# FIRE SERVICE ADVISORY COMMITTEE

**Meeting Minutes**

**March 18, 2015, 10:00 a.m. – 12:00 p.m.**

League of Minnesota Cities  
145 University Avenue West  
St. Paul, MN 55103

| P | Bob Johnson  
*Chair* Insurance Federation of MN |
| A | Don Smiley  
MN State Fire Chief’s Assoc. (MSFCA) |
| A | Steve Zaccard  
Fire Marshals Assoc. of MN / International Assoc. of Arson Investigators-MN Chapter |
| P | Chris Parsons  
MN Professional Firefighters Assoc. (MPFF) |
| A | Rick Loveland  
MN Professional Fire Fighters Assoc. (MPFF) |
| P | Mark Rosenblum  
MN State Fire Department Assoc. (MSFDA) |
| A | Sue Iverson  
League of Cities |
| P | Mark Dunaski  
MN Department of Public Safety - Commissioner Designee |
| A | William Goede  
League of Cities |
| P | Mark Kulda  
Alternate Member |
| P | Jim Fisher  
MN Assoc. of Townships |
| P | George Esbensen  
MN State Fire Chief’s Assoc. (MSFCA) |

**Guests:**  
Marv Calvin – MNSCU  
Bruce West – MN State Fire Marshal  
Steve Flaherty – MBFTE  
Dr. Susan Shaw  
Tom McDonough – St Paul Fire Chief  
Nyle Zikmund – Certification Board  
Sherill Forsberg – Certification Board  
Margaret Koele – FSAC Committee Staff Administrator  
Representative Jeff Howe
Call to order
• Meeting called to order by Bob Johnson, Chair, at 10:04 a.m.
• Quorum was met with seven in attendance

Acceptance of today’s agenda
• Agenda was accepted by the Committee as written

Approval of January 7, 2015 minutes as written
• Minutes from January 7, 2015 were approved as written

New Business
• Proposal regarding funding for State Fire Marshal Division staffing to do school inspections
  o Representative Howe
    ▪ Representative Howe would like to see funding for private and parochial schools to be inspected, so they are safe for all students attending them.
    ▪ Bob Johnson mentioned that the Fire Marshal Office had approached the committee with discussion on long term goals of adding school inspections and long term care facilities. Bob mentioned that we, as a committee, have to make sure we look at the funding and prioritize where the funds need to go.
    ▪ Bob Johnson mentioned that all the funds have been allocated out and there is a list of groups approaching the committee with proposals to fund different projects. Bob Johnson mentioned that the committee will review the request.
    ▪ Nyle Zikmund reported the Certification Board will be able to report on how many certifications have been issued by the funding that was appropriated for training.
  • FSA Balance
    o Bruce West, State Fire Marshal, updates the Committee on this information on the second day of the month.
  • 2015 Legislative Session
    o HF800 Bill Discussion
      ▪ Bruce West commented this bill is the one authorizing the appropriation of $13,956,000 in funds by the Fire Safety Advisory Committee, per the letter of recommendation to the Commissioner. Bruce West mentioned Bob Johnson made a great presentation on
FSAC behalf and the bill that was passed two weeks ago and moved onto the Senate for consideration.

• Health & Safety of the Firefighter (Chris Parsons)
  
  o Chris Parsons discussed the bill HF1100, which pertains to the Firefighters and Children Protection Act. This bill calls for the phase out of flame retardants over the next two and a half years in upholstery, furniture, mattresses, carpets and household textiles. This bill would make the items no longer available for retail sale in Minnesota if they contain 10 specific flame retardants. We would be the fourth state to adopt this law. The bill will follow the standard from the California law set in the mid 1970’s.
    
    o Chris Parsons explained that fires work by burning the fabric, the wood and then the foam. When it burns the flame retardant gives off twice as much smoke, seven times as much CO and eighty times as much soot. They also give off purons and dioxins while burning. When firefighters go into these area’s it is hot, their pores of the skin open up, which then soak up the purons and dioxins. The dust particles carrying these chemicals are also tracked back into the station on their shoes and clothing.
  
  o Chris Parsons mentioned that chemicals in flame retardants have been linked to health risks to the public such as: developmental disabilities in children and birth defects. These retardants get into the air, which then combine with dust particles that land on other furniture or in the carpet then kids touch those items and put their hands in their mouths. This bill has passed the Environmental and Health Committee with no opposition. It will have to be heard by the Commerce Committee, hopefully today.
  
  o Chris Parsons introduced his guest speaker Dr. Susan Shaw, who is a world renowned researcher in firefighter cancers. She would like to discuss what we can do to lessen the risk of cancer in firefighters.
  
  • Dr. Susan Shaw, Director, Marine & Environmental Research Institute; Professor, School of Public Health, Dept. of Environmental Health Sciences, SUNY-Albany.
    
    o Dr. Shaw has been studying the exposure in people for about thirty years.
      
      ▪ There has been a rise in firefighter cancer deaths from 1950 to 2014, compared to other types of causes. The study shows that the cancer risk increases with the duration of firefighting.
LeMasters study identified high risk among firefighters in a review of 32 study participants, which related to multiple myeloma, non-Hodgkin’s lymphoma, prostate and testicular cancer.

NIOSH Cancer study revealed 30,000 firefighters dating back to 1950, was just reported in 2013, found digestive cancers (stomach, small intestine, large intestine), respiratory cancers (esophageal, lung adenocarcinoma) and malignant mesothelioma, which is related to asbestos exposure.

Nordic Fire Fighter study, which was reported on 16,000 male firefighters from five countries that shows a high risk of cancer in younger men, starting at age 30. These cancers reported were: prostate, skin melanoma, non-melanoma skin cancer, multiple myeloma, adenocarcinoma of the lung, and mesothelioma. Retired firefighters reporting an increase in cancer after active duty firefighting.

The studies show there is a greater risk of cancer in firefighters verses the general public.

Dr. Shaw studies exposure and shows the greater risk today for cancer in firefighters is due to the fires being more toxic.

- Toxic flame retardants
- Dioxins and furons
- PCB’s
- Gases
- Perflorinated Chemicals (found in stain resisting chemicals (scotch Gard), Teflon, food wrapping, firefighting foams, and drinking water)
  - This chemical causes endocrine disrupters, liver, heart disease, stroke, and cancer.
- Formaldehyde
- Benzene
- Metals
- Carcinogenic
- Perfluoralkyl chemicals
- Phthalates in synthetics, plastics, foam furniture, carpets, mattresses, TV’s, computers, electronics, and building insulation.
The exposure to these chemicals or carcinogens are ingested, inhaled, and absorbed in the skin due to exposure to the fire, smoke and heat. Cumulative exposure is when the bunker gear goes unwashed for months at a time, even after a significant fire. Firefighters have 2-3 times higher levels of PBDE (retardants) in their blood than the general population. Firefighters have 100 times higher levels of FR dioxins (burning plastics) than the general population. Does fire fighter exposure cause cancer? This has not been proven research needed to fill the gaps. There is a “National Fire Fighter Cancer Biomarker Study” being done 2016-2020 with the following departments participating:
  o Portland, Maine
  o Minneapolis, MN
  o St Paul, MN
  o Arlington, VA
  o District of Columbia
  o Seattle, WA
    ▪ This study will monitor 300 active duty firefighters.
    ▪ The goal is to identify chemicals of highest concern, exposure pathways, and biomarkers of early health effects of exposure that may predict cancer risk. Blood and urine samples will be monitored for this research.
  o Ways to limit the exposure to the firefighter would be on scene DECON, hose line or skin wipes, compressed air, gear laundering (new equipment), gear bagging at the Station, extractors in each station, driers with no heat used in each station, gear storage area in each station, and back up set of gear.
  o Chris Parsons will put forth a funding proposal for the next meeting.

  o Assistant Chief, St Paul Fire, Tom McDonough, presented a proposal for funding “Marine Rescue and Firefighting”.
Minnesota has a lot of water areas in the state. There is a risk we put our firefighters in when operating fire boats when not trained properly. Last year $10,000 was spent on fuel to train on the fire boat use and that was not even getting adequate training of the equipment. This is a State wide program with all the lakes and rivers in Minnesota. There is also risk to the public safety when there are not adequately trained operators of the equipment.

There are three areas that need attention:

- **Fire Boat Operator Training**
  - Century College just developed a program for this training.
  - 24 hour course taught by NASBLA or an accredited agency total would be $45,500 per course for 20 students.

- **Marine Firefighting (fighting fires on vessels)**
  - 24 hour course taught by an accredited agency total would be $44,000 per course for 20 students.

- **Rapid Entry Rescue Swimmer**
  - 24 hour course taught by Dive Rescue International or Century College, total would be $22,000 for 10 students.
  - Dive teams in a county do a great job, but they are volunteer organizations and get to a scene when they can. This can be any time of day before they arrive. The firefighters can do surface rescue and have to wait for the dive team to come in and do the dive rescue. This leaves a tremendous gap between the two. What has been found in drowning fatalities is the body has been found right where they went down. This does not take a lot of training to cover that gap.

- Total proposal would be for the amount of $155,500
  - Fire Department Boat Operator = $44,500
  - Marine Firefighting = $44,000
  - Rapid Entry Rescue Swimmer x 3 = $66,000

**Old Business**

- Rail & Pipeline Safety Law Update
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Mark Dunaski commented the rail & pipeline are still an issue; there have not been any more recommendations this year from the Governor for additional resources. The rail & pipeline gap analysis data is still being collected. We are getting a lot closer with training through HSEM, Fire Marshal Division, MBFTE and Pipeline Safety with how this will roll out in the next 12-18 months. There is a report being presented that is very comprehensive on the pipelines, pipeline safety, and the associated use in the State of Minnesota. This goes through the history, impact, commerce, issues with DNR, safety and a lot of information about what pipelines is doing in the State of Minnesota.

- Marv Calvin, guest, asked if there was any discussion about farm taps under the rail & pipeline information.
- Bruce West, State Fire Marshal, commented there has been no discussion regarding farm taps. There is talk to get a plan with pipeline safety for the safety of the excavators. There is more drain tile going in throughout the state. There is about 1500 out there. Mark Dunaski, Commissioner Office, commented that it comes down to funding.

Mark Dunaski stated that the Governor did mention that he has identified a number of rail processes he would like to see bonding money go to. In addition the Department of Public Safety has submitted a proposal with the National Guard for a little over $3 million to create a training facility at Camp Ripley for rail & pipeline safety training for firefighters and first responders. If the bonding bill goes through, that $3 million will be allocated.

- Fire Service Needs Report Update (Bob Johnson & George Esbensen Presentation)
  - George Esbensen commented that he and Bob have not had a chance to get together on this update.

Other Business
- No new business
  Adjourn
- Meeting adjourned 11:40 a.m.