulatory and Good Practice Guidance

If Barton had implemented a comprehensive static electricity and flammable liquid safety program in compliance with current regulatory standards and good practice guidance, this incident likely would have been prevented.

The Occupational Safety and Health Administration’s (OSHA) *Flammable and Combustible Liquids* standard (29 CFR 1910.106), Section (f), “Bulk Plants,” contains requirements for portable tank bonding and grounding, that—if implemented properly—would likely have prevented the static spark between the tote and the nozzle.

NFPA 30 *Flammable and Combustible Liquids Code* (2008 ed.) includes guidance or mechanical ventilation; fire separation of dispensing (packaging) and storage areas; and a hazard analysis to determine the extent of necessary fire prevention and control (suppression).13

NFPA 77 *Recommended Practice on Static Electricity* (2007 ed.) contains detailed guidance on safely managing static electricity to prevent fires and explosions. Chapter 8.4.4 addresses the safe use of fill (dip) pipes during filling operations, and Chapter 8.13 provides detailed guidance for bonding and grounding, and information on how to safely fill portable tanks.

12 At the time of the fire, several 55-gallon drums and approximately 30 smaller containers (i.e., 1-5 gallons) of flammable liquids were stored in the packaging area.

13 Current Iowa State Fire Marshal Administrative Rules require facilities that handle flammable liquids to comply with NFPA 30, which includes a requirement that facilities conduct a hazard analysis to determine if fire control (suppression) is necessary. This requirement applies only to newly constructed facilities.
Recall Alert

U.S. Consumer Product Safety Commission

Office of information and Public Affairs Washington, DC 20207

December 30, 2008
Alert #09-717

Fire Alarm Control Panels Recalled by Notifier Due to Alert Failure

The following product safety recall was voluntarily conducted by the firm in cooperation with the CPSC.

**Name of Product:** Notifier Fire Alarm Control Panels

**Units:** About 2,000

**Manufacturer:** Notifier, of Northford, Conn.

**Hazard:** The software in the fire alarm system could fail to process an alarm condition which could result in the system failing to respond in the event of a fire.

**Incidents/Injuries:** None reported.

**Description:** This recall involves the Notifier brand operating system firmware control panels in fire alarms. The control panel is black or red with a silver screen. The panels control display and emergency communications. “NOTIFIER” or “NOTIFIER by Honeywell” is printed on the front of the fire alarm unit. This recall includes the following model numbers: Firmware version 11.2.2 for NFS2-640 and NFS-320 control panels and firmware version 3.14.1 for and NFS-640 control panels.

**Sold by:** Authorized distributors to commercial end-users. The products were not sold at retail, but version 11.2.2 was available for download on www.magni-fire.com, a secure Web site accessible only to Notifier customers from May 2008 through July 2008 at no charge.

**Manufactured in:** United States

**Remedy:** Distributors should immediately contact the company for replacement software. All known users of have been contacted.

**Consumer Contact:** For additional information, contact Notifier at (800) 289-3473 between 8 a.m. and 5 p.m. ET Monday through Friday or visit the company’s Web site at www.notifier.com
MEETING NOTICE

Date: February 2, 2009

Place: Hanover Manor
16 Eagle Rock Avenue
East Hanover, NJ

Price: $26.00

Dinner: 5:00-6:00 (Cash bar for mixed drinks)
Dinner at 6 PM

Speaker(s): John Cholin, JM Cholin Consultants

Topic: Case Study: Saw Mill Dust Explosion

Please note for this meeting:
All officers, directors and committee chairman are requested to attend a meeting at 4:00 p.m. at the Hanover Manor.

PLEASE COMPLETE AND RETURN WITH YOUR CHECK PAYABLE TO “SFPE NJ CHAPTER” TO:

Vicki Serafin
Affiliated FM
400 Interpace Parkway, Bldg C - 3rd Floor
Parsippany, NJ 07054-1196
Phone: (973) 541-6771
Fax: (973) 541-6909

OR PAY AT THE DOOR

NAME: ________________________________________________________________

COMPANY: _______________________________ TELEPHONE: ____________________
## Meeting Dates/Programs 2008-2009

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 2</td>
<td>Case Study: Saw Mill Dust Explosion—John Cholin of JM Cholin Associates</td>
</tr>
<tr>
<td>March 2</td>
<td>MIC—Microbiological Corrosion—Prevention &amp; Inspection Requirement—Pete Carey, Potter Signal</td>
</tr>
<tr>
<td>April 24</td>
<td>Seminar</td>
</tr>
<tr>
<td>May 4</td>
<td>Installation Issues with CPVC Piping</td>
</tr>
<tr>
<td>June 1</td>
<td>High Volume, Low Speed Ceiling Fans vs. AS Activation</td>
</tr>
</tbody>
</table>
STANDING COMMITTEES

Program
Ed Armm, Chairman
Consulting - Peter Rullo

Arrangements
Vicki Serafin, Chairperson

Membership
John Cholin, Chairman

Nominating
Glenn Dietz, Chairman
Chuck Gandy
Glenn Buser

Scholarship Fund
Chuck Gandy, Chairman
Ed Armm
Mike Machette
Alternates: Rich Reitberger, Jim Tolos

Auditing
Joe Janiga, Chairman
John Warnet

Archivist
Rich Reitberger, Chairman
Nicole Smith

Historian
Jim Tolos

Communications
Fusible Link—Brad Hart
Ana Crisostomo—Coordinator
Mailing/Automation/e-mail—Vicki Serafin, Chairperson

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Jim Tolos, Chairman
Joe Janiga - Co-Chairman

Career Recruitment
Al Dopart, Chairman
Glenn Dietz
Dave Gluckman

Golf Outing
Richard Reitberger, Chairman
Joe Janiga

Awards
Frank Savino, Chairman
Rich Reitberger

PE Examination
John Cholin, Chairman
Joe Janiga
Mike Newman
Chuck Gandy

Chapter Seminar/Field Trip
Richard Reitberger, Chairman
Dave Gluckman
Joe Janiga

Legislative
Rich Reitberger, Chairman
Venese Fichter
Jerry Naylis

Finance
Rich Reitberger - Chairman
John Cholin
Bob Murray