MNOSHA CONSULTATION VISITS

We completed the calendar 2016 First Quarter OSHA Consultation visits. We were invited to 2 campuses. Here is a summary of the issues:

First Quarter Serious Issues Found:
1. Exits were not marked by readily visible sign reading “Exit”. 1910.37 (b)(2) (Missing illuminated exit signs)
2. The in-plant handling, storage, and utilization of all compressed gases in cylinders, portable tanks, rail tank cars, or motor vehicle cargo tanks was not proper. 29 CFR 1910.101(b) (Compressed oxygen were not secured)
3. LP gas container(s) in storage were not located so as to minimize exposure to excessive temperature rise, physical damage, or tampering by unauthorized persons. 1910.110(f)(2)(i) (propane tanks were being stored in a lab. Tanks were not protect from physical damage or tampering by unauthorized persons)
4. A hazard assessment was not made of the workplace, with a written certification, to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment. 1910.132 (d) (No assessment done in the labs to determine actual hazards and the needed PPE)
5. Where respirators were necessary to protect the health of the employee or when respirators were required by the employer, a written respiratory protection program with worksite specific procedures was not established and implemented. 1910.134(c)(1) (An employee was required to wear a tight fitting respirator and was not included in the respiratory protection program)
6. Food or beverages were stored in area(s) exposed to toxic material(s). 1910.141(g)(2) (Employees allowed to have drinks in the chemistry lab)
7. The employer did not establish an energy control program consisting of energy control procedures, employee training and periodic inspections to ensure that before any employee performed any servicing or maintenance on a machine or equipment where the unexpected energizing, start up or release of stored energy could occur and cause injury, the machine or equipment would be isolated, and rendered inoperative. 1910.147(c)(1) (An energy control plan had not been instituted on how to handle equipment that was being worked on in the lab)
8. Where employees were exposed to injurious materials, suitable facilities for quick drenching or flushing of the eyes were not provided within the work area for immediate use. 1910.151(c)** (Employees were working with corrosives and an eyewash was not provided)
9. Makeshift link(s) or fastener(s) formed from bolts, or other such attachment(s) were used to connect links or fastenings on alloy steel chain sling(s). 1910.184(e)(2)(ii) (A bolt and chain were used to create a makeshift sling)
10. Machine guarding was not provided to protect operators and other employees from hazards created by moving machinery parts. 1910.212(a)(1) (Lathe missing a chuck guard) Multiple Campuses
11. Fan blade guards, where the periphery of the blades was less than seven feet above the floor or working level, had openings larger than one-half inch. 1910.212(a)(5) (Refrigeration training prop fan had larger than ½ inch openings)

12. A peripheral protecting member (tongue guard) that could be adjusted to the constantly decreasing diameter of the wheel was not provided for abrasive wheel machinery. 1910.215(b)(9) (A tongue guard was not provided on a pedestal grinder)

13. The distance between the abrasive wheel and the adjustable tongue guard at the top exceeded one fourth inch and the tool rest exceeded one eighth inch. 1910.215 (b)(9) (Bench grinder out of adjustment)

14. Projecting key(s), setscrew(s), or other projections in revolving part(s) were not removed, made flush, or guarded by metal cover(s). 1910.219(h)(1) (A shaft coupling was not guarded. A guard had been installed over the coupling but the key and shaft were exposed)

15. Hand and portable power tools or equipment were not kept in a safe condition. 1910.242(a) (Hand tools were not kept in a safe condition)

16. Abrasive wheels used on vertical portable grinder(s) (right angle head grinders) were not provided with safety guard(s) having a maximum exposure angle of 180 degrees and located between the operator and wheel. 1910.243(c)(3) (An angle grinder was not equipped with a safety guard)

17. Rated load of portable jacks were not legibly and permanently marked in a prominent location on the jack by casting stamping or other suitable means. 1910.244 (a)(1)(ii) (The rated capacity was not marked on a floor jack)

18. Valve protection caps, where cylinders were designed to accept caps, shall always be in place, hand tightened, except when cylinders were in use or connected for use. 1910.253 (b)(2)(iv) (Cap was not on an acetylene tank)

19. Cylinders were not secured on a special truck, regulators were not removed and valve protection caps, when provided for, were not put in place before cylinders were moved. 1910.253(b)(5)(ii)(D) (Oxygen and fuel gas cylinders used with the oxy-acetylene table were not secured to a special truck. The cylinders were not disconnected and secured before the table was moved)

20. Listed or labeled electrical equipment was not used or installed in accordance with instructions included in the listing or labeling. 1910.303(b)(2) (1. Metal junction box was used on a pendant 2. Power strips were daisy chained together) Multiple Campuses

21. Each service, feeder and branch circuit, at its disconnecting means or overcurrent device, was not legibly marked to indicate its purpose, nor located and arranged so the purpose was evident. 1910.303(f)(2) (The breakers in electrical panel were not labeled so the purpose was evident)

22. Enclosures or guards for electric equipment in locations where it would be exposed to physical damage were not arranged and of a strength to prevent such damage to the equipment. 1910.303(g)(2)(ii) (Lamps inside the abrasive blasting cabinet in the metals lab were not provided with guards to prevent damage)

23. Openings through which conductors enter boxes, cabinets, or fittings were not effectively closed. 1910.305(b)(1)(i) (An unused opening in the bottom of an electrical panel was not effectively closed)

24. Panelboards were not mounted in cabinets, cutout boxes, or enclosures approved for the purpose and were not dead front. 1910.305(d)(2) (Live electrical equipment in an electrical panel was exposed) Multiple Campuses

25. Flexible cords and cables were used as a substitute for fixed wiring of a structure. 1910.305(g)(1)(iv)(A) (An extension cord improperly used)

26. Flexible cords were not connected to devices and fittings so that tension would not be transmitted to joints or terminal screws. 1910.305 (g)(2)(iii) (The flexible cord was not provided with strain relief) Multiple location on one campus

27. When there was a defect or evidence of damage that could expose an employee to injury, the defective or damaged item was not removed from service until the repairs and tests necessary to render the electric equipment safe had been made. 1910.334(a)(2)(ii) (A flexible cord for a Milwaukee drill was damaged and repairs were made. However, proper strain relief was not provided for the flexible cord when the repairs were made)

28. The employer did not furnish to each employee conditions of employment and a place of employment free from recognized hazards which caused or likely to cause death or serious injury to employees. 182.653 subd 2. (Original pin in a high reach jack stand had been replaced with a bolt)

**Multiple Campus Issue
The 21 Serious Issues Hit List for 2016

The 2015 OSHA Consultation visits identified 21 serious issues that were found on multiple campuses in multiple quarters. This indicated that we have not been doing a very good job of educating faculty and staff on the importance of watching for and eliminating these hazards. For 2016 we are asking all campuses to develop goals/training/messages to use with faculty and staff to make sure that we no longer find these common issues. The 21 issues are:

**Multiple Campus Multiple Quarters Summary:**
1. In every building or other structure, or part thereof, used for mercantile, business, industrial, or storage purposes, the loads approved by the building official were not marked on plates of approved design which shall be supplied and securely affixed by owner. 1910.22(d)(1) (The load rating for mezzanine were not posted) **First and Second Quarters**
2. Open sided floor(s) or platform(s) 4 feet or more above the adjacent floor or ground level were not guarded by standard railings. 1910.23(c)(1) (Guard rails not provided or not all of the required components were present) **First, Second and Fourth Quarters**
3. The exit route or path of exit travel from any point within a workplace to a place of safety (including refuge areas) was not continuously maintained free of all obstructions or impediments to full instant use in the case of fire or other emergency. 1910.37(a)(3) (Exit was blocked) **First and Second Quarters**
4. Exits were not marked by readily visible sign reading “Exit”. 1910.37 (b)(2) (Missing illuminated exit signs) **First and Third Quarters**
5. **A hazard assessment was not made of the workplace, with a written certification, to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment.** 1910.132 (d) (No assessment done in the labs to determine actual hazards and the needed PPE) **First, Second, Third and Fourth Quarters**
6. **Where employees were exposed to injurious materials, suitable facilities for quick drenching or flushing of the eyes were not provided within the work area for immediate use.** 1910.151(c) (Employees were working with corrosives and an eyewash was not provided) **First, Second, Third and Fourth Quarters**
7. Material stored in tiers was not stacked, blocked, interlocked or limited in height so that it was stable and secure against sliding and collapse. 1910.176(b) (Materials on top of the shelves, cabinets and rack storage was not stable or secure from falling on employees) **Third and Fourth Quarters**
8. Machine guarding was not provided to protect operators and other employees from hazards created by moving machinery parts. 1910.212(a)(1) (Lathe and other rotating equipment missing proper guards) **First and Third Quarters**
9. Circular hand-fed crosscut table saw was not guarded by an automatically adjusting hood which completely enclosed that portion of the saw above the table and the material being cut. 1910.213 (d)(1) (Table saw guard was missing) **First and Fourth Quarters**
10. A peripheral protecting member (tongue guard) that could be adjusted to the constantly decreasing diameter of the wheel was not provided for abrasive wheel machinery. 1910.215(b)(9) (A tongue guard was not provided or was out of adjustment on grinders) **First, Third and Fourth Quarters**
11. Compressed air used for cleaning purposes was not reduced to less than 30 p.s.i. when dead-ended. 1910.242 (b) (The compressed air nozzles did not have pressure regulators that would limit the pressure to 30 psi) **Third and Fourth Quarters**
12. Electrical equipment was not free from recognized hazards that were likely to cause death or serious harm to employees. 1910.303 (b)(1) (Electrical equipment power cord was damaged and wires were exposed) **First and Second Quarter**
13. Examination of electrical equipment must include classification by type, size, voltage, current capacity and specific use. 1910.303 (b)(1)(vii) (Daisy chained extension cords and power strips) **First and Second Quarters**

Did You Know

That the 2015 Consultation visits identified 556 serious issues that our campuses corrected!!
If OSHA Enforcement had found them on our campuses it would have had an adjusted citation value of $2,724,000!! Cost for corrections would have been on top of this cost!!

Remember that old Fram commercial “You can pay me now or pay me later”.
14. Electrical equipment shall not have damaged parts that may adversely affect safe operation or mechanical strength of the equipment, such as parts that are broken, bent, cut or deteriorated by corrosion, chemical action or overheating. 1910.303(b)(7)(iv) (Broken outlets) Second, Third and Fourth Quarters

15. Sufficient access and working space was not provided and maintained around all electrical equipment to permit ready and safe operation and maintenance of the equipment. 1910.303 (g)(1) (Electrical panels and breakers were blocked) First, Second and Third Quarters

16. The path to ground from circuits, equipment, and enclosures was not permanent, continuous, and effective. 1910.304(g)(5) (Electrical equipment cords and extension cords were not equipped with a ground pin) First, Second and Fourth Quarters

17. Flexible cords and cables were used as a substitute for fixed wiring of a structure. 1910.305(g)(1)(iv)(A) (An extension cord improperly used) First, Second and Third Quarters

18. Flexible cords were not connected to devices and fittings so that tension would not be transmitted to joints or terminal screws. 1910.305 (g)(2)(iii) (The flexible cord was not provided with strain relief) First and Second Quarters

19. **Receptacles installed in wet or damp locations were not suitable for the location. 1910.305 (j)(2)(iv) (No GFCI protection of electrical outlets) First, Second, Third and Fourth Quarters

20. The employer did not furnish to each employee conditions of employment and a place of employment free from recognized hazards which caused or likely to cause death or serious injury to employees. 182.653 subd 2. (Original pin in a high reach jack stand had been replaced with a bolt) Second and Fourth Quarters

21. Emergency lighting was not provided at exits from the workplace and/or in stairways and passageways used as access to exits. 5205.0140 subp. 1 (Emergency lighting was missing or not working) First and Second Quarters

**Impact of Legislative Changes:**

Three changes to waste material management were discussed at the Facility Conference. The management changes were for the following materials: Flushable wipes, Aerosol and Gas Cylinders, and Lead Weights. Currently, only management of lead wheel weights is in effect, as of January 1, 2016. Aerosol can management changes go into effect January 1, 2017. Management changes for flushable wipes are up for legislative review. However, the likelihood of legislative approval for these changes is high, considering the waste water treatment industry is behind the effort.

How MPCA will attempt to regulate these waste management changes is yet to be determined. It will be difficult at best, but this does not relieve us of the responsibility to comply with the new guidance. Below will be a quick description of the regulatory change followed by recommendations on how to comply.

**FLUSHABLE WIPES:** These are wipes packaged with the words “flushable” on the label. The waste water treatment industry requested the legislature force manufacturers to remove the word “flushable” from packaging.

The impetus behind this change, is that these “flushable” wipes do not break apart as advertised and reportedly clog pumps, pipes and lift stations. Frequent repairs of pumps and un-plugging of pipes and grates have increased operating costs from small cities to large municipalities. Flooding of basements with raw sewage has occurred in some locations.

In place of flushing them, it is highly recommended by MPCA to place used surface cleaning wipes into municipal solid waste. The MPCA has not yet provided guidance on how to manage personal wipes used in the privacy of a bathroom stall.

**AEROSOLS and GAS CYLINDERS:** On January 1, 2017, disposal options for aerosol cans (aerosols) and gas cylinders (cylinders) will depend on two factors. Is the remaining material inside the aerosol or cylinder a hazardous waste (includes flammable materials)? Is there enough liquid or propellant still in the container making it non-RCRA empty? Non-hazardous waste aerosols and cylinders have different disposal options.
Official MPCA definition for a container to be RCRA empty, is **when all material possible has been removed and there no more than 3% by volume of the container capacity remains.** MPCA goes on to state the container is RCRA-empty, **if no liquid can be heard when shaken, and no material is expelled when button is pushed and rotated.**

FOR ALL RCRA EMPTY (Both hazardous and non-hazardous)

1. Many municipal solid waste (MSW) haulers, do not allow RCRA-empty aerosols and cylinders to be placed into their bins. Go to #2.
2. Verify with your metal recyclers to determine if they can accept RCRA empty hazardous or non-hazardous aerosols and cylinders. If they won’t or can’t accept them, then you will need to arrange disposal with a treatment, storage and disposal facility (TSDF).
3. Copies of transactions must be provided by vendor and kept with records. Especially important for Twin City Metro Campuses.
4. Twin City metro counties may require weights of aerosols recycled to be reported on annual reports. Check with your County.

FOR NON-RCRA EMPTY (Both hazardous and non-hazardous)

1. Hazardous aerosols and cylinders must be collected for disposal. Label the container as: “Universal Waste-Aerosol”. If in doubt as to the contents of the aerosol, they must be considered as hazardous. You are NOT required to use a hazardous waste manifest for disposal, but ALL transactional paperwork must be maintained. Especially important for Twin City Metro Campuses.
2. Non-hazardous aerosols can still be punctured. Drum used for collection of liquids must have a hazardous waste label. Write the words “Satellite Accumulation” on the label, and list contents as “Waste Aerosol Liquids”. Once container is ready for disposal, a sample must be submitted for lab analysis. Sample results will determine proper disposal method. Recycle empty containers once verified acceptable by metal recycler. Keep copies of all transactional paperwork. NOTE: More than one collection container may be required to assure incompatible materials are not mixed.
3. Twin City metro counties may require weights of cans recycled to be reported on annual reports. Check with your County.

Partially filled aerosols left sitting for any length of time tend to either lose propellant or the nozzles will plug up (paints), rendering the aerosol unusable. Try to avoid a stockpile of non-RCRA empty aerosol containers. Encourage personnel to avoid grabbing a new aerosol, when partially filled ones are still in inventory. Another suggestion for aerosols which are nearing empty, would be to keep spraying the container for its intended purpose. For example, if you are painting something, and the aerosol is near empty, find something else which requires painting, and keep shaking the can while painting, attempting to expel all paint and propellant.

**HOWEVER,** it is illegal to purposely empty an aerosol to the atmosphere by depressing the nozzle and spraying it at nothing. This is not what the aerosol was intended to do, making it an illegal act.

**LEAD WEIGHTS:** As of January 1, 2016, the sale, distribution and use of lead weights for wheel balancing was banned in MN. Here is the guidance: [https://www.pca.state.mn.us/sites/default/files/w-hw4-68.pdf](https://www.pca.state.mn.us/sites/default/files/w-hw4-68.pdf). However, this ban does not extend to the four surrounding states at this time or to other areas of the country. Additionally, it is not illegal to order lead weights from an automotive parts stores, and have these lead weights sent to “home”. BUT, it would be illegal to USE these weights on a vehicle. Vehicle is defined as both cars and trucks.

To avoid accidentally ordering lead weights, ensure all future wheel weight order requests are for NON-LEAD only. What do we do with existing stock?? It is difficult to distinguish between lead and non-lead wheel weights. There are markings which may help, but these markings are not always consistent or distinguishable. Furthermore, some vendors don’t place any markings denoting what the weight is made of.

Bottom line is, if at all possible try to separate the types. But if you can’t guarantee it is a non-lead wheel weight, then it must be considered as having lead. All lead weights must then be taken out of service and recycled. Label containers “Lead Weights for Recycling”. Contact your local metal recycler to determine if they will accept them. Contact System Office if you are unable to find a recycler. Copies of transactions must be kept with other waste records. You are not required to use a hazardous waste manifest. Currently, only the twin city Metro counties are required to report lead tallies on their annual report.
Quarterly Workers Compensation Summary:
Of MnSCU’s MnSAFE reportable claims for the past three fiscal years (FY2013-2015):
- Slip, trip, falls (excluding falls from vehicles and elevation) account for 37% of the claims reported (250 of 672).
- Accounted for 52% of the total reserves ($2.252 million out of $4.324 million in total reserves)
- Have an average total reserve of over $9,000 per claim.

Last Quarter Summary (January – March 2016): Includes incident only, accepted and denied claims. There were a total of 118 incidents with 54 – Incident only, 12 – Lost time claims and 52 – Medical only claims
If you would like your specific Workers Compensation campus data please contact Amy!!

The primary cause of injury was Slips, Trips and Falls – 21 of the 63 incidents occurred due to icy/snowy conditions.

8 out of 12 lost time injuries were caused by slips, trips or falls on snow or ice.
Injuries were further examined by occupation and claim type.

The Department of Administration’s Safety and Loss Control division has a large volume of Slips, Trips and Fall Prevention information, posters, etc. on their web page at:

http://mn.gov/admin/government/risk/safety-loss-control/index.jsp

You can also find information on the MnSAFE web page also.

Here are six guidelines to help you create a safer slips, trips and falls free working environment.

1) Create Good Housekeeping Practices
Good housekeeping is critical. Safety and housekeeping go hand-in-hand. If your facility’s housekeeping habits are poor, the result may be a higher incidence of employee injuries, ever-increasing insurance costs and regulatory citations. If an organization’s facilities are noticeably clean and well organized, it is a good indication that its overall safety program is effective as well.
Proper housekeeping is a routine. It is an ongoing procedure that is simply done as a part of each worker’s daily performance. To create an effective housekeeping program, there are three simple steps to get you started

- **Plan ahead** – Know what needs to be done, who’s going to do it and what the particular work area should look like when you are done.
- **Assign responsibilities** – It may be necessary to assign a specific person or group of workers to clean up, although personal responsibility for cleaning up after himself/herself is preferred.
- **Implement a program** – Establish housekeeping procedures as a part of the daily routine.

2) Reduce Wet or Slippery Surfaces
Walking surfaces account for a significant portion of injuries reported by state agencies. The most frequently reported types of surfaces where these injuries occur include

- Parking lots
- Sidewalks (or lack of)
- Food preparation areas
- Shower stalls in residential dorms
- Floors in general
Traction on outdoor surfaces can change considerably when weather conditions change. Those conditions can then affect indoor surfaces as moisture is tracked in by pedestrian traffic. Traction control procedures should be constantly monitored for their effectiveness.

- Keep parking lots and sidewalks clean and in good repair condition.
- When snow and ice are present, remove or treat these elements. In some extreme cases, it may be necessary to suspend use of the area.
- Use adhesive striping material or anti-slip paint whenever possible.

Indoor control measures can help reduce the incidence of slips and falls.

- Use moisture-absorbent mats with beveled edges in entrance areas. Make sure they have backing material that will not slide on the floor.
- Display “Wet Floor” signs as needed.
- Use anti-skid adhesive tape in troublesome areas.
- Clean up spills immediately. Create a procedure for taking the appropriate action when someone causes or comes across a food or drink spill.
- Use proper area rugs or mats for food preparation areas.

3) Avoid Creating Obstacles in Aisles and Walkways
Injuries can also result in from trips caused by obstacles, clutter, materials and equipment in aisles, corridors, entranceways and stairwells. Proper housekeeping in work and traffic areas is still the most effective control measure in avoiding the proliferation of these types of hazards. This means having policies or procedures in place and allowing time for cleaning the area, especially where scrap material or waste is a by-product of the work operation.

- Keep all work areas, passageways, storerooms and service areas clean and orderly.
- Avoid stringing cords, cables or air hoses across hallways or in any designated aisle.
- In office areas, avoid leaving boxes, files or briefcases in the aisles.
- Encourage safe work practices such as closing file cabinet drawers after use and picking up loose items from the floor.
- Conduct periodic inspections for slip and trip hazards.

4) Create and Maintain Proper Lighting
Poor lighting in the workplace is associated with an increase in accidents.

- Use proper illumination in walkways, staircases, ramps, hallways, basements, construction areas and dock areas.
- Keep work areas well-lit and clean.
- Upon entering a darkened room, always turn on the light first.
- Keep poorly lit walkways clear of clutter and obstructions.
- Keep areas around light switches clear and accessible.
- Repair fixtures, switches and cords immediately if they malfunction.

5) Wear Proper Shoes
The shoes we wear can play a big part in preventing falls. The slickness of the soles and the type of heels worn need to be evaluated to avoid slips, trips and falls. Shoelaces need to be tied correctly. Whenever a fall-related injury is investigated, the footwear needs to be evaluated to see if it contributed to the incident. Employees are expected to wear footwear appropriate for the duties of their work task.

6) Control Individual Behavior
This condition is the toughest to control. It is human nature to let our guard down for two seconds and be distracted by random thoughts or doing multiple activities. Being in a hurry will result in walking too fast or running which increases the chances of a slip, trip or fall. Taking shortcuts, not watching where one is going, using a cell phone, carrying materials which obstructs the vision, wearing sunglasses in low-light areas, not using designated walkways and speed are common elements in many on-the-job injuries.
It’s ultimately up to each individual to plan, stay alert and pay attention.