

SpotLight on Maintenance

OPFMA Newsletter - Connecting Knowledge with Public Facilities' Needs! Summer 2007 Page 1 of 9

Ohio Public Facilities Maintenance Association

Renewable Energy Solutions in Ohio

The global demand for onsite renewable energy is increasing as fossil fuels increase in price and concern grows about their economic and environmental impact. In short order, OPFMA member

communities will be looking to us to take a leadership role in investigating and implementing renewable energy sources. Clearly such activity will result in positive public relations, but as important are the increasingly attractive financial reasons to "go green." The most commonly used renewable technologies are solar, wind turbines, geothermal, wastewater treatment plant

digester gas, biomass, and landfill gas to energy. A brief summary of each of the technologies is

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Solar Energy

included in this article.

Photovoltaic energy is the conversion of sunlight to electricity through a photovoltaic cell (PV), a non-mechanical device usually made from silicon. The amount of sunlight in Ohio, combined with the current cost of PV devices, does not provide optimal economic payback without government or utility incentives. However, solar thermal energy (heat) is a currently viable alternative. Solar thermal energy is created by absorbing the heat of the sun with collecting devices such as flat-plate solar-energy collectors. Air or a heat collecting fluid passes through tubes within the collecting devices where it is warmed and then distributed to the appropriate heating system. Solar thermal power plants take the heated fluid process one step forward through the use of a heat transfer system to produce steam and then electricity from a conventional generator coupled to the turbine.

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Maximize your benefits

On the lighter side:

Einstein's - "summary report"

- Wisdom nuggets
- **Good Questions**

Computer talk

Wind Energy

Wind power is converted to electricity by a wind turbine. In a typical wind turbine, wind energy is converted to rotational motion which turns a generator.

The generator converts the rotational motion into electricity at medium voltage. Depending on the turbine size and your application, this voltage may power a specific facility or it can also be sent back onto the electric grid. Current wind data in Ohio indicates sufficient wind in many parts of the State to justify turbines, and more entities are evaluating this renewable energy source.

Geothermal Systems

With geothermal systems, ground-source heat pumps take advantage of the earth's natural heating or cooling through a series of pipes, called loops, installed below ground or submersed in a pond or lake. Fluid in the loop is pumped into the building, where a heat exchanger will compress it and release it at a higher temperature. In summer this process is reversed, removing heat from the building to cool the facility. Unlike conventional heat pumps, it is much easier for the geothermal heat pump system to capture heat from soil of a moderate temperature than from the frigid air outside. Conversely, in summer, the relatively cool ground absorbs waste heat more readily than warm outdoor air. The efficiency of this renewable energy source makes it attractive, and it is proven technology already here in Ohio.

Wastewater Treatment Plant Digester Gas to Energy

The average American creates about 100 gal of wastewater every day, which must be treated and purified before being reintroduced to the environment. Anaerobic digestion, a process many wastewater treatment plants use in purification, creates usable methane gas as a byproduct. A digester gas to energy system takes advantage of this gas byproduct by converting it into energy. Wastewater treatment plants can use digester gas to supply the heat needed to complete the digestion process itself, to generate electricity, or do both.

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Renewable Energy Solutions in Ohio

Continued from page 1

5% of people think

10% of people think they think

85% of people would rather die than think.

By Albert Einstein

Be quick to take advantage of an advantage!

Knowing is not bringing solutions acting upon the knowledge does.

Waiting until the situation gets out of control is paying dearly just to dig you out of the whole!

Biomass Energy

Biomass energy, which refers to renewable energy from plant and animal waste, takes advantage of stored energy from the sun. Through photosynthesis, the sun's energy is stored in plant material and passed along to animals and people in chemical form when consumed. When burned, the chemical energy in biomass is released as heat. The heat is used to boil water in biomass boilers, creating steam which is then used to turn turbines and generators to produce electricity. Examples of biomass fuels include wood chips or corn.

Landfill Gas to Energy

Cities, counties and private industries across the nation maintain landfills to meet the waste disposal needs of local businesses and consumers. While all of these landfills generate some level of methane, many of these landfills could be used to generate significant quantities of methane for re-use. The most common application is to develop a co-generation plant, where you use landfill gas to generate electricity for direct use or for resale. Using landfill gas to generate electricity offers more flexibility since it is not dependant on having a thermal or electric load close by since you can always sell to the power grid.

How to Implement Renewable Energy

There are several firms, like Johnson Controls, which can help OPFMA members analyze the most appropriate renewable energy solutions for your situation. Energy Services Companies (ESCOs) have the ability to take responsibility for the design, engineering, installation, commissioning, operation and maintenance of sustainable renewable energy solutions, and can also guarantee the financial performance of the solution, minimizing your financial risk of implementation while improving the environmental impact on our communities. Additionally, State and Federal grants and incentives are continually being rolled out to promote renewable energy, which will be critical to "kick starting" development here in Ohio.

Editor's note:

"Renewable Energy Solution in Ohio" article was provided by OPFMA Associate Member Johnson Controls, Columbus, OH - For more details you can call: (614) 751-4100 or e-mail: Mark.a.Zappe@jci.com

Awareness - the way to a healthier, happier you!

To correct anything, one must first be aware that there is a problem that left unchecked will create complex negative implications. You can control tension if you are aware of its first messengers and don't ignore them! When others noticed that we are tense for sure tension's messengers were ignored for a while.

There are nearly 700 muscles in your body, only four or five are used to hold your head, neck, shoulders, chest and back in proper alignment. Very few people have a healthy posture! This is not only unsightly it is unhealthy at a much deeper level than most people know.

The head-forward position stress every part of the body - and produces constant postural stress that contributes to vision problems, tension headaches, and fatigue and reduces the oxygen intake affecting every cell of your body. As a result a chain of body's negative reaction is at work and left unchecked brings much strife and pain not only to you but to those you work with or live with.

Remember to "watch you" once in a while! You'll notice the tension creeping up on your body! Your intense gaze, tight mouth, clenched teethes, frown forehead, shallow breathing - they are your body's voice telling you that stress is taking it over - "Take control, I'm losing the battle! Order everything to STOP for 2-3 minutes".

If your body is of any value to you, you come to its aid immediately!

Take action - stand up tall, walk way from the position that stressed your body even if for only 2-3 minutes! Look up to the sky or ceiling, on the left and right - involve other muscles than those used before the break. Take 4-5 deep breath; walk around for 2-3 minutes as you would if you would be a king!

Try a smile - costs you nothing - but brings huge dividends!

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OPFMA - 2007 Conference and Trade Show -

Just few months away!



The 2007 Conference Committee Chairman, and OPFMA Vice-President, Norm Sorge (B&G Medina city Schools) works closely and tirelessly with the conference committee and our administration to make the OPFMA conference a valuable and enjoyable event for our attendees!

Over the past two decades they've learned to expect high standards on all aspects of OPFMA conferences. We go the extra mile to meet their expectations! Meet the team behind the scene:

Tom Dodds - Lucas County Randy Crossley -Lima City Schools Wayne King - Franklin County Mark Wantage -OSFC Denise Zehner - Emerald Environmental Ted Howell - Energy Instruction Reed Tarkington - FSE Inc Mark Herbert - Pioneer Career & Technology Center, Shelby Jim Duckworth - Perfection Services Co. Ron Atkins - Retired from Mad River Schools John Beckemeyer - Oak Hills District Schools Constantin Draganoiu - Cleveland State University



Oct 29th & 30th Conference & Trade Show

Mark your calendar, Register now! The conference's agenda is packed with topics of great interest and utmost importance to the public facilities maintenance departments' employees at all levels. There are twenty-four sessions on five tracks to choose from and the largest Trade Show we ever had.

This year our key speaker will be from the Ohio Governor's office!

Clearly the highest public office in Ohio makes energy efficiency, safety, and security high priority issues and values the maintenance employees in the public sector! We have rented the largest salons that Crowne Plaza Hotel has for the exhibition - as more and new exhibitors are registering for OPFMA 2007 Trade Show - offering the best of the best services and products.

To keep pace with today's hot topics - be where the action is!

Enrich your knowledge, expand your peers' network and spend couple of days in a professional and friendly environment highlighted by nice meals, raffles and entertainment.

Participants and guests from organizations such as OBOR, BASA, OASBO, ODOD-OEE, DAS, ODH and others will be there in support of OPFMA efforts on continuing education of maintenance employees of public facilities across Ohio.

Reserve your seat today!

Visit <u>www.opfma.org</u> - get a print of the Attendee registration form - fill it in and fax it to our office. Remember, our staff is always ready and happy to assist you or answer your questions -Call (866) 570-7880 or e-mail us at: <u>info@opfma.org</u>

"Hard at work, Mike?"

"I'm foolin' the boss. He thinks I'm workin'... but I'm carryin' the same lot of mortar up and down all day." In today's fast-moving environment, there's a fair chance that those who become, or have already got lazy about learning will struggle to maintain and protect their career.

Technological advances and the flood of new information make it hard to keep up with what's going on. Even the most highly skilled people can see their supposed wealth of knowledge outdated within a few years; others find their jobs change beyond recognition, sometimes totally disappears.

It doesn't matter that much what specific field you work in - the principles or learning remain the same!

Life School

Be sure to develop some transferable skills too, as who knows what's around the next corner

Lifelong learning is perhaps the only way to keep up with the pace, and remain competitive in the job market. You should invest in your own growth, development and self-renewal. To a greater or lesser degree your company may assist, but it's ultimately up to you to ensure that you remain abreast of developments.

Try to make time each day/week for studying & reading - the more you know about what you do, the better you do it, the more valuable you become, resulting in greater job choice and security.

Starting a Small Maintenance Business

Being recently retired as a Public Schools Facility Supervisor, I have discovered a new approach to the world of work. I decided to start a small maintenance business, that allows me to do Construction, Maintenance, and Repair, for individual homeowners, and some businesses that I had contact with during my career.

You don't know what you can't do till you try!

I found that the general public has the same needs as any large or small business, for keeping things working properly, either keeping things repaired, constructed or replaced. It seemed to be a natural fit for me to start my own business, especially since I have worked either in housing construction, teaching, or maintenance of facilities most of my life.

First I had to ask myself few questions:

How does one go about starting a new business from scratch?

What are some of the scary details that one must consider to do this kind of work? There are many things to consider when you start a business, such as; legality, liability, expenses, recordkeeping, and the list goes on.

Step 1.

classes: To start incorpora those who thought and never did, and those who did and

never thought

Failures are divided into



When you are through improving, you're through.



Retirement

shouldn't mean

isolation and

desolation!

To start a business you will need to become incorporated, with a Catchy Business Name. You will also need to be registered with the State of Ohio. And a Federal Tax ID # also known as EIN

(Employer Identification Number) These can be easily accomplished by finding an internet site that can help file the appropriate paper work for incorporation. There are several sites that are readily available to do this.

You must decide the type of company that you request, such as an LLC (limited Liability Company), or if you form a partnership, or, there are several other choices. This site will also help you to file the paperwork to get registered with the State and Federal Entities.

Step 2.

Be sure you are covered with liability insurance. You can contact any insurance agency for Business Coverage, or add a rider to your homeowner's insurance policy to cover you New Business.

Step 3.

The need for a work related Vehicle. I found that the only way to do this kind of work successfully was to have a work van with mounted tool boxes inside, whereby I,

could carry all of the tools and supplies that are necessary to do this type of work and plenty of room to haul materials such as lumber and sheets of plywood and drywall. It is nearly impossible to have everything for every job, due to the variety of jobs that you will encounter, so I find myself changing tools and materials regularly to suit each job.

Step 4. - Business Accounts

I first found it necessary to open up a Banking Account to be able to deposit and track proceeds. Secondly Business accounts are a must. I have established credit accounts with a Paint Supplier, and a Lumber and Building Materials Supplier, and a Fleet Fuel account to track fuel costs. As your business prospers, you will discover other businesses that will need to add as suppliers.

Step 5. - Recordkeeping Keep Good Records. Start a file of any job that you do. Keep track of any Materials, Company Expenses, and Labor charges. This will all be necessary at the end of the year for reporting -- TAXES --Yes there are Taxes! This is another expense that you will need to consider, you may discover that a tax service will be needed to help file for you business.

WHY START YOUR OWN BUSINESS?

1. Do it because you like to do this kind of work! There are many needs out there for good service people.

To try and help people who do not know who they should call, or who they can trust.
 For your health, to stay busy and keep you from sitting around and getting soft in you old age.

4. The little extra that you may make after all is said and done, is a nice reward.

Sincerely, Ron Atkins Rent A Ron L.L.C.

SpotLight on Maintenance

OPFMA's Building Operator Certification

(BOC) course offering has proceeded as

Columbus and Cincinnati. There are 125

2006 calendar year!

series.

students registered to date and compares

well to 57 students registered in the same

period last year as well as 87 for the whole

The Cleveland Level 1 course concluded on

support of the Brewer-Garrett Co. for

hosting the series and thank Deborah

Gregoire for her enthusiastic assistance.

The Cincinnati BOC Level 1 course series,

the Cincinnati Trane office. We thank Ms.

Mary Crespy for her help in hosting the

with 25 students registered - the graduation date September 7th. The series is hosted by

The Columbus BOC Level 1 course started, as

planned, at the Northgate Center (Columbus

The series has crossed its mid-point in June

with a scheduled graduation date of October

19th. We thank Columbus City Schools and, in

particular, Mr. Dan Spence, PE for his help.

Ohio's first BOC Level 2 course series

started, as planned, on May 18th with 23

students registered and is hosted by the

Trane Columbus office. The series is into its

City Schools) with 27 students registered.

July 20th. We deeply appreciate the generous

planned. In July 2007 OPFMA has 5 course

series running simultaneously in Cleveland,



Good Questions...

Do you count your blessings, or do you think your blessings don't count?

Both enthusiasm and pessimism are contagious. Which one do you spread?

Do you make others feel bigger or smaller when they're around you?

If you were arrested for being kind, would there be enough evidence to convict you?

How many successful complainers do you know?

BOC Activities Report for the Second Quarter 2007

By Cornel Pod, BOC Program Coordinator

second half and will conclude on October 26th. OPFMA is very grateful to Ms. Mary Crespy for her help in hosting the series at the Trane Columbus office.

We welcome Mr. Jon Miller as our newest BOC Instructor. Mr. Miller is President of Aleron Inc. and an HVAC System Specialist with over 40 years experience.

OPFMA, as a result of HB251, has worked in close collaboration with the Ohio Dept. of Development Office of Energy Efficiency (ODoD/OEE) and the Dept. of Administrative Services (DAS) to create a BOC Level 1 course series for state facilities employees starting - July 26th. We thank Dr. Emanuel Anunike (ODoD) and Mr. Daniel Barr (DAS) for their valuable assistance. Also we appreciate Ms. Angelia Cleveland (Construction Activation), herself a BOC Level 1 Graduate, for serving as the main point of contact for state facilities employees across Ohio. Additional classes will be offered in the near future.

BOC classes are formed based on a regional demand basis. We have received inquiries from interested organizations about upcoming classes.

If you would like to be notified about upcoming classes in your geographic area, give us a call at (440) 756-5620; or e-mail us at: bocc@opfma.org

Job Juggling

When you're working on several projects at once, each with its own deadline, how do you get everything done? Here are some useful pointers....

- On your bulletin board, post a list of dates showing when each project is due.
- Get out your calendar and mark times when you're booked for regular staff meetings, workshops, and holidays - all those times you won't be able to work on your projects. (You may also want to note times when key co-workers will be unavailable).
- In the spaces left on your calendar, jot in times when you will work on each project. Keep those times sacred, and follow the schedule.

- If a project is complex, set intermediate deadlines for tasks to be completed before the BIG DAY.
- The week before a project is due, try not to schedule business lunches, medical check-ups, car maintenance or other tasks that can take you away from your desk during office hours and add to your stress level.
- Take your deadlines seriously. If you keep stretching them, they lose their ability to motivate you.

SpotLight on Maintenance

OPFMA Welcomes its Newest Members !

Be a Valuable Team Player -

Don't think of the team as "they"!

Working with a team can give you access to people you may not otherwise have met and who may offer you a needed support someday... Dear new members welcome aboard and we take the opportunity to encourage to contact us with any questions may have or assistance you may need - we would love assist you, but you must contact us - as this is the only way we could learn about your interests and needs!

Associate Members

Lesko Associates, Inc - Cleveland, OH - Mr. Robert W. Blatchford, Jr. Siemens Building Technologies - Worthington, OH - Mr. Paul Jablonski Waibel Energy Systems - Vandalia, OH - Mr. Greg Smith SchoolDude.com - Cary, NC - Mr. Bryan Coble

Institutional II

Lakewood City Schools - Lakewood, OH - Mr. Jay Roberts/ Asst. Operations Supervisor Mansfield/Richland County Public Library - Mansfield, OH - Mr. James K. Ousley/Facilities Coord.

Individual Members

Daniel Hardyman - Georgetown Exempted Village School District /Custodian- Maintenance Elizabeth Staugler - Write State University - Lake Campus - Manager Buildings & Grounds Charles E. Kelly - Ohio Department of Natural Resources - Building Manager Clifford A. Paulsen - Lotte Food Inc - Facility Manger Miguel Maldonado - Montgomery Education Prerelease Center - Maintenance Michael Hardeman - Montgomery Education Prerelease Center - Electrician

Congratulations BOC Graduates of Cleveland July 2007 Series!



Meet the July 2007 Cleveland BOC Class:

James Beachler (Ursuline College), Mark E. Brown (Barberton City Schools), Richard Ganyard (Parma City School District), John F. Gill (Cleveland Municipal Schools), Virgil Kline (Green Local School District), Duane Kortze (Green Local School District), William A. Lucas (Warren City Schools), George McCaffery (Cleveland Municipal Schools), Robert F. Misbrener (Kent State University), Ed Myers (Warren City Schools), Tom Nadelin (Wayne County Schools Career Ctr.), Ed Neal (Kenyon College), Lance Pearce (Medina City Schools), Stacey Raines (Warren City Schools), Roger Reinker (Medina City Schools), Shawn Shimko (Warren City Schools), James M. Simonson (Ursuline College), Jason L. Stake (Glinchmer Realty Trust), Joseph J. Tarkey (Cleveland Municipal Schools), Kevin Tisher (Warren City Schools), Giacinto Vaccarella (Maple Heights Board of Education) and Robert Walker (Warren City Schools)

OPFMA is happy to recognize and congratulate our newest BOC Level I graduates and to wish them all success, health and advancement!

This Cleveland series was held at The Brewer-Garrett Co. from Jan 26th through July 20th 2007 Special thanks to The Brewer-Garret Co for graciously hosted our classes.

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<u>Computer talk</u>

"I think there is a world market for maybe five computers" - by Thomas Watson, Chairman of IBM, 1943

"Computers in the future may weigh no more than 1.5 tons"-

Popular Mechanics, forecasting the relentless march of science, 1949

"There is no reason anyone would want a computer in their

home" -by Ken Olson, president, chairman and founder pf Digital Equipment Corp., 1977







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Our Focus Is On SOLUTIONS

Remember that ignorance is expensive.

Don't waste time waiting for inspiration. Begin, and inspiration will find you!

Maximize your benefits from Trade Show Visits

If you are among the many who will be attending trade shows this summer, these tips may help you get the most out of it.

Plan your strategy - compile a list of information needs and identify four or five exhibitors you must see. Prepare questions in advance - thoughtful questions reflect a serious customer and may afford you more time and attention with the exhibitors as a result.

Be assertive - trade shows only last for a short time, so you need to be able to get your information quickly. Don't be side tracked into talking with exhibitors who are overtly "pushy" or who takes ages to run through their standard sales "patter" to everyone.

Take advantage of free seminars - seminars and workshops provide a great opportunity to network and get up-to-date information on new products, technologies and trends.

Follow up - take action as soon as you get back to the office. Follow up with sales reps and exhibitors to stay "in the loop". Make the calls immediately or you'll soon find other things will take priority ...

Pump Installations

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By Tony J. Furst LEED AP Senior Mechanical Systems Engineer Heapy Engineering LLC

One of the items that are the most often overlooked by mechanical contractors is proper installation of base mounted pumps, these pumps are designed to provide many years of trouble free operation but this relies on the pumps being installed correctly per the manufacturers instructions.

The first issue with proper pump installation is the housekeeping pad; on the surface this seems to be a fairly routine task. Construct a concrete pad that will allow the pump to be mounted above the finish floor in the mechanical room so that the floor can be cleaned without danger of getting the pump motor wet. Actually the housekeeping pad serves a much greater purpose and that is to provide a solid foundation for the pump and also to greatly decrease the transmission of noise to the surrounding space. Proper noise reduction is obtained by providing a pad that has greater mass than that of the pump. The pad should have a minimum weight of 2 $\frac{1}{2}$ times the dry weight of the pump and suction diffuser combined. Secondly the housekeeping pad must be constructed in such a way that it is isolated from the building walls, one of the most common practices is to use the mechanical room walls as part of the framing for the forms when the pad is constructed. This practice will cause excessive pump noise to be transmitted to the building structure through the pad and into the walls. The noise transmission is heightened with block walls, as the sound tends to resonate and amplify within the hollow sections of the block. Working with the contractor and assuring that the pad is constructed properly can greatly reduce noise transmission to the adjacent space.

Once the pad is properly constructed the pump must be mounted and secured on the pad, generally the contractor will set the pump in place square the pump to the building and bolt the base rails to the pad. While this appears to be the proper procedure it actually causes more problems than one would seem to think. The most severe problem is that when the base rails are directly bolted to the housekeeping pad in most cases the pad is not absolutely level, then when the bolts are tightened the rails are distorted. This distortion however slight will cause coupling alignment and noise problems. This is complicated even more when the piping is connected to a pump mounted in this manner as the strain of the piping connections causes even further distortion of the base rails. Proper installation of the pump on the housekeeping pad requires that a minimum of four studs be installed into the housekeeping pad at the locations as indicated by the pump manufacturer (holes in pump base rails) the pump is then set over these studs. The next step is to properly level the pump; four one inch tapered wedge shims are to be placed at each mounting stud location and adjusted so that the pump is level in both planes and square to the structure proper coupling alignment.

Once this is complete the nuts can be installed on the studs and the pump base rails secured. The next step insures that the pump maintains a level set over its entire life, the inside of the base rails and the one inch gap between the rails and the pad need to be filled with non-shrinking grout. This insures two things the first is additional sound attenuation and the second is a solid base to maintain proper coupling alignment.

Well now that we have the pump properly set on an adequate housekeeping pad, the base of the pump properly grouted and the contractor is finally ready to start things up all we need to do now is throw the switch and move water right? Wrong, the final step before starting the pump is to check the coupling alignment and adjust the motor mounting as required to assure that both of the coupling halves are properly aligned. In reality this is a fairly routine procedure for any mechanical contractor but all too often it is never done and the pump experiences premature seal failure, drive coupling failure or worse motor failure. Alignment of the pump coupling involves nothing more than checking for parallel and angular misalignment, the use of a straight edge and your visual acuity, well ok maybe for some of us with bifocals it may be a bit more challenging. The easiest way to verify proper alignment after the pump is running is to place your hand on top of the motor while the pump is running, you should not feel any noticeable vibration, if you do then the alignment may not be correct. Should you choose to make the contractor verify the alignment while you observe then what you want to look for is that he places his straight edge on the pump coupling halves in two different locations, one top dead center and the other ninety degrees away, the straight edge should fully contact the coupling rim on both halves. If the straight edge does not correctly contact the coupling halves then the motor will need to be shimmed or turned depending on which alignment plane was incorrect.

Maintaining proper motor to pump alignment is critical to trouble free operation of your pumps and to that end annual alignment verification should be performed. In addition to the simple method of alignment detailed here there are more accurate methods available utilizing dial indicator or laser alignment equipment.

Once the pump has been properly installed and aligned at the time of initial installation the pump should provide many years of trouble free service provided that the pump and motor bearings are properly lubricated per the manufacturers recommendations.

Editor's note:

We encourage our readers for more details to contact the article providers! The newsletter only opens the door to matters of importance to the maintenance departments - but the experts who wrote the articles could assist your needs!

SpotLight on Maintenance

2007 OPFMA Board Members and Contact Information

2007 OPFMA Board Meetings

April June August October December

Board Meetings' Host

M.E. Companies 635 Brooksedge Blvd. Westerville, OH 43081

- Conference
 Committee meetings
 follows Board
 meetings
- BOC Advisory Committee meeting on July 25 2007

For newsletters' archive visit our on the Website!

www.opfma.com

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Note from Editor -

Dear member, OPFMA writes the "SpotLight on Maintenance" for you and for you only. I would like to have a "two way" communication in order to serve you better. Write me - be assured your identity will not me mentioned if you so chose!

Suggestions - sharing experiences - and constructive criticism, all of these would be very helpful and much appreciated.

Write me at: <u>editor@opfma.org</u> or visit our web site and click on "TELL ME MORE" - and let me hear your point of view!

Thank you! Alex



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Deadline for submissions of articles and photos is the first day of the month of publication. All documents for submission must be submitted in Word Format and sent as an attachment to email. All photos must be in JPEG or TIFF format and sent as an attachment to an email.

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