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The Plant Exchange is produced by members of the Plant Operations Division at the University of Michigan. Its purpose is to inform Plant Operations staff and the university community of activities, accomplishments, and information about our organization and the work we perform.

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new hires
PLANT OPERATIONS
September 2013 - November 2013

Facilities Maintenance
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Kyle Brown
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Richard Massey
Adam Shahin
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Utilities and Plant Engineering
Blake Brosamer
Justin Moik

in memoriam
September 2013 - November 2013

Ronald King

retirements
September 2013 - November 2013

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IT Rationalization, Shared Services, OS1, Facilities Maintenance Restructuring, Planet Blue, and UPE Process Improvement are all initiatives either being implemented by or supported by Plant Operations, and sharing a clearly-stated objective of improving the efficiency of the University.

Two initiatives—IT Rationalization and Shared Services—are University-wide. The others are unique to Plant Operations. In either case we all know that improvements in efficiency have the consequence of impacting on the number of people we need to perform the work after efficiency has been achieved.

Normally, this kind of situation would create a concern about job security in a typical business, but the University of Michigan is not a typical business. We have several factors that are creating just the opposite condition—a high level of job security. Let me elaborate.

The University has been experiencing an unprecedented period of growth, with several million square feet of space added to the campus over the past 12 years. This expansion has created a need for more positions to perform the O&M/Custodial tasks associated with this new space. This trend continues into the planning future. The Plant Department is also seeing an increase in retirement rates, most likely due to a rebound of the nation's economy and average age of the Plant workforce. Again the impact is to create more positions that will need to be filled.

As efficiencies begin to take hold of our operation, we are seeing more of the campus community reaching out to Plant to perform maintenance services. Plant service level agreements with Housing, Athletics, and NCRC have grown dramatically in the past few years.

Lastly, the administration of the university recognizes the value and importance of the men and women that make the “Michigan Difference”. The provost recently issued a letter to the campus community, stating that no one would lose their job at the university due to the Shared Services initiative.

What all this implies is that the University of Michigan is not only among the finest higher education, research and public service institutions in the world; it is also a people-focused institution. Plant Operations embraces this principle and will do all that we can to demonstrate that job security is part of what makes the University of Michigan a Great Place to Work.

Rich
As one of the world’s leading research institutions, the U-M needs to stay on the forefront of technology solutions in order to advance the university’s academic, teaching, research, and clinical programs. To help the University reduce overall IT costs, Plant Operations is adopting MiWorkspace and other IT Rationalization projects so that local IT (Plant IT) can focus more directly on unique services not provided anywhere else on campus, such as the Facility Management System (FMS), CCure Building Access system, the Casper time clock system, Electronic Billing System (EBS), and the Geographical Information System (GIS).

WHAT IT MEANS FOR THE AVERAGE EMPLOYEE

The benefit to employees is that once MiWorkspace rolls out across Plant Operations and the larger campus, everyone will be working with the same computer services, which will foster and facilitate the greatest amount of collaboration across units both within and outside of Plant Operations. For example, if you work in two different units, or work in multiple buildings, your experience with your computing needs will be the same. Wherever you are, the contact number for help is always the same—dial 4-HELP-(734-764-4357).

Some specific advantages of MiWorkspace for Plant Operations staff beyond the former Plant Windows 7 system are listed below:

• For MiWorkspace laptop users, you can contact 4-HELP from your home office or from a hotel in San Francisco to have your computer remotely administered for repairs, or to add print drivers or additional software.

• You can add printers from anywhere on campus so that you can print wherever you travel on campus.

• All computer hard drives are encrypted, thus preventing unauthorized access by anyone other than the owner of the computer.

• Google Drive and M+box sync are enabled for use, thus allowing easy access from your hard drive to your files stored in Google Drive or Box.

• Windows laptop off-campus access to your data with the same ease as on campus, without having to connect via U-M Virtual Private Network.

• No more roaming profiles. Yes, you still get a familiar desktop when logging into a different computer at Plant Operations, but you no longer see “out of space” messages due to large profiles.

HOW THE TRANSITION IS GOING IN PLANT—how many computers, people, and time frame for completion

Only those with active login accounts or computers are impacted by MiWorkspace. For Plant Operations this means that 870 users and 681 computers will be affected. As of November 15, three hundred computers have been moved, with the completion of the first phase in late December when MiWorkspace is finally moved into Utilities & Plant Engineering. Make-up dates for deferred computers and stabilization of the service will continue into March 2014.

While the rollout officially began on October 10, planning and preparation began months before in the summer of 2013. First, four Plant IT staff members were transferred to ITS to become part of Neighborhood IT.
These staff members included Jessie Miller, Dan Pope, Emma Ridener, and Glen Yeager. As new ITS staff members, they were assigned to Neighborhood IT to provide second-tier support, including deskside visits to fix problems on Plant Operations staff computers. In addition, Ed Triska, Ron Loveless, Jody Sherwin, and Jorge Palacio met almost daily with the project team to prepare the rollout plan and schedule for MiWorkspace. Jorge is the lead contact for the daily detailed schedule, and Jody continues to collaborate with ITS on the network, firewall, and other infrastructure issues for the transition. Both Jorge and Ron are in daily contact with the MiWorkspace team reviewing rollout problems and remediation steps.

Overall, the MiWorkspace project for Plant Operations is moving along amazingly well. There have been some speed bumps, although these are being addressed as they occur. For instance, there were reported delays on getting full functionality on day 1 after the MiWorkspace transition for some users. ITS has responded by trimming back on the number of computers rolled out on a single evening and by adding more staff to day 1 activities. There have also been some communication problems with some staff stating that they were not notified about the MiWorkspace update or MiWorkspace issues. Communication is being adapted to also include management, particularly for users who share a computer. Communication to staff, in general, will continue to be reviewed going forward for continuous improvement.

In any kind of major organizational change like this, there is always an adjustment by staff to the changes, both for the computer users and the IT staff. Plant Operations staff are adapting and learning to call 764-HELP to initiate IT service calls. The 4-HELP staff, neighborhood IT staff, and Plant IT staff are adapting to new processes for desktop support. So far, MiWorkspace seems to be successful for Plant Operations.

MiWorkspace provides a suite of desktop services, including printing, network connectivity, storage, security, software, and desktop support. The effort is part of a multi-year roll-out that began in 2012 with central administrative units, moving on to Plant Operations in October 2013, and onward to academic units across campus in 2014.

In 2010, the University retained the services of Accenture Consulting to conduct the first-ever comprehensive assessment of information technology, with a focus on consolidation and reduction of redundant IT services.

One of the outcomes of IT Rationalization is the consolidation of central administration IT desktop support resulting in MiWorkspace. The mail consolidation and the switch to Google collaboration tools were other outcomes that Plant Operations adopted in 2012. Two future outcomes of IT Rationalization that Plant Operations plan to adopt as services in 2014 are MiServer, a service to host servers; and MiDatabase, a service to host Microsoft SQL databases.

For more background on IT Rationalization, see: http://nextgen.umich.edu/projects/
Over the last few months, I have been under a lot of stress worrying about my mother. She has been suffering with many serious health issues lately. During this time, I have shared with my co-workers some of my concerns about the stress and difficulty of caring for an aging parent, all while trying to stay focused and productive on-the-job.

What I have found here in Plant Operations has amazed me. The overwhelming support, words of encouragement, and the abundant advice I have received is comforting. The ideas my colleagues have shared with me regarding things I can do to help my mother and my family muddle through this difficult time are remarkable.

I have worked in Plant Operations for nearly twenty-five years. My current situation has taught me the importance of a work/life balance. I have found so many friends and co-workers facing similar circumstances. We have all been able to support each other when we need it most. A work life/balance is very important to me during this difficult chapter of my life, and I am grateful for the support I have received from my superiors, co-workers, and friends.

Plant Operations is one of the best departments to work for at the University of Michigan, and the bottom line is that we are a family that supports each other during the good, the bad, and all the things in between!

For additional information regarding resources that provide assistance to UM employees facing the challenges of caring for a loved one, visit the following websites:
- www.umich.edu/~fasap/
- www.uofmhealth.org
- www.sph.umich.edu
- www.hr.umich.edu

The Plant Operations Respect & Inclusion Resource Team is here for you! Contact us at PO-RIRTEAM@umich.edu if you would like assistance connecting with resources, you want to find out more about our team, our mission, our values, or if you are interested in joining us. You can also reach us by calling 615-7644.

Now is the time … Let’s all pull together and give back!

We tend to be in a state of “I want this and I want that” when we should be thinking about how can I help or how can I give back. This holiday season, I plan on getting my boys involved in giving back to the community and learning the true meaning of being humble and selfless.

Here are some easy and great opportunities to help us reach our Plant Operations’ goal of $10,000 by December 31, 2013.

1. Donate online at Wolverine Access under the Faculty and Staff Announcements or
2. Visit the United Way Campaign website directly at http://uway.umich.edu/

Let’s make a difference and donate today!

Thank you,

Divna Marinkovski,
Plant Building & Grounds Services | 2013 United Way campaign volunteer for Plant Operations
Women in Plant

NEW PLANT SERVICE COMMITTEE FORMED—WOMEN IN PLANT

By Camie Munsell

Last spring, a new service committee was formed to address the interests of women in non-traditional roles and workplaces within Plant Operations. As defined by its charter, “Women in Plant” will work to foster career development and establish a tangible force for the recruitment and retention of talent.

First year objectives of our committee are to:
- Foster networks and informal mentoring for professional development and support.
- Advance professional development through quarterly, sponsored programs and the frequent sharing of information.
- Establish groundwork for the recruitment of women into non-traditional facilities career fields, especially in skilled trades and front-line management.
- Encourage systems within units to enable equitable access, within business parameters, to professional and leadership development opportunities.

A team of women stepped forward to form the founding committee and various subcommittees. We held a business planning retreat and began establishing networks with campus resources for women. Several of these resources are now linked on our website, along with other interesting topics and a campus event calendar.

We used an interest survey to identify each of our first-year program topics:
- Leading Innovation and Creativity in the Workplace
- Meyers-Briggs
- Networking
- Effective Business Communications.

We plan to reach out to target groups for each session, and we will be greatly appreciative of the supervisors we rely upon to help spread our message about available programs and resources.

The kick-off session in October was highlighted by a welcoming message from a very special guest - Laurita Thomas, Associate Vice President for Human Resources. She spoke to the group about creating innovation in the workplace and “thinking outside the box” to evoke change. Laurita focused on Joel A. Barker’s message of “Innovation at the Verge”, where differences come together to spawn innovation. This was a perfect echo of the strong support from the Plant Operations Lead Team in establishing Women in Plant.

This subcommittee exemplifies yet another investment in the value of diversity and providing a positive and supportive environment for everyone. As the founding chair, I am very excited about this year and look forward to joining many Plant women in events, discussion, and involvement for years to come. If you are interested to learn more about “Women in Plant”, please go to our webpage that can be found at the Plant Operations homepage under the Office of the Executive Director, and then go to Plant Resources.

Contact a Women in Plant program committee member near you:
- Hayley Barnes (Work Management/Scheduling);
- Molly Dicken (FM West Region),
- Cathy Hamilton (Work Management/Scheduling),
- Melissa Kennedy (Central Power Plant),
- Chris Nedrow (Facilities Management).

We appreciate behind-the-scenes support from Anna Balhoff (Plant Academy) and Mary Diskin (Plant Operations Executive Director’s Office).

Laurita Thomas was presented with a “union”, representing the joining of women in different capacities from throughout Plant Operations.
Surely every reader of the Plant Exchange lies awake at night wondering about steam traps. I do, and others should too, because steam traps are essential devices for making steam systems operate correctly and efficiently. When you look into the numbers, steam traps get very exciting indeed.

Steam traps are found on radiators, heating coils, fans, piping, and even air conditioning equipment that uses steam as an energy source. Traps are reliable and cost-effective devices, but like any other piece of equipment they don’t last forever. Failed traps can result in costly steam waste and cause other operating problems. A single bad steam trap on a small room radiator can waste over 7500 pounds of steam per year. Cost: $100/year. A failed trap on a low pressure steam main can waste more than 12 times that amount. A medium-sized chiller can use $5000 per day in steam when operating correctly, but a bad trap can easily double that cost.

Because the UM Campus is so large, there are literally thousands of traps to keep track of. Identifying and fixing failed traps one-by-one is difficult and time-consuming. As part of the Planet Blue initiative, the UM Utilities department and Facilities Maintenance adopted a new program of trap testing and repair using an innovative online database: Steamstar. In this program, testers “fly” through buildings on a scheduled basis, identifying and testing traps for proper function. Test results are entered into the database Failed traps are identified and FMS work requests are created for fitters to replace them.

The goal: minimize total labor effort and time between failure and detection/repair, and maximize energy savings. Added bonuses: constantly improving information on the installed base of traps, and a longitudinal data set that will allow us to analyze failures and improve reliability going forward.

At present writing, the Steamstar database documents more than 10,500 steam traps across campus, and more are added with each survey. Based on identified failures and repairs so far, 2013 figures calculate steam losses prevented at over 100 million pounds per year—annual savings of $1.4 million (Source: Steamstar Steam Trap Multi-Site Summary, Nov 2013).

Money isn’t everything. What about the environment? These savings amount to a carbon footprint reduction of 1.63 million pounds per year. For comparison, that’s about the carbon footprint of a fleet of 378 Toyota Prius Sedans, each driving 10,000 miles per year! (Source: UM Master Rates; www.carbonfootprint.com/calculator1.html)

Through this initiative, UM Facilities Maintenance and Plant Engineering also participate in Detroit Edison’s “DTE Energy Efficiency Program for Business Projects”. This DTE program encourages a wide range of energy saving activities by businesses and institutions, and covers more than just steam systems. We participate by documenting trap repairs to DTE, which reviews the submissions and issues rebate checks. Rebates can amount to $100/trap. At this writing the University has received rebates for lighting and steam of more than $40,000 in the 2013 program with five or six more 2013 submissions pending.

Rebates and one-off repairs, however, are side benefits. It is aptly said, “perseverance is the author of success.” The real program value is its sustained focus on trap reliability and energy savings over many years to preserve the gains from Planet Blue and beyond. Facilities Maintenance and UPE staffs are justifiably excited and proud to be part of this important effort.
NEW CHILLERS IN CHEMISTRY BUILDING

By Jim Vibbart and Mark Mau

In the fall of 2012, the long-planned $7 million project to replace two large chillers in the Chemistry Building began. Chillers are the devices that generate the chilled water used by air handling units’ cooling coils to air-condition a building. The building’s original steam absorption chillers were installed in 1988, and had reached the end of their useful life. Two 1300-ton electrical centrifugal chillers were installed in this project, joining another 1200-ton electrical centrifugal chiller installed three years before. Nine cooling towers were replaced with four new larger cooling towers. The new chillers have 974-horsepower motors which required a new 480-volt electrical substation. This substation replaced an existing 208-volt substation after the loads were transferred to another existing substation.

Many university personnel had critical roles in the overall success of the project, including lead mechanical engineer Mark Mau, who led the effort for Plant Operations to provide design input as well as serving as the project commissioner. The project was particularly complex due to the interior location of the mechanical room, and required moving very large pieces of equipment through the electrical substation room. Tom Walterhouse, the AEC manager in charge of the project, choreographed a complex series of electrical and building shutdowns with Chemistry Building facility manager Tracy Stevenson, contractors, and Plant Operations—enabling the project to be completed on time and with a minimum amount of disruption to building operations.

In early March, with outside air temperatures in the mid-20° range, four “precision” shutdowns of the ventilation system were performed resulting in no heat being delivered to the building for eight hours each time. During these shutdowns, the building could not be occupied above the first level due to air quality concerns. At the end of the shutdowns, systems had to be restored in an orderly manner, ensuring there was no damage to systems or the building.

The cooling tower replacement required the use of a large crane to remove the old towers and lift the new towers to the roof deck. This work was performed on weekends to minimize the impact on traffic in the area.

Two members of the Central Campus East Region were actively involved throughout the project. Ed Wilson, the asset supervisor responsible for the Chemistry Building attended project meetings to assist Tom and Tracy in coordinating shutdowns and the scheduling of CCER staff when needed. Ed’s extensive knowledge of the mechanical systems operating in the building was a big help to the project team. Ed was also involved in coordinating the safe removal and disposal of 3750 gallons of waste chemicals that were removed from the old chillers prior to removal. Air conditioning mechanic Scott Schaub provided his chiller expertise to the team throughout the project, especially near the end when the new chillers became operational.

The DDC controls for the system were replaced with the most up-to-date controllers and the system programming completely rewritten. Jim Beachum did all of the field wiring and Dan Stroebel did all of the programming. The new controls were installed and commissioned in a timely and efficient manner with no disruption to the building occupants. The new chilled water system was completed in late spring—just in time to handle the heavy seasonal cooling load. This project is a great example of the role Plant Operations has in supporting large infrastructure projects.
ReceNT ORGANIZATIONAL CHANGES WITHIN UTILITIES & PLANT ENGINEERING

By Jw Krantz

During the last half of calendar year 2013, the Utilities and Plant Engineering Lead Team experienced a few changes in their organizational structure.

Jw Krantz is currently the Interim Associate Director of Utilities and Plant Engineering (UPE). Jw can be reached by calling 936-9869 or by e-mail at jwkrantz@umich.edu. In addition to Jw’s Interim Associate Director duties, he is keeping in touch with all of his Operations & Mechanical Engineering (O&M) staff and projects with help from Eric Albert and the O&M Engineers.

Roy Anderson is the Interim Senior Manager for the Central Power Plant. Roy can be reached by calling 647-1898 or by e-mail at royander@umich.edu. Roy is also continuing his role as the Central Power Plant Maintenance Superintendent along with his Interim Senior Manager duties.

Ray Garrett now heads the URI/GIS staff as the Senior Manager and reports directly to the UPE Associate Director. Ray can be reached by calling 764-2105 or by e-mail at rcgarret@umich.edu. Ray and his team are responsible for the UPE GIS website. The function of this website is to consolidate the location and documentation of UPE and other appropriate assets into an easy-to-use interface. The team is also involved in a number of different areas including UPE PM planning, UPE electrical print updating, UPE Distribution Management System (DMS), and is UM’s Miss Dig administrative liaison.

Below is the organization chart for the current Utilities and Plant Engineering Lead Team:
CONSTRUCTION SERVICES ALIGNMENT

By Paul Guttman

Construction Services current organization structure was developed in 2002. In the past ten years campus has grown and changed significantly. Construction Services decided to study their organizational structure and determine if adjusting their structure would improve the services they provide to their customers.

Our Senior Managers knew our direction required a strong customer focus and we began by developing a mission statement for our efforts:

Adapt the organizational structure of Construction Services to improve our current processes and increase flexibility during times of fluctuating workloads and changing customer expectations.

The department did a deep dive into the demographics and characteristics of the work orders the department had performed and decided the best way to achieve the goal was to create a campus wide group dedicated to performing our minor work orders. This work would involve the talents of six skilled trade employees and would perform approximately one million dollars of work on 2,800 work orders per year. Transition of minor work orders to this new group took place during the month of August and on September 3 this group assumed full responsibility for the oversight of minor orders.

The balance of our renovation and small work order would be performed by three groups within our department which would be dedicated to perform work in specific geographic areas of campus. Additionally a lot of effort was expended to develop standard processes to be followed by all managers and trades people in our department. This standardization will allow the department to utilize our work order system more effectively.

We made the changes with the goals of achieving improvements to the work we perform. The department is very concerned about what our customers think of our new efforts. We invited comments from the campus community this fall and will inquire again in the spring of 2014.
TWO NEW FACES IN CONSTRUCTION SERVICES SIGN SHOP

By Matt Wilson

Construction Services recently hired two new Sign Makers, and we would like to introduce ourselves. We are Matt Wilson and Dustin Gilbert.

Dustin and I are excited to bring some great new products to the Construction Services Sign Shop that will greatly benefit our customers here at the University of Michigan. Some of the new products include wide-format printing, full color displays, wall coverings, window and floor graphics, and vinyl wraps and posters. We are also bringing in some environmentally-friendly products made here in the USA.

Please feel free to contact us to discuss any of your sign-related needs.

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