Volume 13 Issue 6 CLEMSON UNIVERSITY FACILITIES November/September 2013

The Facilitator

Protecting the Environment Through Stormwater Management

By Robert McCrary and SCDHEC Website

During a storm event, rainfall is either absorbed into the ground or, as the ground becomes saturated with water, it flows across the surface of the ground toward a downstream point. This is commonly referred to as stormwater runoff. As the runoff flows across various surfaces, it has the potential to accumulate and transport pollutants like sediment, debris, and chemicals. If left untreated, stormwater runoff can impact water quality, harm or kill fish and other wildlife, and may even flood downstream areas. Therefore, an effective stormwater management program is vital to control runoff.

Construction and other industrial activities significantly increase the chances that stormwater runoff will accumulate pollutants, as existing land is either changed or subjected to industrial exposure. For this reason, these activities must comply with both federal and state stormwater regulations to ensure that polluted stormwater runoff does not have an adverse effect on receiving water bodies.

There has been quite a lot of talk recently regarding something called an MS4 (Municipal Separate Storm Sewer System.) An MS4 is a storm water conveyance or system of conveyances that are:

- Owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.
- Designed or used to collect or convey storm water (including storm drains, pipes, ditches, etc.)
- Not a combined sewer and
- Not part of a Publicly Owned Treatment Works (sewage treatment plant).

In order to be subject to a South Carolina Department of Health and Environmental Control (SCDHEC) permit for such a system, an entity must have a certain population base or density— something Clemson did not until recently. States are taking in more and more areas so that the vast majority of storm water in this country will be treated as an MS4. SCDHEC has, of this writing, not released their new permit, but we have been led to believe that Clemson will be covered by it, and will have to abide by all of the restrictions within that permit.

Why is this important?

SCDHEC will mandate that, through the use of proper storm water management, drainage systems can be designed to address water quantity and quality concerns, alleviating downstream flooding problems and aiding in the restoration of waterways towards supportive conditions conducive to state wildlife and public usage.

In order to achieve this goal, we will have to be compliant with the restrictions placed on us by the MS4 permit. This will not happen in a matter of months, or even a few years – it is going to require some time and adjustment before we come into full compliance – but we must begin now before we are actually mandated to do so, or we risk falling behind in our program.

The basic means of compliance is the term “Minimum Control Measures”. Because storm water is generally deposited into streams, rivers, lakes, etc., without treatment, these measures were developed to minimize the amount of pollutants discharged into receiving water bodies. The six minimum control measures that must be addressed by Clemson’s MS4 program are: Public Education and Outreach; Public Participation/ Involvement; Illicit Discharge Detection and Elimination; Construction Site Storm Water Runoff Control; Post -Construction Storm Water Runoff Control; and Pollution Prevention/ Good Housekeeping.

Robert McCrary will be happy to answer any questions by calling him at 722-7190 or by email at mccrary@clemson.edu.

Campus Kudos

Letter to Tony Putnam:

University Housing & Dining is very grateful for the exceptional support provided to us by Snowil Lopes over the life of the Holmes Hall Occupancy Sensor Pilot Study. Snowil is a highly capable individual who provided great value to this project. We fully appreciate the work that Snowil did on this project and acknowledge the success of the pilot was greatly enhanced by the research, planning, implementation, guidance, and leadership that Snowil provided.

On multiple occasions, Snowil spent many hours verifying and troubleshooting issues associated with the pilot project. He also spearheaded the development of the technical specifications for the Holmes Hall occupancy sensor installation project, which is to take place in the summer of 2014. That project will retrofit Holmes Hall with the occupancy sensor technology based on the empirical information gathered during the Holmes Hall Occupancy Sensor Pilot. The study showed that the occupancy sensor technology will provide approximately 30% energy savings. We hope to retrofit most of the residence halls that utilize fan-coil units with this energy efficient technology.

Sustainability is one of University Housing & Dining's core values. Snowil's efforts have helped us in the process of making our residence halls more energy efficient which will help us achieve our goals. In addition, Snowil has been a pleasure to work with and we look forward to working with him in the future.

On behalf of University Housing & Dining, thanks to you and Snowil for your continued support!

James Bonney, PE, LEED AP
Associate Director of Housing & Dining Projects

IT Tidbits

By Keith Jones

Have you ever needed to print something and by the time you get around to the printer, either someone has accidently picked up your document, or is standing there reading it? There is a solution.

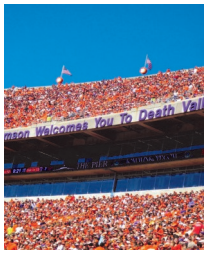
Several of our printers and multi-function devices (copiers that can print, scan and fax) are now capable of job storage. Instead of having the print job processed right after you click print, you can opt for the printer to store your job until you get there. When you reach the printer you can use the interface to print the job then.

Print jobs that are stored at the printer can be secured by picking a personal 4-digit pin code when you go to print. Jobs will stay on the printer until someone punches in the correct 4-digit code. This is a good choice if you're printing out information that is sensitive in some way (HR-related materials, EPMS reviews, etc.)

If you would like to know more about job storage and how to perform this useful feature of our print network, Support Services IT would be happy to show you how. Contact Keith Jones at 643-6369.

Cell Phone Service Update

By Cecelia Jackson



As the end of football season approaches, Verizon Wireless users should see a significant improvement in cell phone signal strength over the next couple of months.

In August 2012, Verizon installed a state–of-the-art 4G wireless Distributed Antenna System (DAS) behind the tiger paws in Memorial Stadium, including separate antenna locations mounted throughout the facility to boost network strength and capacity. Not only has this not worked very well on game days, but everyday usage for our building has been substandard, at best.

In order to alleviate some of our immediate concerns, Verizon engineers installed Network Extenders in our building while we waited for a separate DAS system to be installed. Unfortunately, the network extenders have not helped much and the DAS installation has been scrapped due to a number of engineering problems.

Don't give up hope yet though, as another antenna is set to be installed at the North End of the stadium very soon. Hopefully, that will take care of the signal strength in this building. Let's keep our fingers crossed!

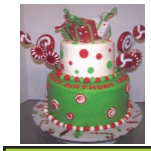
I would like to thank everyone for their continued patience while Verizon works through the service issues. Please let me know when, and if, you see any improvement in service.

On a Lighter Note

Vicki Durham and Patrick Fant having fun at Maintenance Stores on Halloween.

The Pride of Pendleton Wins State Competition!

On 10/26/13, The Pride of Pendleton Marching Band won first place at the state 2A band competition at Spring Valley High School in Columbia, SC. There were 18 bands that earned the right to compete in the 2A division. Lisa McElveen's daughter Emily, a junior at Pendleton High School, is the drum major. This is her first year as drum major, her 5th in the marching band, and her 3rd state champion medal. The Band has worked very hard since early July to achieve this, and not only is Lisa a very proud mama, but she is proud of all of the students, staff, and parents that worked so hard for this end result. Pictured on the left is Emily and the new Band Director, Mr. Moss with the trophy and on the right, the entire band. Congratulations!



Birthdays

December

12/2	Roger Arflin
12/3	Annie Lee
12/3	Claudia Johnson
12/3	Michael Schoen
12/4	Paul Minerva
12/5	Ron Hall
12/5	Bradley Justice
12/6	Mark Wilson
12/7	Walter Johnson
12/9	Evelyn Gantt
12/14	Ron Katona
12/14	Brad Felty
12/17	Chuck Balch
12/18	Ken Burgess
12/20	Sam Zanca
12/28	Mark Lyles
12/29	Ray Turner
12/29	Will Bottoms
12/30	John Howard
12/31	Allen Lohmann

January

1/1	William Knox
1/1	Ricky cox
1/2	Christie Snider
1/5	Patricia Fruster
1/6	Melvin Sexton
1/6	Steve McMahan
1/6	Billy Grant
1/6	Shantel Smith
1/9	Anthony Coogler
1/10	Mike Owens
1/12	Steve Shiflet
1/13	Claude McKern
1/16	Warren Wang
1/20	Frankie Pressley
1/24	Dianne Spearman
1/24	Larry Wilbanks
1/25	Martha Weidendorf
1/26	Samul White
1/30	Rod Oliver

University Facilities Newsletter,
November/December 2013
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Retirees

Susan Heron	19 Years
Ricky Patterson	7 Years
Eric Martin	16 Years

Service Awards

Mitch Merrit	10 Years
Mack Whitmire	10 years

New Hires

Lee Robertson, Outside Utilities
Jonathan Sturner, Outside Utilities
Glenda Cotton, Support Services
David Martin, Landscape

Annual SPCC Training

All Clemson University personnel who handle oil in the course of performing their job, or who supervise personnel who handle oil, are required to take SPCC training annually. The following areas need to complete the training and quiz by the end of December 2013:

* Maintenance Areas: Central, East, West, Structural, Main. Utility
* Utilities Areas: High Voltage, Outside Utilities, CEF, WWTP, Chillers
* Landscape Services
* Maintenance Stores

For employees/shops that prefer the classroom method please contact Tim Nix.

To ensure proper documentation of training records, please email Tim Nix when training is completed.

The online course can be found at:

http://www.clemson.edu/facilities/es/training/index.html

Campus Wide Power Outage

On Wednesday, November 27, the campus had a major electrical outage when a primary 12,470 volt power cable supplying the President's House utility transformer failed/faulted. A complete outage on campus ensued between 1 and 2 pm. The specific fault may have been a cable or transformer issue; however, there was a vermin hole indicating the possibility that an animal may have gotten into the enclosure for warmth. This particular cable and transformer were recently inspected and scheduled for replacement in two weeks.

The damage was much greater than expected because the main feeder breaker did not trip in the University's sub/switch station, which resulted in a more extensive campus outage. The fire that resulted damaged the President's House transformer and back-up generator set, underground and tunnel cabling for the transformer and one of the loop circuits to Byrnes.

A special thanks to everyone who worked during the holidays to restore service including CUFD, CUPD, and our own Bret McCarley, John Gambrell, Joey Green, Warren Scovil, Scott Richey, Tim Brown, Jay Whitmire, Dennis Roach, and Mike Smith.