

# AT YOUR SERVICE



## Message from the desk of Harold D. Johnson

Associate Vice President, Facilities Management & Construction

Many of the articles in our June 2008 issue will speak to green initiatives. Therefore, I would like to take this opportunity to invite you to visit the FMC website, now and in the future, to stay informed on our efforts to reduce the university's carbon footprint. Also, I thought that we should share the PowerPoint [presentation](#) given at the June Board of Regents meeting to serve as an overview of FMC's effort on behalf of the university. Although, most of our articles address university issues, from time to time we will include tips on how to save energy or green your home. Hopefully the tips that follow will reduce your personal carbon footprint and help prevent climate change at your home:

- Develop and implement a personal energy strategy that reduces your carbon footprint by cutting emissions at home.
- Many of us think that if the oil companies produced more fuel the price would drop.

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Remember that the cheapest way to produce more energy is for each of us to use what we have more efficiently.

- Drive less and walk more. Use public transportation more where possible.
- Turn off the lights when you leave a room. (Every time.)
- Upgrade your appliances to the more efficient "Energy Star" as replacements become necessary.

Please see *Message from Harold Johnson* on page 8

## Everyday Decisions Can Make a Big Difference

by Ronald Tarbutton, Director of Physical Plant

### Toiletry Paper Adds Up

You may know that annually, Facilities Management purchases paper towels, facial and toilet tissue made with 40%, 20%, and 10% recycled content, respectively. The use of recycled content products helps us reduce the university's impact on the environment. A few facts you may not be aware of are: TWU consumes 15,231,441 linear feet of toiletry paper products every year. That equals 2,885 miles of paper. Stacked end to end that is enough paper to reach from the Denton to the Houston campus and back over five

times! Conversely, based on this annual consumption we save enough trees to produce the equivalent of 4,372,178 linear feet of toiletry paper products each year. This is equivalent to a distance that stretches from Denton to the Houston campus and almost all the way back to Denton again!

### Paper Recycling Program Ramping Up

This summer TWU will roll out a broadly structured paper recycling program with enhanced visibility. We hope to increase the amount of recycled paper on campus and if successful then consider expanding the recycling program to include additional materials in the future.

Please see *Everyday Decisions* on page 4

## Greening a Campus

by Bill Morgan, Director of Construction Services

The last FMC publication talked about what it takes to create a campus – that intangible sense of place that resonates with students, faculty, staff and visitors. This article explores one social imperative that is receiving much deserved attention – ‘Green Buildings’. The built environment has a profound and direct impact on each of our lives. The facilities industry have pursued ‘smart’ buildings for years to maximize the social, economic, and environmental benefits of our campuses. Some of the benefits of our efforts include:

### Social:

- Occupant Safety, Comfort & Health
- Quality of Life
- Support of TWU’s teaching & research mission

### Economic:

- Reduce energy
- Reduce Operating & Maintenance Costs
- Improve functionality of spaces
- Optimize Life-Cycle Performance



Equipment and supplies being used to build the new Golf Course Clubhouse.

### Environmental:

- Improve air and water quality
- Reduce waste streams
- Conserve and restore natural resources

The aforementioned benefits become tangible when we are planning, designing, or constructing a building. The Denton Campus’ Science Building is no exception, as we qualify for many LEED certification criteria. Included are a sustainable site, water efficiency, energy conservation, natural materials, indoor air quality, and innovation in our

Please see *Greening a Campus* on page 4

## Central Plant Braces for Impact

by Ward Sheeder, Assistant Director of Plant Utilities

We would like to say welcome to Keith Sanford and Cliff Carter who have joined our staff in the Power Plant. The Plant Utilities staff (Central Plant and HVAC) has over 250 years of experience in our respective disciplines and over 100 of those years were earned right here at TWU!!

This level of expertise is critical to energy conservation strategies that reduce consumption and ensure our customers comfort while facing tremendous electrical cost increases, approximately \$870,000 this year alone, on the Denton campus. Reductions can and are achieved by implementing tight schedules on our HVAC systems in every building, continuous monitoring of our building automation systems, and tweaking set-points throughout the campus.

Also, worthy of note, the Plant Utilities staff

just conducted an extensive investigation and evaluation of a broad range of complex environmental issues that plagued Bralley Annex Building for years. An action plan was developed and all repairs were accomplished in-house.



### VEHICLE REQUEST CHANGES

Please be aware that some of the methods by which we do business are changing and one area is of particular interest to those departments that use our Fleet services. The new fax number for vehicle requests is **81-3148** and the forms will now require a valid TWU email address for anyone requesting a vehicle. In addition, **pickup and drop-off will be at the north entrance of the building.** (The same entrance you enter for keys.)

## Pitching In

by Dennis Maddux, Supervisor of Custodial

Custodial Services is doing its fair share to pitch-in and encourage the recycling effort at Texas Woman's University by purchasing green. Did you know that the university uses:

- 1,012 cases of flat paper towels. That is the equivalent of covering 2,597,828 square feet or 59.63 acres. **40% of that material is made from recycled fiber.**
- 1,050 cases of multi-fold paper towels that are equal to covering 2,562,000 square feet or 58.82 acres. **Of that total, 40% is made of recycled fiber.**
- 287 cases of single-ply toilet tissue, equaling 2,551,085 square feet or 58.56 acres. **Of which, 20% is made from recycled fiber.**
- All paper products, chemicals, trash can liners, etc. are purchased in bulk and packaged in recycled, corrugated containers.

Custodial Services has conducted a physical survey of the campus buildings and inventoried recycling container needs for the new campus recycling program.

## Dallas Campuses Looking Great

by Lyle Tremmel, Supervisor of Facilities - Dallas

The Parkland facilities staff is in the process of installing a new hot water circulating pump to provide a consistent supply of hot water; enhance the comfort of students, faculty, and staff; and increase energy efficiency. One of our two chillers has just been rebuilt as well, and the second chiller is scheduled to be rebuilt in the very near future. This proactive maintenance will ensure sufficient cooling for the summer months and save energy.

At the Presbyterian Campus, the exterior doors have been given a much needed facelift (a new coat of paint). Our staff is also testing a new air filtration system in the air handling units that should provide a more efficient air supply while lowering cost and reducing waste.

It should be noted that the custodial staffs at both the Parkland and Presbyterian campuses have been extremely busy stripping and waxing all vinyl floors. As always, the campuses will be ready.

## Busy Break for FMC

by Kenneth Burt, Supervisor of Building Maint.

Classes are out so we can start our annual summer ritual of working on various construction projects to get ready for the upcoming year. Some of you may have noticed that we have already renovated two smaller classrooms in Pioneer Hall into one larger classroom to accommodate a larger number of students as class sizes continue to grow. An additional office has been constructed in the Guinn Hall housing staff area and many other projects are scheduled for completion in the next eight (8) weeks or so.

We have responded to the concerns of students, faculty, and our vendors who pick up keys, vehicles, office supplies and attend meetings at the Central Services Center by adding a few new parking spaces on the north end of our building. New solar powered parking lot light standards have been installed to light this area as an energy saving feature. The new standards are an environmentally friendly pilot project that, if successful, can be expanded to other areas on the Denton campus and to Dallas as well.

## The World is Becoming Ever-Green

by Robert Trevino, Supervisor of Landscape

Landscape Services has been part of the Green Initiative for the past few years by implementing the following in our work duties. All equipment that maintains the campus landscape was purchased with mulching kits attached. These kits enable the landscape staff to mulch all excess grass and leaves and in turn provide beneficial nutrients back into the soil. The trees that did not survive the extreme weather have been cut down, ground, and turned into compost for the flower beds on campus. Also, in order to reduce any overwatering due to malfunctioning irrigation controllers rain/freeze sensors have been installed on all irrigation controllers in the last few months.

As always, Landscape Services will continue to provide greener services.

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### **Food for Thought**

One measure of a successful recycling program is how much is recycled. Consider the following question, will we one day find ourselves asking if a measure of success is how we minimized our need to recycle by using less? The “greenest” recycled paper is the paper never used which equates to uncut trees. This costs nothing. If you apply these same principals to items we consumed and activities in our daily lives, ask yourself if you really need to print an email, newsletter, or information from the internet. We all need water but do we really need the plastic bottle and its environmental consequences? Decisions on a daily basis can make a big difference.



## Mosquito Safety

Here are a few tips to protect yourself and your family from mosquito bites and mosquito-borne disease.

- Eliminate all standing water on your property.
- Dispose of or store in a dry place any unused tires, bottles, buckets, canoes, boats, wading pools, etc.
- Drill holes in the bottom of recycling containers.
- Clear roof gutters of debris.
- Repair leaky outdoor faucets.
- Change the water in bird baths and plant pots weekly.
- Avoid water collecting on pool covers.
- Plug tree holes and stumps.
- Keep shrubbery and weeds trimmed

*Source: American Mosquito Control Assoc. website*

## Weird Trivia

Since moving into the new Houston Center campus, the consumption of toilet tissue has inexplicably doubled. The only plausible explanation seems to be that the new height of the dispensers (which are 3” to 4” higher) have made them more accessible and therefore people use more paper.

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design processes. We have incorporated roof materials that reduce the heat island effect, included dual flush low-flow toilets, diverted 75% of construction waste from landfills, selected certified wood, specified low-emitting materials, and have an Indoor Air Quality management plan *during* construction.

It is interesting to note that occupied buildings account for:

- 39% of total energy use
  - Houses account for 55% of that use
- 12% of the total water consumption
  - Houses account for 75% of that use
- 68% of total electricity consumption
  - Houses account for 51% of that use
- 38% of the carbon dioxide emissions

Facilities Management has developed and implemented green (or energy) strategies for at least seven (7) years.



Click on the picture above or the link below to find out how to lower your personal contribution to global warming.

[http://www.epa.gov/climatechange/emissions/ind\\_calculator.html](http://www.epa.gov/climatechange/emissions/ind_calculator.html)

## Designing Smart to Achieve Green

by Bill Bussman, Manager of Facilities – Houston Center

After almost two years in operation, the new Houston Campus (HIHS) is proving to be quite “Green.” Marrying old school passive technology with state-of-the art new technology has created a winning combination for reducing energy cost and the university’s carbon footprint.

In the old days, more power was the theme with little thought of any future shortages. To put things into perspective, the old TWU campus was built when energy costs were low, gasoline was 18 to 28 cents per gallon, natural gas and electricity was dirt cheap, and any thoughts of energy conservation were far off on the horizon. The buildings were constructed in the following fashion:

- Basic concrete structures, painted or with strictly aesthetic brick veneer.
- Single-pane plate glass windows.
- A huge high-volume air-conditioning system that kept the environment somewhat comfortable in most areas.

Today, the new Institute of Health Sciences Houston Center, without residence halls, is still about the

same size (in square footage) as the old campus but with more classroom and lab spaces to accommodate future university growth. Carefully

“Marrying old school passive technology with state-of-the art new technology has created a winning combination for reducing energy cost.”

designed and built, the building utilizes:

- Passive sun-shading louvers and e-glazing tinted double-paned gas-filled glass that shades the building from summer sun and takes advantage of winter sunlight to help with heating
- Outstanding building orientation that capitalized on daylight views and open atriums
- Very effective, longer lasting, high-efficiency lighting
- Low VOC paints
- Automated speed controls on all mechanical equipment allow for precise air temperature

management where fresh air is first filtered twice, pushed through an energy recovery wheel to remove humidity while allowing for increased efficiency in the transfer of heat for cooling. The air is then continuously double-filtered, conditioned to the required temperatures and sent out only to the areas requiring it. Simple in concept yet highly efficient.

While utility costs are skyrocketing today, the new TWU Institute of Health Sciences Houston Center is posting record low utilities, approximately 40% less than the old Houston campus and 15% lower than the already impressive results at the Denton campus.

Careful attention to meet the needs of the facility while maintaining budget constraints was always a primary goal, but reducing ongoing utility costs through careful infrastructure, design and integration is a benefit that will continue to produce cost savings to the University as well as play a responsible roll in expanding TWU’s efforts for a “Greener Environment” by lowering its carbon footprint.

**Congratulations and many thanks to those who celebrated their Anniversaries with the University the first half of this year!**

### 20 years

*Phil Burney  
Vicki Byrd  
Alice Hilliard*

### 15 years

*Kenneth Burt  
Edward Laduke  
Junior Lynch  
Elfreda Metcalf  
Carl Sorenson  
Robert Trevino*

### 10 years

*Ann Beverly  
Maria DelCastillo  
Rick Garms  
Cliff Harris  
Carmen Martinez  
Sam Shaw*

### 5 years

*Terissa Crisp  
Kenneth Williams  
Juan Lopez  
Juana Oyervides  
Archie Jackson*

### Cost Saving Tip:

Clean your keys off at least once a month. The dirt, lint, dust, and other elements that cling to the metal cause locks to become very dirty and require repair or replacement more often than necessary.

## Injury and Illness Reporting

by Vicki Byrd, Safety Coordinator

The university has updated the Incident/Accident Investigation section of the Texas Worker's Compensation forms. Instructions are included. Supervisors and employees can find these forms on the Human Resources website under Benefits and Welfare/Worker's Compensation located at <http://www.twu.edu/humanresources/benefits/benefits.html>.

*Other forms of importance include:*

- Supervisor's First Report of Injury or Illness
- Instructions for the Incident/Accident Investigation Form
- Accident Investigation Best Practices
- Employee's Instructions and Responsibilities
- Authorization for Release of Information
- Witness Statement
- Employee's Report of Injury

It is important that the Benefits Office of Human Resources is aware of all incidents/accidents, including "near miss" situations and that reports are submitted as soon as possible. This allows our risk management professionals to focus on certain areas to reduce the possibility of injuries and/or accidents.

The information discussed above is extremely important when reporting to the State Office of Risk Management (SORM) who visited our Denton Campus December 11<sup>th</sup>-13<sup>th</sup>, 2007. That visit was

to perform its bi-annual comprehensive inspection of TWU's Risk Management program and to provide their findings/recommendations for correction of deficiencies to the university to assure that TWU meets the State of Texas agency requirements.

That inspection covered a myriad of topics and areas including but not limited to fire and life safety, alarm systems, eye wash stations, corridor safety, MSDS availability, laboratory safety, driving policies, business continuity plan, and the chemical hygiene policy and procedures.

On the heels of SORM, was the State Fire Marshal's office who visited the Denton campus for its bi-annual inspection of our residential housing buildings with respect to fire and life safety items on February 25<sup>th</sup> and 26<sup>th</sup>, 2008. Their inspection was originally scheduled for a three (3) day duration, but only lasted a day and a half due to the university's proactive preparedness.

Both of the recent inspections yielded only minor findings for improvement and all recommendations have either been or are currently being addressed. Both agencies were very complementary and made several comments regarding FMC's thoroughness in preparation for the inspections and for the policies and programs that we have in place.



# Abitibi Paper Retriever

Abitibi Paper Retriever will **no longer accept cardboard or phone books** in its recycling bins. Please refrain from putting either in them so we can avoid "contaminating" the materials that we are able to recycle.

## Living Green

by Christina Williams, Supervisor

For this special “green” issue the General Services staff has decided to share some of its favorite everyday “green” tips and solutions.

- **Reduce, reduce, reduce!** Avoid unwanted paper mail. Contact the sender via email or fax and tell them you wish to have your name removed from their list. Receive and/or pay bills via email and online if possible. Remove unwanted catalogues by visiting [www.catalogchoice.org](http://www.catalogchoice.org). Go to <http://www.dmachoice.org/consumerassistance.php> to remove your name from mailing, telemarketing, and email lists.
- **Properly dispose of waste.** The City of Denton has five (5) drop-off centers available if you do not have access to a curbside service where you can take things like aluminum, steel, and tin cans, office/school paper, newspaper, magazines, cardboard, glass containers, plastic bottles and jugs. Visit <http://www.cityofdenton.com/pages/utswrecdropoff.cfm> for more information. The City of Houston has seven (7) such sites and details can be found at [www.houstontx.gov/solidwaste/recycling.html#dropoff](http://www.houstontx.gov/solidwaste/recycling.html#dropoff). The City of Dallas has 32 similar sites and info on their program can be located at [www.dallascityhall.com/sanitation/dropoff\\_location.html](http://www.dallascityhall.com/sanitation/dropoff_location.html).
- **Go native!** Plant flowers and shrubs that are well-suited to your climate. The benefit: you’ll use less fertilizer, pesticides, and quite possibly less water.<sup>1</sup>
- **Use less hot water.** Conserve energy by washing clothes in cold water whenever possible. Use the shower more often than the bathtub. Help children learn to shorten showers by using an egg-timer.
- **Inform yourself.** The U.S. Marketplace is being reshaped by products labeled “environmentally friendly” or “organic” and we’re being bombarded with feel-good terms like “recycled”, “natural”, “biodegradable”, and more. Are the labels always accurate? Even if they are, do they represent real

environmental or health benefits? Click the link below to access a chart that will inform you, surprise you, and help you make better choices.<sup>1</sup>

<http://www.goodhousekeeping.com/cm/goodhousekeeping/PDF/green-labels-chart.pdf>

<sup>1</sup> Courtesy of How to Buy Green as presented in 6/4/08 issue of Good Housekeeping Magazine.

## Reducing Fuel Consumption

- Drive like an old person: slow and smooth.
- Keep the car tuned, the oil changed and the tires properly inflated.
- Plan a route to do errands efficiently, in one trip.
- Clean out the trunk. The more weight the car carries, the harder the engine has to work.
- Don’t idle the engine. Turn it off.
- Avoid left turns. UPS plans its delivery routes with as few left turns as possible to cut down on idling.
- Carpool. Use a service such as [AlterNetRides.com](http://AlterNetRides.com) to locate or begin a carpool from your local area.
- For families with multiple vehicles, use the most efficient one as often as possible.
- Try making a trip without a vehicle. Take the bus. Walk. Ride a bike. Avoiding traffic and getting some exercise can be refreshing.

Source: Dallas Morning News research

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- When replacing your roof, install reflective materials.
- Upgrade your central heating and cooling systems with high efficiency units as replacements become necessary. Tune up existing central units annually, and check for leaks in your air ducts.
  - Install replacement windows that block the sun's heat and eliminate leaks. (Huge savings)
  - Install solar sunscreens on west facing windows to reduce heat gain inside.
  - Planting and/or saving shade trees is always important
  - Recycle everything you can.
  - Replacing a 75-watt incandescent bulb with a compact fluorescent bulb cuts about 1,300 pounds of pollution that causes global warming.

#### **Paper Recycling Rollout**

- Containers were ordered in June
- Coordination meetings are planned for July to finalize student, faculty, and staff participation
- The pilot program has been initiated in the Plant Services Building
- Volunteers are being solicited via email
- The full program is moving toward implementation in September

*(Details will be posted on FMC website as they become available.)*



If you must print this,  
please recycle.

### **Building and Room Inventory**

by Bill Beckham, Assistant Director

Texas Education Code §61.0583 requires the Texas Higher Education Coordinating Board to conduct a comprehensive audit of all educational and general facilities. For the past year, I have been working with a study group at the Texas Higher Education Coordinating Board to develop a University Peer Review Audit Process to evaluate the accuracy of Building and Room Inventories submitted by each institution.

One may view the Texas Woman's University's building and room inventory file with the following link <http://www.theccb.state.tx.us/InteractiveTools/FacInv/FacSe archBldg.cfm>. Use the pull down on the web site to select Texas Woman's University. Then click on Search Facilities Inventory. By clicking on any building, the rooms in that building will be displayed.

I have been conducting building walkthroughs to compare the physical features of a room with the information contained in the Building and Room Inventory File, as well as developing an inventory database by department. Once the Peer Review Audit Teams initiate audits, the teams will be following the same process to audit an institution's Building and Inventory File.

It is important to notify Asset Management of any change to a room use or room type. A form is provided in the FM Portal by clicking on Asset Management and selecting "Space Change" at the top of the page. I can always be reached at [wbeckham@twu.edu](mailto:wbeckham@twu.edu) or extension 81-3134 if you have any questions or need additional information.

Information contained in the Building and Inventory File is used in scheduling, classroom and class laboratory utilization, the academic Space Projection Model, Master Plan Reports, replacement value computation, and state funding for operation and maintenance. All of these areas affect the funding and operation of Texas Woman's University.