# The "Tool Box" for Educational Facility Management Professionals

# Spring MASMS Events & Meetings!

## MASMS Day on the Hill ~ Tuesday April 12, 2016

Each year, MASMS members from around the state join together to discuss upcoming legislation and advocacy. Members discuss legislative priorities with their individual Senators and Representatives.

9:00 AM Meet at the Double Tree by Hilton, 2200 Freeway Blvd, Minneapolis MN

9:15 AM Board a Bus to the State Capital

10:00 AM Update on 2016 Legislature (Randy Morris)

10:15 AM Group Meeting with Key Legislators

10:45 AM Members meet with their Legislators (MASMS will have a talking point sheet)

available to use when you meet with your legislator.

Noon Board Bus to go back to Double Tree by Hilton Hotel; will have lunch on the Bus

# MASMS State Meeting & St. Cloud Convention Center Tour~ Tuesday May 10, 2016

Location: Kelly Inn, 100 4th Ave So, St. Cloud, Minnesota (Downtown St. Cloud)

9:00 AM Registration

9:30 AM Education Session ~ Powermind Training, Dr. Michael Monroe Kiefer 10:45 AM Education Session ~ Assistant School District Attorney, Peter Shaw

11:45 AM Legislative Update, Randy Morris

Noon Lunch

1:00 PM Formal Tour of St. Cloud Rivers Edge Convention Center1:55 PM Tour or Hotel Marriott and Hotel Best Western Kelly Inn

# MASMS April 2016 Chapter Meetings

Southern Chapter ~ Wednesday, April 20, 2016

Location: SWSC, 1420 East College Drive, Marshall MN

Northern Chapter ~ Thursday April 21, 2016

Location: Arrowwood Lodge at Brainerd Lakes, 6967 Lake Forest Road, Baxter MN

Northwest Chapter ~ Wednesday, April 27, 2016

Location: Engelstad Arena, 525 Brooks Ave North, Thief River Falls MN

To register for any of these events or meetings go to www.masms.org and select "Member Log-in" (Top of the window). Enter your username (first initial and last name; Enter password "masms" (unless you changed it). Select "Registration"; Select "The Event or Meeting you would like to attend"; Enter your name and organization.

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No matter how chaotic it is, wildflowers will still spring up in the middle of nowhere! .... Sheryl Crow





#### **New MASMS School Members**

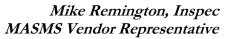
Joe France, Hinkley-Finlayson Schools Shaun Nelson, Bertha-Hewitt Schools

#### **New MASMS Business Members**

Dan Bavey, Mobile Radio Engineering, Inc. Neal Ray, Center for Energy & Environment Jeffrey Voeller, Tuff Stuff Solid Locker Inserts Jim Kovaik, Crotega

Alex O'Meara, Mannington Commercial
JoAnn Kasper, Batteries Plus Bulbs, Roseville
Steve Wielock, The Blue Book Bldg & Construction Network
Mike Olson, The Blue Book Bldg & Construction Network
Dustin Olson, The Blue Book Bldg & Construction Network
Ryan Benson, Northern Technologies, LLC
Brian Torney, ECSI Notifier
Michael Spetz, Minnesota Plumbing & Heating

# Vendor Corner





We all enjoy the great MASMS newsletter we receive, and you can help continue its success by submitting technical articles to Ruth for publication in the newsletter! Articles should be educational in nature and not a sales pitch or about proprietary products. Any topic or issue that would be relevant to School facility managers is welcome and needed! The Business Members of MASMS are a great resource for providing educational articles on various current topics important to Schools and School facility managers. Please consider submitting an article to Ruth soon at Ruth@masms.org, we need them for future issues of the MASMS newsletter!



If you are interested in having a mentor, please contact the MASMS office. We have many people who have expressed an

interest in being a mentor ~ they are here to help! Just let us know, and we can make the connection!





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# Managing The Aftermath of a Fire: Simple Steps to Help Limit Damage To Your School

Submitted by Scott Clemente, ServPro of Minnetonka

Our company recently performed restoration services on a commercial property damaged by a minor fire. The morning after it happened I walked the property with the facility director.

After we arrived on-site, he pointed me in the direction of the source of the fire, a malfunctioning piece of equipment, and explained how the damage was contained to the source room.

Upon closer inspection, we determined that while the fire was confined to the room where it started, the smoke damage extended into the hallway, the adjacent rooms on either side and, because of the way the HVAC system was set up, to several rooms a floor below.

This sort of scenario is not uncommon to the fire restoration work we do. Contrary to popular belief, when dealing with the after math of a fire, it is typically the smoke that causes the most damage and not the flames and heat.

The reasons for this are pretty straight forward. The smoke from a fire gets up into the air and then follows any air flow pattern inside the building. Closed doors and vents may help contain it but unless something is air tight, the smoke will find its way.

On top of this, the smoke from a fire is toxic and, depending on the source of the fire, it can become so acidic that the soot that lands on surfaces will eventually eat through metal. Because of this, if you experience even a small fire, it is important to ensure that any clean up that is done encompasses all of the damage. Otherwise, tables, chairs, desks, walls and anything else with even a minimal amount of soot will end up permanently damaged.

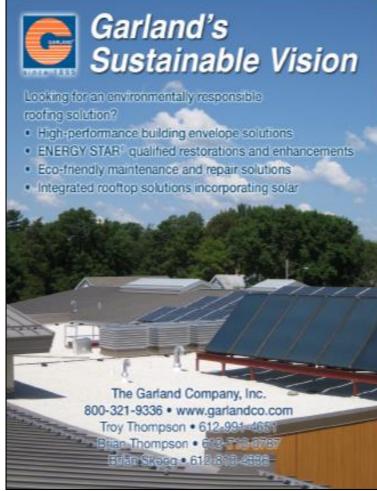
The following is a list of things you can do to help limit the damage to your school and the number of days facilities may be unusable:

- Place one or multiple air scrubbers in the affected area as soon as possible. An air scrubber will filter out the carbon and smoke that lingers in the air after a fire. Make sure it has both a carbon filter and a HEPA filter. The particle size of soot is approximately 2.5 microns (the dust you can see in the light coming through a window is 40 microns in size) so a normal air filter won't do a lot of good. The scrubber will help improve the indoor air quality (IAQ) of the affected areas and help limit secondary damage from the soot.
- Limit movement around the property. As mentioned, the soot from a fire can be severely corrosive to everything it touches.

  Damage to one room can quickly spread to another if it is tracked from room to room on clothing and shoes.
- **Protect the HVAC system.** The soot leftover from a fire and the smoke particulates that linger in the air can destroy HVAC systems. To help limit this secondary damage, put cheese cloths over the registers which will help filter the soot. You should also change filters that are part of the heating/cooling system daily for the first week after a fire.

Remember, after a fire, it is the smoke that will do most of the damage. The few simple tips outlined above can go a long way to limiting the cost of any kind of clean up from a fire that may be needed.

••••••





# Hey, what's new in drain cleaning?"

Submitted by: Clark Young, McDonough's Water jetting and Drain Cleaning

This question is thrown into many a conversation to start the flow "small talk". However, most times the listener is caught off guard and says: "ah, um, . . . not much" and "same old same old". Well, not this time! Guess what, in the sewer and drain business there is something new that is also old. Confused? Let me lift that cloud of double talk doubtfulness from you. Cameras, I'm talking about cameras.

Cameras have been around now since 1826 or 1827 (according to Wikipedia). With moving pictures coming along in 1889. What a wild concept at the time; pictures that could move and tell a story. Believe it or not, Thomas Edison had a hand in the next step of development; getting the crazy moving pictures camera adapted to be handheld and easily portable. The handheld video camera was eventually marketed to the general public (made famous by private citizen Abraham Zapruder in Dallas, November of 1963) to make home movies.

Today we have glamorized that moving picture machine by putting it on the end of a long cable and shoving it down your drain. Beautiful thought isn't it? Who hasn't wanted to see that imagery? What is really driving this new phenomena is the digital aspects of today's camera capabilities. We all know how simple it is with our smart phones. Everybody now has a camera for both images and video right there in their purse or pocket almost all the time. And storage, that tiny little micro disc is amazing! Well, this is so much better for putting in the hands of a Sewer Drain Technician.

Just 4 years ago, video cameras for the drain cleaning business were just as archaic as the first moving picture cameras

over a century earlier. To record a video of your drain that Tech had to lug a heavy machine around that was mounted on wheels and place a 7 3/8" x 4 1/16" x 1" plastic cartridge (remember the VHS) into the camera. But wait for it, here is the big reason they were not mainstream; that camera cost over \$20,000! And the picture, was black and white. Don't you want to see the colors in your drain? You actually do! Simply because it is easier to determine what the clog is and then how to go about removing the clog. This black and white system was not user friendly, would break a lot, the VHS tapes would get wet or damaged and the VHS tapes were bulky to carry around, etc.

Fast forward to today and now there are hand held units, using full color! They are lightweight, very reliable and so much easier to use. Plus all that is needed to record on is a tiny little flash drive. AND, the best part is the cost is 90% less! That's right, you can get a really decent camera for about \$2,500. One other really neat feature on some of these new cameras is the lens is fitted with a membrane that works like an eyelid. You press a button and it blinks to clear the, um, goop (for lack of a really disgusting truthful word) off of the lens.

Just check with the company that you use for unclogging your drains- and see what is new! Technology is a beautiful (may not be the best word choice with this topic!) thing!



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The Messenger



## History Committee Update

Based on several recent meetings, the History Committee is gathering additional information to create a more detailed MASMS historical timeline and overview that will ultimately be available for members in print and digital formats.

This will take some significant time and resources, so the completion date is still TBD. See below for some details on next steps.

- The history will be based generally by the decade, as outlined in our preliminary timeline.
- We have currently identified almost 20 senior Life Members, Members and Business Members to interview.
- The committee will be reaching out to the membership via the newsletter and emails in the coming months with additional requests and updates.
- Your suggestions are always welcome.

#### Please keep all of your old photos, videos, mementos and files!

What may look like a dusty old box or file for you can be a treasure chest of history for MASMS, so don't throw any of that out in your spring cleaning. Just contact any of the committee members listed below, and we'll take it off your hands!

#### **History Committee**

Mike Boland/Co-Chair, North St. Paul Mark Eisenbacher/Co-Chair, Cambridge/Isanti Don Hanson, South Washington County David Sheridan, Poolside Mike Warzeha, Life Member



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#### **How Flooring Impacts Classroom Performance**

by Michael Eckert, market segment leader for Milliken

When selecting flooring for schools, there's more to consider than price and design. Here's how flooring impacts four critical areas of classroom performance.

1) ACOUSTICS ~ Noise from HVAC systems, PA announcements, traffic, construction and other children can interrupt and interfere with teaching. In the average classroom, speech intelligibility is a mere 50 percent just four rows back (Siebein, 1998). The relationship between noise level and academic performance is well documented, yet many classroom sound levels average 65 db (Oberdorster and Tiesler, 2005). Schools can earn LEED certification points for classrooms with sound levels below 40 db, which are then used to qualify the school for different levels of certification, and in some instances, financial grants.

Carpet with open-cell cushion backing can help reduce both airborne sounds and ground level vibrations, minimizing the need for additional acoustic treatments.

2) INDOOR AIR QUALITY ~ Both broadloom carpet and hard flooring can trap moisture under their surfaces and create environments primed for mold and mildew to proliferate. Seamed carpet tiles with open-cell cushion backing allow moisture to escape the subfloor, reducing mold and mildew growth.

Allergens, which float freely in rooms with hard flooring, also contribute to poor air quality. In fact, studies show that the breathing zone over a hard surface floor can contain almost nine times more breathable particulates than carpet. Carpet can trap these allergens and allow them to be easily removed when vacuumed with a HEPA filter.

3) COMFORT ~ In recent years, The National Clearinghouse for Education Facilities and The Center for Green Schools have stressed the importance of indoor environmental quality on student performance. Studies clearly indicate that adequate daylight, thermal comfort and acoustics lead to significantly improved learning environments.

School aesthetics can cue student behavior. Soft carpeting in vivid designs can encourage quieter speech and help students enjoy a bright, warm and glare-free environment for engaged learning. Cushioned carpet can be useful for creating flexible learning spaces, making it comfortable for students to sit, stand and even lie down. Cushioned carpet will also reduce muscle fatigue for teachers who stand throughout the day.

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4) SAFETY ~ Slips and falls are the leading cause of injury in schools, and flooring plays an important role in minimizing these incidents. Carpet offers significantly more traction than hard surface flooring and reduces the likelihood of slip-and-fall accidents. In the event of a fall, carpeting can also reduce the risk of harm. Only 17 percent of falls on carpet result in injury, compared to 46 percent of falls on hard surfaces (Hedge, 2003).

# MASMS July 2016 Boot Camp

Wednesday July 20<sup>th</sup> and Thursday July 21<sup>st</sup>, 2016 —8:00 AM to 4:00 PM (Dinner at 6:00 PM on Wednesday evening) at the Holiday Inn, St. Cloud, MN.

**Cost:** MASMS will cover the cost of this training. This includes cost of class, hotel room for Wednesday night (and Tuesday night if 1.5 hour drive), and all meals. (Meals include: Wednesday lunch and dinner; Thursday breakfast & lunch; break for both days.)

#### **Boot Camp Information:**

The MASMS Boot Camp is specifically designed to provide training for facility professionals. The training will be of great value for newly employed facilities managers or seasoned veterans. Custodial—Grounds—Maintenance Management—Security—Health & Safety—Transportation

Contact Ruth at the MASMS office to register. Ruth @ masms.org or 320-685-4585







## MASMS Custodial ~ Grounds ~ Maintenance Days ~ June 2016

Each year MASMS holds custodial days in three parts of the state.

Here are the dates! This is a great way to thank your Custodial, Maintenance & Grounds Staff. Give Them A Day of.... Networking ~ Education ~ Vendor Information ~ Door Prizes ~ Great Food ~ Fun

Just \$25 a person! (Non-MASMS Members \$30) Registration Includes Snacks & Lunch!

June 15 –16, 2016 Metro Chapter Custodial Days being held in Orono Minnesota.

June 21, 2016 Northern/NW Chapter /Custodial Day is being held in Duluth Minnesota.

This event moves every second year from the NW side of the state to the NE side of the state—we are hoping that everyone can attend, however by moving it between these

two areas it may allow different members to attend that would not be able.

June 23, 2016 Southern Chapter Custodial Day—Mankato Minnesota

Watch for the registration forms—in your mail box in April!





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# Health & Safety Section

The MASMS Health & Safety Committee supplies information for this section each month. If you have a specific topic you would like to see covered, just let the MASMS office know (ruth@masms.org).



What is the OSHA standard for control of hazardous energy sources? The OSHA standard for The Control of Hazardous Energy (Lockout/Tagout), Title 29 Code of Federal Regulations (CFR) Part 1910.147, addresses the practices and procedures necessary to disable machinery or equipment, thereby preventing the release of hazardous energy while employees perform servicing and maintenance activities. The standard outlines measures for controlling hazardous energies—electrical, mechanical, hydraulic, pneumatic, chemical, thermal, and other energy sources. In addition, 29 CFR 1910.333 sets forth requirements to protect employees working on electric circuits and equipment. This section requires workers to use safe work practices, including lockout and tagging procedures. These provisions apply when employees are exposed to electrical hazards while working on, near, or with conductors or systems that use electric energy.

Why is controlling hazardous energy sources important? Employees servicing or maintaining machines or equipment may be exposed to serious physical harm or death if hazardous energy is not properly controlled. Craft workers, machine operators, and laborers are among the 3 million workers who service equipment and face the greatest risk. Compliance with the lockout/ tagout standard prevents an estimated 120 fatalities and 50,000 injuries each year. Workers injured on the job from exposure to hazardous energy lose an average of 24 workdays for recuperation.

How can you protect workers? The lockout/tagout standard establishes the employer's responsibility to protect employees from hazardous energy sources on machines and equipment during service and maintenance.

The standard gives each employer the flexibility to develop an energy control program suited to the needs of the particular workplace and the types of machines and equipment being maintained or serviced. This is generally done by affixing the appropriate lockout or tagout devices to energy-isolating devices and by deenergizing machines and equipment. The standard outlines the steps required to do this.

What do employees need to know? Employees need to be trained to ensure that they know, understand, and follow the applicable provisions of the hazardous energy control procedures. The training must cover at least three areas: aspects of the employer's energy control program; elements of the energy control procedure relevant to the employee's duties or assignment; and the various requirements of the OSHA standards related to lockout/tagout.

What must employers do to protect employees? The standards establish requirements that employers must follow when employees are exposed to hazardous energy while servicing and maintaining equipment and machinery. Some of the most critical requirements from these standards are outlined below:

- Develop, implement, and enforce an energy control program.
- Use lockout devices for equipment that can be locked out. Tagout devices may be used in lieu of lockout devices only if the tagout program provides employee protection equivalent to that provided through a lockout program.
- Ensure that new or overhauled equipment is capable of being locked out.
- Develop, implement, and enforce an effective tagout program if machines or equipment are not capable of being locked out...
- Develop, document, implement, and enforce energy control procedures.
- Use only lockout/tagout devices authorized for the particular equipment or machinery and ensure that they are durable, standardized, and substantial.
- Ensure that lockout/tagout devices identify the individual users.
- Establish a policy that permits only the employee who applied a lockout/tagout device to remove it.
- Inspect energy control procedures at least annually.
- Provide effective training as mandated for all employees covered by the standard.
- Comply with the additional energy control provisions in OSHA standards when machines or equipment must be tested or repositioned, when outside contractors work at the site, in group lockout situations, and during shift or personnel changes.

How can you get more information? OSHA has various publications, standards, technical assistance, and compliance tools to help you, and offers extensive assistance through its many safety and health programs: workplace consultation, voluntary protection pro-

grams, grants, strategic partnerships, state plans, training, and education. Guidance such as OSHA's *Safety and Health Management Program Guidelines* identify elements that are critical to the development of a successful safety and health management system. This and other information are available on OSHA's website at www.osha.gov.

Toolbox Talks ~ Click here for Toolbox Talk Topics: www.masms.org

Click on Health & Safety Toolbox Talks on the left! Lockout/Tagout Standards ~ Why they affect everyone!

# Partner with utilities to improve energy efficiency.

Submitted by Judy Ring, Xcel Energy

America's schools spend more than \$ 8 billion annually on energy, according to the U.S. EPA.

A good way to improve energy efficiencies in your buildings and help save your school money, is to partner with your energy provider. Many utility companies have account managers who work one-on-one with schools on their energy needs and ways to be more energy efficient.

#### How is energy used in your school?

Before deciding on energy saving solutions, it's important to know how energy is used in your school. Areas that use the most energy are the best targets for saving opportunities. An on-site energy assessment conducted by your energy provider is a great way to identify those opportunities. There are two types of assessments that are requested most frequently by schools through Xcel Energy: a Recommissioning study and a Turn Key assessment.

**Recommissioning study**: This in-depth assessment is ideal for school buildings and designed to identify functional systems that can be turned up to run as efficiently as possible through low- or no-cost improvement.

**Turn Key Assessment**: This program will provide an ASHRAE Level 1 assessment that identifies rebate eligible upgrades and offers implementation services.

#### Small improvements, big savings.

Once you know how your school uses energy and have identified saving opportunities, it's time to put a plan into action. Many schools have tight budgets so low- or no-cost energy reductions are important. Small fixes can have big savings. For every 1,000kWh that is saved by turning things off, your utility bill goes down by about \$100. Here are some quick fixes that can help your school save energy and money:

- Automate the turn off process and temperature controls. Adding occupancy sensors and controls that turn off lights and regulate heating and cooling can save energy.
- Use smart power strips with occupancy sensors that shut off plugged-in devices when no one is using them.

Use sink and shower controllers that automatically shut off after a certain time. Low-flow faucets and shower heads also help conserve energy used to heat water.

Jeff Schiltz

#### New construction – invest in energy efficiency from the start

If you're considering a major construction project, like a new building or a renovation, investing in energy efficiency from the start of the project can pay off in a big way over the life of the building. Your local utility can help you identify design consultation services which can help you evaluate and incorporate energy efficiency opportunities and rebates into your construction plans.

Your local utility may also offer many rebates on purchases of energy efficient products which can lower your up-front costs of making improvements and increase the return on your investment.

If you're interested in making energy-saving improvements at your school, contact an account manager at your local utility.



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#### MASMS CALENDAR

April 12, 2016, Day on the Hill

April 13, 2016, Southern Chapter Meeting - Marshall SWSC

April 21, 2016, Northern Chapter Meeting – Brainerd MN

April 27, 2016, Northwest Chapter Meeting – Thief River Falls MN

May 10, 2016, State Meeting—Kelly Inn, Downtown St. Cloud MN

June 15 –16, 2016 Metro Chapter Custodial Days—Orono MN

June 21, 2916 Northern/NW Chapter / Custodial Day—Duluth MN

June 23, 2016 Southern Chapter Custodial Day—Mankato MN



#### MASMS OFFICE

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