

FIREFIGHTER TECHNICAL REVIEW COMMITTEE HIGHLIGHTS

Submitted by David Ellingson

April 2020 Meeting:

1. Areas for learning opportunities from this month's meeting:
 - a. Post minutes of your safety committee meetings in each building of your fire department.
 - b. When you develop your Accident Prevention Plan, ensure it is tailored to all the areas, hazards and exposures your firefighters may be exposed to in the course of their duties.
2. L&I has issued new guidance as a result of the COVID 19 impacts and pace of activity. DOS notes are:
 - a. 11.80 - Guidance for loosened requirements due to N95 shortage.
 - b. 1.60 - Temporary enforcement guidelines.

December 2019 Meeting

1. Not only keep your Accident Prevention Plan up to date but also ensure that your personnel comply with PPE requirements. PPE can only protect you if it is being used.
2. The second inspection reviewed this month involved paramedics who were overcome by carbon monoxide (CO) poisoning and were hospitalized. The medics responded to a medical emergency at an apartment complex in the complex's exercise room early in the morning. As they arrived, they saw one individual lying on the floor and all signs pointed to a cardiac arrest or other serious health problem. After working on the patient for a short period of time, the medics started to feel funny and soon it was recognized that they were overcome by the gas as well. CO is odorless so there was no indication of CO in the atmosphere, but a faulty furnace allowed the gas to accumulate in the exercise room.

KEY POINT & RECOMMENDATION – In this incident, all indications were that this was a normal medical emergency. The department has now installed disposable single gas (CO) meters on the crew medical bags. These detectors last about two years and will alarm in the presence of CO. Departments should seriously consider implementing this process improvement.

October 2019 Meeting

1. Two areas for learning opportunities from this month's meeting:
 - a. Facial hair and respirator use/fit testing are not compatible. Facial hair prevents a good seal with the face mask.
 - b. When you develop your Accident Prevention Plan, ensure it covers all the areas, hazards and exposures your firefighters may be exposed to in the course of their duties.
2. Review your safety plan periodically to ensure it is up to date and meets the WAC 296-305 requirements to avoid L&I findings and ensure firefighter safety. The "[Dirty Dozen](#)" pamphlet is a free resource on the WFCAs web site listing the most common findings issued by L&I during fire service inspections. Use this pamphlet as a handy reference during inspection/walk

August 2019 Meeting

3. Comprehensive and functioning safety programs at fire departments are critical to saving the lives of firefighters and they are required to be documented. This month, an inspection revealed scant evidence of a safety program at this fire department. Findings included:
 - a. No respiratory protection plan.
 - b. No respirator fit testing was being conducted.
 - c. No medical evaluations were being performed.

- d. There was no chemical hazard communication plan.
 - e. No written hazard exposure plan for blood borne pathogens.
4. Take the opportunity to ensure your safety plan is up to date and meets the WAC 296-305 requirements to avoid L&I findings and ensure firefighter safety. Review the “**Dirty Dozen**” pamphlet on the WFCFA web site for a list of most common findings issued by L&I during fire service inspections. Encourage employees to use this pamphlet as a handy reference during inspection/walk around of your facilities and equipment.

February 2019 Meeting

1. General findings are listed here. Use these reports as resources for your fire department to avoid L&I findings and/or fines for noncompliance. Review the “**Dirty Dozen**” pamphlet on the WFCFA web site for a list of most common findings issued by L&I during fire service inspections. Encourage employees to use this pamphlet as a handy reference during inspection/walk around of your facilities and equipment.
 - a. Keep accurate maintenance records on apparatus and equipment.
 - b. Free access to electrical panels must be maintained. Storing material in front of electrical breaker panels prevents prompt access during an emergency.
 - c. If using areas above office spaces for storage, ensure load limits are posted and limit floor loads to prevent ceiling collapse.
 - d. Maintain accurate records of firefighter response training and live fire training.
 - e. Workplaces should be clean, sanitary and free of debris.
 - f. Compressed air nozzles must be limited to 30 psi. Most safety nozzles have vent holes at the nozzle to reduce high pressures at the nozzle.
 - g. Open pits create fall hazards in shop areas. Ensure safety barriers are installed to prevent inadvertent falls into the pits.
 - h. Ensure personnel have asbestos awareness training.
 - i. MSDS’s must be readily available for all chemicals used by the fire department.
 - j. If secondary hazardous material containers are used, they must be appropriate for the hazardous material and labeled accordingly.
 - k. Ensure all personnel sleeping quarters have a CO detector installed.
2. Personnel performing maintenance on firefighting vehicles and equipment must be ASE certified or have completed factory qualifications specific to the equipment.
3. Fire districts that have firefighting responsibilities (designated in an ILA) must be trained for aircraft specific hazards.
4. Eyewash stations are required where caustic or hazardous chemicals are used. Those eyewash stations must have free, unobstructed access.
5. UPS batteries sometimes fail causing the batteries to overheat and generate toxic fumes. Ensure the situation is correctly assessed, control the scene, limit access and respond with personnel wearing appropriate PPE.
6. For departments that have diving missions:
 - a. Ensure divers are outfitted with reserve breathing air (required only for training dives).
 - b. Document safe practices to be used by the divers.
 - c. Maintain training logs for all personnel.

November 2018 Meeting

5. Be aware that many facilities have battery room for power backup. Batteries will sometimes short out internally causing the battery to overheat and generate acid odors. Ensure proper PPE is used in hazardous areas like this.
6. Over exertion, even in a training environment, can lead to dehydration and heat stress. Ensure your teams stay hydrated.
7. FYI – When it comes to diving safety, OSHA is responsible for the first three miles from shore. After that, the Coast Guard has responsibility out to the 12-mile limit.

8. When considering a repair or remodel of a facility, ensure there is no asbestos present. This is especially true in older structures where you may find asbestos in flooring, wall plaster, ceilings and siding materials. If asbestos is present, abatement by a qualified contractor must be performed as part of the work package.
9. This is a reminder! When fighting fires in IDLH areas or areas with the potential to become an IDLH area, respirators must be used.

September 2018 Meeting

10. General findings are listed here. Use these reports as resources for your fire department to avoid L&I findings and/or fines for noncompliance. Review the “**Dirty Dozen**” pamphlet on the WFCAs web site for a list of most common findings issued by L&I during fire service inspections. Use this pamphlet as a handy reference during inspection/walk around of your facilities and equipment.
 - a. Light fixtures in close proximity to workers must have guards installed to ensure bulbs do not get broken subjecting workers to falling glass and debris.
 - b. Free access to electrical panels must be maintained. Storing material in front of electrical breaker panels prevents prompt access during an emergency.
11. Firefighter roles are diversifying and expanding into new situations and hazard areas. If you are considering an expanded role with new potential hazards, train and equip your personnel with appropriate PPE before implementing any new policy.

March 2018 Meeting

1. The most significant agenda item this month involved a recent inspection of a fire district that resulted in over 100 pages of safety and health findings. There were 14 serious findings with another 11 general findings. The serious findings included asbestos hazards, mold and mushrooms growing inside a fire station, dry rot and structural integrity of the building, unserviceable engines without required maintenance, SCBA deficiencies, training deficiencies over several program areas, Blood Borne Pathogen program deficiencies and the list goes on. Building deficiencies were so extensive that the station may be condemned.
2. Some general findings are listed below. Review the WFCAs “**Dirty Dozen**” pamphlet on the WFCAs web site for a list of most common findings by L&I during fire service inspections. Use the pamphlet as a handy reference during inspection/walk around of your facilities and equipment.
 - b. Beards and respirators are not a good match. Beards do not allow a tight seal with the respirator face mask. Ensure your department has a comprehensive respiratory protection program – no facial hair, conduct medical screening of personnel and fit test respirators.
 - c. Ensure personnel who are required to wear respirators are fit tested.
 - d. Ensure hazardous material is stored in approved containers and the containers are properly labeled. Secondary containers must also be labeled.
 - e. Many departments/districts are replacing engines and medic units. Be sure to place a height and weight placard in view of the operator in the cab. Might want to include a requirement for a placard to be installed in the vehicle by the manufacturer.
 - f. Ensure emergency eyewash stations are located in areas where caustic chemicals are used.
 - g. Wear appropriate PPE when entering a hot zone.
 - h. Electrical safety – Remove from service electrical cords where wires are exposed. Empty spaces in breaker panels must have blanking plates installed. Do not block access to electrical panels.
 - i. Elevated lofts and storage areas need to be posted with load

September 2017 Meeting

1. General findings are listed here. Use these bimonthly reports as resources for your fire department to avoid L&I findings and/or fines for noncompliance. Review the “**Dirty Dozen**” pamphlet for a list of most common findings by L&I during fire service inspections. Use this pamphlet as a handy reference during inspection/walk around of your facilities and equipment.
 - a. Apparatus was maintained in an unserviceable condition. Severe corrosion existed and the outriggers would not hold pressure.

- b. Hose racks were built in the shop and did not have load ratings.
 - c. Oxygen bottles stored near flammable materials.
 - d. Ensure MSDS' are present for all hazardous materials.
12. Pre-fire plans can provide valuable information so the firefighters have knowledge of the hazards present during an emergency response.
13. If untrained/unqualified personnel are assigned to a team, ensure they do not contribute to the minimum staffing and do not assign them duties that may put them at risk.

March 2017 Meeting

1. General findings are listed here. Use these bimonthly reports as resources for your fire department to avoid L&I findings and/or fines for noncompliance. Review the "Dirty Dozen" pamphlet for a list of most common findings by L&I during fire service inspections. Use this pamphlet as a handy reference during inspection/walk around of your facilities and equipment.
 - a. Beards and respirators are not a good match. Beards do not allow a tight seal with the respirator face mask. Ensure your department has a comprehensive respiratory protection program – no facial hair, conduct medical screening of personnel and fit test respirators.
 - b. Ensure personnel who are required to wear respirators are fit tested.
 - c. Ensure hazardous material is stored in approved containers and the containers are properly labeled. Secondary containers must also be labeled. Tip: Do not use water/juice containers as secondary containers.
 - d. Many departments/districts are replacing engines and medic units. Be sure to place a height and weight placard in view of the operator in the cab. Might want to include a requirement for a placard to be installed in the vehicle by the manufacturer.
 - e. Ensure your department has a sound hearing conservation program (pun intended!).
2. **Note:** Fall Protection (WAC Chapter 296-155) rulemaking is in process to amend the L&I's fall protection rules for the rules to be at least as effective as those administered by the Federal Occupational Safety and Health Administration (OSHA). A series of public hearings will be held. See <http://www.lni.wa.gov/Safety/Rules/WhatsNew/Proposed.asp?RuleID=31> for more information

November 2016 Meeting

14. General findings are listed here. Use these bimonthly reports as resources for your fire department to avoid L&I findings and/or fines for noncompliance.
- a. Ensure emergency eye wash facilities are placed, maintained and functional in areas where corrosive chemicals are stored/used.
 - b. Beards and respirators are not a good match. Beards do not allow a tight seal with the respirator face mask. Ensure your department has a comprehensive respiratory protection program – no facial hair, conduct medical screening of personnel and fit test respirators.
 - c. Ensure personnel who are required to wear respirators are fit tested.
 - d. Ensure hazardous material is stored in approved containers and the containers are properly labeled. Secondary containers must also be labeled. Tip: Do not use water/juice containers as secondary containers. Maintain a chemical inventory for all hazardous material.
 - e. Properly store respirators to prevent deformation/contamination of the face piece. Perform required maintenance in accordance with manufacturer's instructions.
 - f. Lights within reach from floor level need to be protected from inadvertent breakage.
 - g. Open platforms and walkways 4 feet above adjacent areas need guardrails/fall protection.
 - h. Ensure grinders and shop equipment have safety guards in place and properly adjusted.
 - i. Use only approved air nozzles that restrict pressures to 30 psi or below.
 - j. Ensure chaps and other PPE are used when training with chain saws is conducted.
 - k. Document your risk management/hazard assessment program.
 - l. Provide nonskid surfaces in equipment bays adjacent to apparatus where personnel mount/dismount the apparatus.

- m. Electrical safety – Remove damaged extension cords from service and never use extension cords in lieu of permanent wiring. Keep electrical panels free from obstructions.
 - n. Post load limit signs on storage lofts or floors above administrative areas.
2. Safety Alert: If your department uses Scott respirators, check to see that all the sizing dots on the inside of the mask are firmly in place. Recently, a student at the North Bend Fire Academy experienced a sizing dot falling off and getting lodged in the exhaust valve of the respirator. See <http://www.lni.wa.gov/safety/hazardalerts/SCBASizingDotseBulletin9-21-16.pdf> for more information.

May 2016 Meeting

1. General – Common recurring findings are listed here. Use these bimonthly reports as resources for your fire department to avoid L&I findings and/or fines for noncompliance.
 - a. Pop Quiz - What are the number one deficiencies written by L&I on fire departments' inspections?
Answer below.
 - b. Maintain good housekeeping practices in fire stations.
 - c. Ensure hazardous material is stored in approved containers and the containers are properly labeled. Maintain a chemical inventory for all hazardous material.
 - d. Document your department's accident prevention program, hold periodic safety meetings and post the minutes of these meetings.
 - e. Beards and respirators are not a good match. Beards do not allow a tight seal with the respirator face mask. Ensure your department has a comprehensive respiratory protection program – no facial hair, conduct medical screening of personnel and fit test respirators.
 - f. Ensure your blood borne pathogen program is up to date. Ensure personnel who may have a potential for exposure are vaccinated for hepatitis B.
 - g. Document your risk management program.
 - h. Maintain records for quarterly SCBA testing and annual test of respirator knowledge.
 - i. Document your infection control program.
 - j. Document procedures for maintenance of protective clothing by qualified personnel and retirement of out dated gear.
15. Key lessons learned this month:
 - a. Document procedures for tracking personnel at emergency scenes. Be sure to include procedures for using PASS devices.
 - b. If department members respond to a shoreline or washed out road where there is a potential for drowning, those personnel must be wearing flotation devices.
 - c. When responding to a hazardous material scene, do not allow department members to enter the site unless they have been trained for the specific hazard involved. Measure concentrations of the hazardous material present, establish boundaries and use appropriate protective equipment for the chemical involved.
 - d. Document your first aid training.
 - e. Document your cold/hot rehab procedures.
 - f. Document maintenance of wildland PPE.
16. Answer to Pop Quiz above – The number one deficiencies = Ensure the height of any apparatus, over seven feet in height from the ground to the top of the beacon or highest point of the vehicle, and ensure apparatus in excess of 10,000 pounds loaded weight have the weight of the vehicle in pounds and tons are both clearly labeled in a place where they can be read by the driver while operating the vehicle.

March 2016 Meeting

1. General – Common recurring findings are listed here. In-house safety walk around inspections are an excellent way to prevent injuries and keep the workplaces safe. Consider planning these inspections so that each facility gets a good review every year. In so doing, hazardous conditions can be identified early and injuries can be avoided. The WFCFA “Dirty Dozen” pamphlet identifies common safety problems uncovered during L&I inspections. If you would like a copy of this pamphlet, contact the WFCFA office.

- a. Ensure the height of any apparatus, over seven feet in height from the ground to the top of the beacon or highest point of the vehicle, is labeled in a place where it can be read by the driver while operating the vehicle.
 - b. Ensure apparatus in excess of 10,000 pounds loaded weight has the weight of the vehicle in pounds and tons clearly labeled in a place where it can be read by the driver while operating the apparatus.
 - c. For 1.a and b above, ensure labels are securely fastened so that they do not fall off. Ensure labels are placed in any new apparatus procured for the department.
 - d. Ensure electrical equipment is maintained in good working order. Correct deficiencies promptly and keep doors to breaker panels closed.
 - e. Ensure nonskid is placed on the floor adjacent to apparatus to prevent falls and injuries. Replace the nonskid if it is severely worn. Nonskid mats can also be used.
 - f. Document your department's accident prevention program, hold periodic safety meetings and post the minutes of these meetings.
 - g. Ensure eye wash stations are provided in areas where eye hazardous chemicals are present.
 - h. Post load limits on overhead storage areas.
2. Key lessons learned this month:
- a. Document your accident prevention program.
 - b. Document your infection control program.
 - c. Ensure your blood borne pathogen program is up to date. Ensure personnel who may have a potential for exposure are vaccinated for hepatitis B.
 - d. Beards and respirators are not a good match. Beards do not allow a tight seal with the respirator face mask. Ensure your department has a comprehensive respiratory protection program – no facial hair, conduct medical screening of personnel and fit test respirators.
 - e. Document your hazard communication plan.
 - f. When chain saws are used for training, chaps must be used.
 - g. Document procedures for maintenance of protective clothing.
 - h. Document your risk management program.
 - i. Document your Incident Management Program.

July 2015 Meeting

1. General – a discussion concerning the life and replacement of bunker gear. Some small districts have bunker gear that has been rarely used but has exceeded the 10 year life stipulated by the manufacturer. Bunker gear that is over 10 years old must be replaced but can still be used for non-live fire training. Departments should plan bunker gear replacement over a period of several years to preclude large expenditures in a single year.
2. Lessons learned this month:
 - a. When responding to a hazmat scene with unknown chemicals present, ensure the appropriate PPE is used and the responders have the appropriate training for the hazard.
 - b. Ensure proper procedures are used for life safety ropes and harnesses. Based on information provided to the committee, a further investigation will be conducted to determine what procedures are being taught at the Fire Academy.
3. Notes:
 - a. Sample policies for fire departments are available from the L&I web site and the Fire Chiefs Association web site. CDs with these proposed policies are also available.
 - b. Changes to the OSHA 300 reporting requirements became effective on July 1st.

May 2015 Meeting

1. General – There is really no substitute for performing in-house safety walk around inspections. Consider planning these inspections so that each facility gets a good look every year. In so doing, hazardous conditions can be identified early and injuries can be avoided. The WFCFA “Dirty Dozen” pamphlet identifies common safety problems uncovered during L&I inspections.
2. Common recurring themes this month:

- a. Ensure the height of any apparatus, over seven feet in height from the ground to the top of the beacon or highest point of the vehicle, is labeled in a place where it can be read by the driver while operating the vehicle.
- b. Ensure apparatus in excess of 10,000 pounds loaded weight has the weight of the vehicle in pounds and tons clearly labeled in a place where it can be read by the driver while operating the apparatus.
- c. For 2.a and b above, ensure labels are securely fastened so that they do not fall off. Ensure labels are placed in any new apparatus procured for the department.
- d. Grinder safety devices (guards and tool trays) must remain in position and not be removed.
- e. Maintain electrical boxes, wiring and extension cords in good condition. Cutting ground lugs off extension cords or otherwise defeating built in safety systems creates an electrical shock hazard.
- f. Mark all emergency exits with appropriate signs. Doors that are not exits from a space should have a sign posted "Not an Exit."

November 2014 Meeting

1. General – There is really no substitute for performing in house safety walk around inspections. Consider planning these inspections so that each facility gets a good look monthly. In so doing, hazardous conditions can be identified early and injuries can be avoided. Checklists are helpful to identify known energy sources and hazards in each space.
2. Common recurring themes:
 - a. Ensure nonskid is placed on the floor adjacent to apparatus to prevent falls and injuries. Replace the nonskid if it is severely worn. Nonskid mats can also be used.
 - b. If planning to use overhead storage areas or ceiling areas above offices, the load capacity (based on design limits) must be posted.
 - c. Ensure emergency exit signs are posted in facilities.
 - d. Axes/pick poles were stored in holders on the side of the apparatus, but there were no covers over the pick head.
 - e. Core requirement deficiencies: No program for medical evaluations, no SCBA fit testing, no training for use of respirators or fit testing, and no certified record for breathing air.
 - f. Ensure to maintain MSDS's for all hazardous materials used (also includes cleaning supplies used in the stations). This can be either hard copy or an electronic database. This is part of a sound hazard communication system.
 - g. No height/vehicle weight signs posted in vehicles in sight of the operator.
 - h. Check rotating fans/machinery to ensure belt guards, grinder guards, etc. are in place.
 - i. Electrical safety – Ensure electrical cords are not damaged, no conductors are exposed at junction boxes and temporary wiring (extension cords) are not used in place of permanent wiring. If breakers are removed from a breaker box, ensure a blanking plate is installed protecting personnel from the energized circuits inside. Do not remove light bulbs and leave light sockets empty.
 - j. Ensure all containers containing hazardous materials are properly labeled. If pouring hazardous materials into a smaller container, ensure appropriate markings are on each container.
 - k. Smoke and CO detectors are required in sleeping quarters. Place the detectors in areas where CO/smoke may be generated or enter a space.
3. For training: Ensure fall protection is used for heights over 10 feet. If using chain saws, ballistic chaps must also be used for protection.
4. Bunker gear must be inspected periodically, conform to the manufacturer's specifications, and be inspected by qualified personnel.
5. Ensure fall protection is provided for maintenance or training function where a fall condition over 10 feet exists. This also applies to trenches over 10 feet deep or maintenance/training on a roof. Portable barriers can be used if properly anchored.
6. Life safety ropes must be periodically inspected for serviceability. If removed from service, segregate them and label appropriately.
7. Apparatus records should be maintained to track reported problems and repairs.
8. Pump testing should be performed in accordance with the manufacturer's recommendations.

9. Cold and heat stress can be serious problems. Document/train on the signs/symptoms of cold and heat stress.
10. If your department has a MOA to respond to aircraft fires, ensure the requirements in NFPA 402 are met.
11. Cutting teeth on chain saws should be covered when the saw is not in use.
12. Fire hoses need to be tested and documented annually.
13. When working fires near downed power lines, ensure power is secured to these lines by the utility company.
14. OSHA 300 logs must be maintained for all injuries. Injuries to LEOFF 1 employees should also be documented on the OSHA 300 form.

July 2014 Meeting

1. General – There is really no substitute for performing in house safety walk around inspections. Consider planning these inspections so that each facility gets a good look every year. In so doing, hazardous conditions can be identified early and injuries can be avoided.
2. Common recurring themes:
 - a. Ensure nonskid is placed on the floor adjacent to apparatus to prevent falls and injuries. Replace the nonskid if it is severely worn. Nonskid mats can also be used.
 - b. If planning to use overhead storage areas or ceiling areas above offices, the load capacity (based on design limits) must be posted.
 - c. Ensure emergency exit signs are posted in facilities.
 - d. Axes were stored in holders on the side of the apparatus, but there were no covers over the pick head.
 - e. Core requirement deficiencies: No program for medical evaluations, no SCBA fit testing, no training for use of respirators or fit testing, and no certified record for breathing air.
 - f. Ensure to maintain MSDS's for all hazardous materials used. This can be either hard copy or an electronic database. This is part of a sound hazard communication system.
 - g. Be sure to have a functioning Safety Committee. This is an important step to overall safety of your department.
 - h. Check shop machinery to ensure belt guards, grinder guards, etc. are in place.
 - i. Do not place material in an area which blocks emergency exits or sprinkler heads.
 - j. Ensure breathing air is sampled and certified quarterly.
 - k. Electrical safety – Ensure electrical cords are not damaged, no conductors are exposed at junction boxes and temporary wiring (extension cords) are not used in place of permanent wiring. If breakers are removed from a breaker box, ensure a blanking plate is installed protecting personnel from the energized circuits inside. Do not cut off grounding lugs from equipment power cords.
 - l. Place emergency eyewash stations in area where caustic substances are used.
3. Live fire training is required once every three years for personnel who perform interior structure firefighting.
4. If bunker gear is repaired, it must conform to the manufacturer's specifications and be inspected by qualified personnel.
5. CO detectors are required in sleeping quarters. Place the detectors in areas where CO may be generated or enter a space.
6. Ensure fall protection is provided for maintenance or training function where a fall condition over 10 feet exists. This also applies to trenches over 10 feet deep or maintenance/training on a roof. Portable barriers can be used if properly anchored.
7. Grinder wheels should be replaced when damaged or obvious grooves are worn in them. Exploding grinder wheels can throw particles at high velocity. Do not allow material to build up in a grinder wheel. Use a dressing wheel if necessary to true up the grinder wheel.
8. If using an air nozzle, ensure there are relief ports in the nozzle.
9. Fire department recordkeeping should be sufficiently detailed to ensure the qualifications of department personnel are maintained.
10. Be sure to track repairs to PPE/bunker gear and document accordingly. Ensure semiannual inspections are performed.
11. Hazmat physicals should be performed and documented.

12. Appoint an infection/exposure control officer to oversee department personnel. Ensure department personnel review annually the infectious disease plan.

March 2014 Meeting

1. Sometimes it never hurts to double-check that hazardous sources have been isolated and secured. This is especially true for electrically charged conductors that may contain voltages sufficient to immobilize or kill a firefighter. An ounce of prevention may save your life.
2. Common recurring themes:
 - a. Ensure nonskid is placed on the floor adjacent to apparatus to prevent falls and injuries. Replace the nonskid if it is severely worn.
 - b. Be sure to have a functioning Safety Committee. This is an important step to overall safety of your department. Document these safety meetings and maintain a file of the minutes.
 - c. Chaps are not required for chain saw use during structure fires, but are required if chain saws are used during training and wildland clearing.
3. Know the hazards that exist in your fire district, develop accurate pre-fire plans, ensure you have the appropriate protective equipment for each hazard and personnel are properly trained. Good incident response management will quickly identify the hazard at the scene, take action to protect people who may be trapped as well as the first responders, initiate measures to eliminate the hazards. With the broad range of chemicals in use today, response plans must identify specific techniques to combat each release.
17. Logging operations present many hazards to workers as well as first responders. It is important for the incident commander to identify these hazards, control access to the site and take appropriate actions with due consideration for all risks posed to first responders.
18. With the legalization of marijuana for recreational use and the increased number of grow operations, new hazards to first responders may be present:
 - a. Optimal growing environment requires increased Carbon Dioxide levels so CO2 cylinders may be present and may be displacing oxygen in grow areas.
 - b. Butane burners are used to extract hash oil from the marijuana and may be an additional fire or explosion hazard. In fact, there have been recent explosions reported involving illegal hash oil sites.
6. Hard copies of the new WAC 296-305 standard are now available in limited quantities from L&I.

November 2013 Meeting

1. We do not hear much about asbestos these days. It has not been used for many years and we have (or should have) remediation plans in place. However, asbestos is still present in older buildings and can cause problems if those buildings are donated for fire training. There are a host of regulations associated with asbestos exposure from annual physicals, records maintenance, area sampling, PPE, etc. Before using an older structure for training, be sure it is certified to be free from asbestos. It will save you a lot of grief later.
2. Common recurring themes:
 - a. Ensure nonskid is placed on the floor adjacent to apparatus to prevent falls and injuries. Replace the nonskid if it is severely worn.
 - b. Check to make sure your accident prevention program is current. If you "borrowed" a plan from a neighboring district, be sure to tailor it to your district.
 - c. PPE maintenance is important. Keep accurate records to ensure required maintenance is performed regularly.
3. Be sure to have a functioning Safety Committee. This is an important step to overall safety of your department.

July 2013 Meeting

1. Modification of facilities is important and structural additions must be properly engineered to ensure firefighter safety is not compromised. We can all think of creative ways of improving our ability to enhance our training environment or perform our daily functions, but before we make a modification, go through the proper channels to ensure design and life safety requirements are met.
2. Common recurring themes:

- a. Ensure MSDSs are available for all chemicals and compounds used in the fire station.
 - b. Weight & height limits need to be posted in the cab of each apparatus in view of the operator. Sometimes these are placed on windshields. If the windshield is replaced, be sure to repost the information on the new windshield. New apparatus will also need to have this information posted.
 - c. Electrical breaker panels need to have free access to them in case of emergencies. Maintain good housekeeping practices to keep areas in front of electrical panels free from obstructions.
 - d. Ensure nonskid is placed on the floor adjacent to apparatus to prevent falls and injuries. Replace the nonskid if it is severely worn.
 - e. Unprotected fluorescent light fixtures in facilities need to have guards installed if mounted in an area where the bulbs can be broken.
3. Electrical systems need to be properly installed and maintained. Exposed electrical energized wiring and broken switch and outlet covers can present an immediate shock hazard. Ensure that repairs or modifications to building electrical systems are performed by qualified electricians in accordance with the National Electric Code.
 4. If planning to use overhead storage areas, the load capacity (based on design limits) must be posted.

January 2013 Meeting

1. Use of approved equipment by firefighters is important and modification of that specialized equipment or vehicles must be properly engineered to ensure firefighter safety is not compromised. We can all think of creative ways of improving our ability to perform our functions, but before we make a modification to any piece of equipment not authorized by the equipment manufacturer, pause, take a deep breath, and go through the proper channels to ensure design safety requirements are met.
2. Modification of facilities falls into a similar category. Adding sleeping quarters may expose firefighters to hazards or limit avenues for escape. Prudent design reviews need to be conducted to ensure all life safety requirements are met before modifications are performed.
3. Ensure bunker gear and SCBA's are maintained and disinfected in accordance with manufacturer's recommendations.
4. Ground ladders need to be tested annually. The new NFPA standard does not require annual ladder tests, but that standard will not be in effect until January 2014.
5. Item for future consideration:
L&I drafted a finding that a department did not have an eye wash station in a wash room where liquid bleach was being used. That caused a lot of discussion in the meeting about the concentration threshold of acids, caustic substances and hazardous materials which would require an eye wash station to be present. L&I was asked to go research the requirement and present their findings at the next meeting.

July 2012 Meeting

1. Several common themes again this month. Weight of engines and tender were not posted in view of the operators. Both weight and height of apparatus are required to be posted. Be sure to have a checklist for this when new equipment is purchased, windshields are replaced, or make sure permanent labels are installed so they do not fall off.
2. Ensure your respirator program is kept up to date, physicals are conducted and periodic maintenance and training requirements are met. This also applies to Chief Officers who may be required to use an SCBA as part of their assigned duties. There also needs to be an annual evaluation of your department's respiratory program conducted.
3. In areas where the SCBA compressor is located and bottles are filled, it is a good idea not to store gas powered equipment. Hydrocarbons can be evaporated. Most compressors have filters to ensure the contaminants are removed, but it is still a good idea to prevent any potential contamination in the first place.
4. Be sure to conduct and document your department's safety meetings.
5. Electrical safety is important. Be sure to repair any exposed wires or electrical connections.
6. WAC 296-305 update:
 - a. July 31st is the filing date for the new proposed language.
 - b. There will be two public hearings in September, one in Spokane and one in Tumwater.

- c. February 1, 2013 will be the effective date for the new regulations.
- d. Draft 7 is the final draft.

November 2011 Meeting

1. Height and weight of engines were not posted in view of the operators. Both weight and height of apparatus are required to be posted. We see this again as a recurring item. Be sure to have a checklist for this when new equipment is purchased, windshields are replaced, or make sure permanent labels are installed so they do not fall off.
2. Electrical safety is important. Breaker panels must have filler plates when breakers are removed or otherwise missing. Energized bus bars are exposed without the filler plates installed. Also ensure all electrical outlets have faceplates installed.
3. Ensure locations of fire extinguishers are clearly identified with signs in fire stations. This is a recurring item.
4. If axes are mounted on the outside of apparatus, there must be safety covers over the picks. This is a recurring item.
5. All containers of chemicals must be labeled even if it is a common household cleaning agent like Windex. Ensure MSDSs are available for all chemicals.
6. Exit signs need to be posted at all exit locations in fire stations.
7. Ensure adequate preplanning for all hazards in your fire district. You need to know the potential hazards your firefighters may be exposed to. Once hazards are identified, firefighters need appropriate training to deal with the hazards, ensure roles are assigned to all team members, list specific Hazmat items for each location, procure the correct chemical agent PPE, and document emergency response procedures and the use of monitoring equipment. Firefighter protective clothing should not be used for primary Hazmat protection except as noted in the Emergency Response Guidebook. For example, ammonia refrigeration systems are used in many commercial operations. Responding to a refrigerant leak must include protective equipment to protect all body areas from vapors and liquids. Fire departments responding to Hazmat incidents must comply with WAC 296-824.
8. WAC 296-305 update. The Governor extended the rules moratorium through 2012. However, there is a very good chance L&I will be granted permission to move forward with changes to this rule after January 1, 2012. The stakeholder committee will probably get back together in the December - January timeframe and there will be two more public comment periods if the rulemaking takes place.

September 2011 Meeting

1. Weight of engines and tender were not posted in view of the operators. Both weight and height of apparatus are required to be posted. We see this again as a recurring item. Be sure to have a checklist for this when new equipment is purchased, windshields are replaced, or make sure permanent labels are installed so they do not fall off.
2. Electrical safety is important. Breaker panels must have filler plates when breakers are removed or otherwise missing. Energized bus bars are exposed without the filler plates installed.
3. Ensure locations of fire extinguishers are clearly identified with signs in fire stations.
4. If axes are mounted on the outside of apparatus, there must be safety covers over the picks.
5. Ensure anti-skid flooring is placed at the entry point to apparatus. The whole floor does not need to have anti-skid, just the immediate area around the apparatus entrances.
6. If planning to use overhead storage areas, the load capacity (based on design limits) must be posted.

July 2011 Meeting

1. Weight of engines and tender were not posted in view of the operators. Both weight and height of apparatus are required to be posted. This seems to be a recurring item. Be sure to have a checklist for this when new equipment is purchased or windshields are replaced.
2. Unprotected fluorescent light fixtures in facilities need to have guards installed if mounted in an area where the bulbs can be broken.
3. One firefighter was injured when he fell through a roof during training for cutting ventilation holes. Be sure to have a safety plan for all training evolutions and maintain situational awareness.

4. PPE assessments and response to civil disturbances should be documented in district policies.
5. WAC 296-305 update: L&I plans to reconvene the stakeholder committee in October to review changes to the WAC with plans to initiate public hearings/rulemaking in January once the ban on new regulations is lifted.

May 2011 Meeting

1. Two different inspections revealed the use of PVC pipe for compressed air systems that had been modified in fire stations. Compressor oils plus the heat from compressing air can cause a failure of the PVC pipe and when it fails, it breaks into shards causing a significant safety concern. Districts should be reminded about the dangers of PVC piping when used in compressed air systems.
2. One district that had excellent results from L&I inspections in the past, but was now found to be without a chief after the city went through a mill closing and now had only volunteer firefighters. Many of the fundamental firefighter safety programs were nonexistent and even basic safety requirements were not known by the firefighters (such as how to put on a respirator, fit testing, etc.). Districts should be reminded of the resources available through WFCA and the Chiefs association to get them equipped with essential safety requirements. This could be a good proactive approach before someone gets seriously hurt.
3. Weight of engines and tender were not posted in view of the operators. Both weight and height of apparatus are required to be posted.
4. Ensure emergency exit signs are posted in facilities.
5. Electrical modifications were made to a station that left exposed electrical energized wiring and junction boxes without covers. Ensure that repairs or modifications to building electrical systems are performed by qualified electricians in accordance with the National Electric Code.
6. Axes were stored in holders on the side of the apparatus, but there were no covers over the pick head. This condition had already caused damage to bunker gear when caught on the pick head.
7. Core requirement deficiencies: No program for medical evaluations, no SCBA fit testing, no asbestos training, no training for use of respirators or fit testing, no training associated with exposure to infectious diseases, no hose testing, and no certified record for breathing air.
8. WAC 296-305 Update -- Currently the standard is in limbo since L&I did not want to challenge the governor's suspension of rulemaking. L&I did receive very good public comment and would like to get the stakeholder group back together a couple of times later this year to possibly resubmit the standard in January 2012.