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LODGING ENGINEER

THE ELECTRONIC MAGAZINE FOR HOTEL & LODGING ENGINEERS



1ST PERSON INTERVIEW

Peter J. LaPage

**Director of Engineering
and Sustainability**

Champion

**Sheraton Syracuse University
Hotel and Conference Center**

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*Sheraton Syracuse University Hotel and Conference Center
Syracuse, New York*



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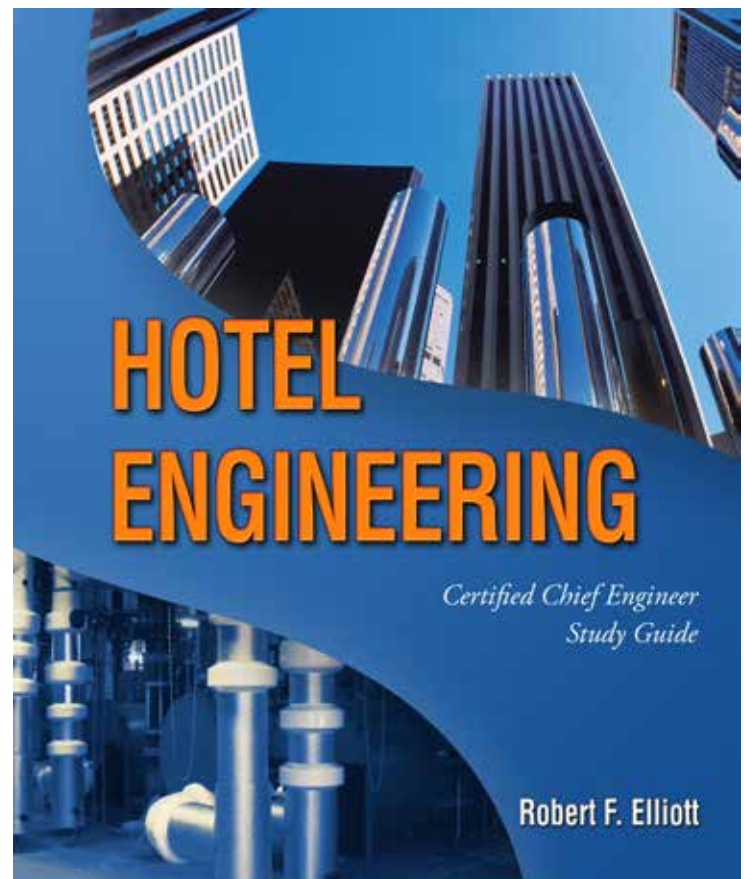
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AS I SEE IT

Robert Elliott, CCE
President, CEO - NAHLE
Editor - Lodging Engineer



I am pleased to say after several months of a lot of hard work by a lot of people, NAHLE is announcing a new certification program for engineers of select-service properties. Though I am not currently at liberty to acknowledge the numerous hotel management companies that contributed to

its content, I would like to thank two companies in particular. Liberty Building Forensic Group and CH2MHILL both provided significant effort to our new study guide and CCE program. I would especially like to thank David Odom and Norm Nixon for their contribution. This new program started at the request of a well known REIT and was then vetted and customized to meet the needs and satisfaction of seven management companies.

Our new Certified Chief Engineer program has been developed specifically to aid the hourly employee in obtaining their certification by studying 'on-the-job' at the employer's expense. The new study guide dropped about 15 chapters from our full-service CCE text including numerous sections on the history of hotel engineering. We then added back in three new chapters, PTAC Units, Mold and Mildew, Through Wall Penetrations and a couple of sections on low-rise wood construction. And, I would like to thank Jason Gilliana of Whiteco Pool Solutions in advance for his contribution to the new sections on saltwater pools and dehumidification that are currently in the works. The result of all of this effort is a concise streamlined text book that is much more manageable for the reader and about 1/3 less pages than the full-service CCE study guide.

In developing this new select-service program, we were challenged with the dilemma of how to train hourly employees on the job. So we took our problem to our partner and our industry's master of hospitality education and training, the Educational Institute (AH&LEI). They came back with the solution to provide three on-line mini-exams matching the study guide's new three-section format. As a result of this collaboration including input from our friends at the REIT, the study guide is now divided into three sections; Management, Building Systems, and Building and Grounds.

After the candidate successfully completes all three exams NAHLE will provide the candidate a diploma recognizing that they have successfully mastered the 'core competencies' required of the program. Each candidate has two tries at each exam module. NAHLE is also going to be tracking the candidate's total hours spent studying while 'on-the-job.' This last monitoring request is being provided in conjunction with the roll-out for the REIT.

So, whether you are an engineer seeking professional development or owner wanting to protect your assets, it doesn't really matter. We all want to improve the guest's stay at any hotel property and we all want to empower the hotel engineer with more knowledge that will enable him/her to make more right decisions. NAHLE's goal is simple. We strive through our CCE program and other educational opportunities to help hotel engineers bridge the gap between today's available information into tomorrow's hands-on usable knowledge. And, that's how I see it.

Robert Elliott

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1ST PERSON

AN INTERVIEW WITH

Peter J. LaPage

**Director of Engineering & Sustainability Champion
Sheraton Syracuse University Hotel and Conference Center
Syracuse, New York**

Peter, tell us a little bit about your property?

Sure, Syracuse is located in the heart of New York State and our property is centrally located to downtown Syracuse with local malls and Syracuse University. Our hotel has a total of 235 guest rooms, a ballroom and ten meeting rooms. It was built in 1984 and opened in January 1985. The building is nine (9) stories tall, brick and glass exterior and we have 24 suites. We have a full kitchen, a full service restaurant 'Rachel's' featuring continental cuisine and the 'Citrus on the Hill' for light fare. Our last major renovation was completed in 2011, all the guestroom floors and the restaurants were completely renovated and I am pleased to say we completed everything on time and on budget.

Tell us how you got started in hotel engineering?

After I returned from serving in the U.S. Army, I found that I enjoyed working with air conditioning and refrigeration. My Army training didn't fully prepare me for the career I wanted, so I took a class in air conditioning and refrigeration at Onondaga County Center for Adult Career Development here in Syracuse. The program gave me the additional training in commercial applications for hotel refrigeration, cooling systems, electrical circuitry, heat pumps as well as maintenance and repair troubleshooting. After graduating from the program I interviewed at this Sheraton and was hired in June, 1992, as the night engineer. Over the years I was able to move up the ladder to become Chief Engineer of the hotel in February 2006.

Most of my training has been 'on-the-job' training. I have received two more certifications over the years; one is in Refrigerant Transition and Recovery and the other is a Network Specialist-Copper Cable. I am interested in becoming a Certified Chief Engineer with your trade association's educational program.

Tell us about your staff.

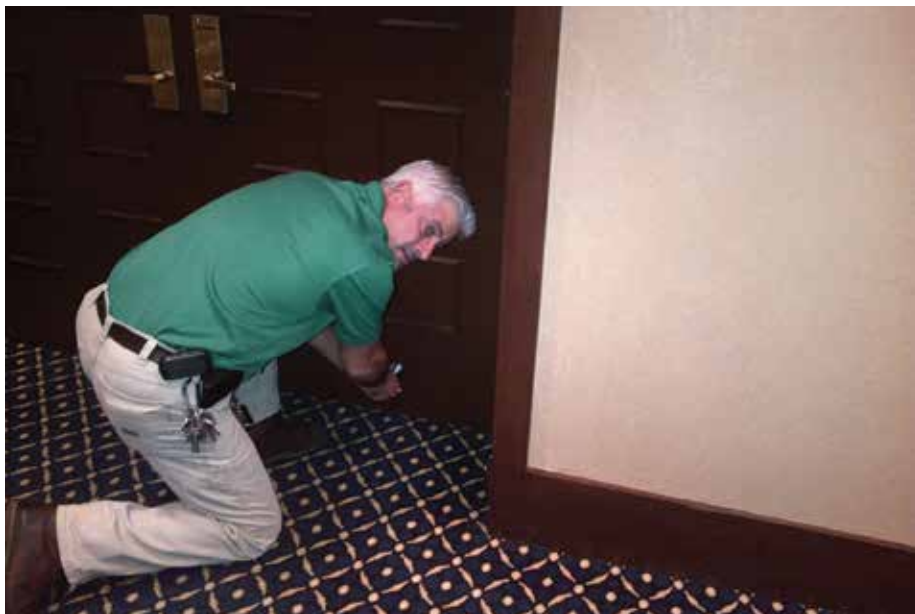
We have a total of seven (7) guys including myself as Chief Engineer, an Assistant Chief, and five (5) Engineers. Each person brings something to the team. We all learn from each other and approach the job from a collective - team perspective finding a better or more productive way of doing something. My team is interesting and, collectively, very knowledgeable. We love repairing things and sharing what we know with each other. It is this 'team' attitude, I believe, that is

the key to our success and communications is important. We have a two-way system through Verizon. Every one has a phone, some are push to talk a few of us have Blackberries. I also use my personal Apple iPhone.

Syracuse is in upstate New York with pretty severe winters. How do you deal and prepare for the winter?

Although this winter has been mild, we are prepared. We have a Gehl 3935 skid steer with a bucket to remove the snow in the large areas, a walk-behind snow Ariens blower for walkways and shovels for the difficult to reach areas. We use environmentally safe "Snow-N-Ice" ice-melt to ensure no one has a chance of being injured on the property. We purchase 3 pallets with 50, 50lb bags for the winter. We stopped using sand because of the tracking and maintenance factor.

Dave is fixing the door stop.



The Cooling Tower is drained in October. We clean scaling from the bottom, refill it with water and keep the pump running all winter with the louvers closed when necessary.

We have an indoor pool so we don't worry about that except an occasional problem with the outside wall. The pool is class four so we don't need a lifeguard and its open 7am to 11pm. We put in an ADA compliant Pool Lift (April 2012) with a permanent sleeve mount into the pad that is covered when not in use. We test it every week. All my guys and staff are trained on it so they can assist our guests if necessary.

Energy management must be an important factor in your winter climate? What do you do to work towards maintaining a green or 'sustainable' hotel?

First, our owners believe if you come to Syracuse our hotel should be the best value, and it is. We are seeing a lot more green travelers. I look at "green" as great for the environment and it's great for our hotel's bottom line. We don't have to raise our rates as high as our competitors so our customers can stay at our high quality Sheraton for the same price as a limited service property down the street. This is a win/win proposition for us. My team keeps the operating costs down, the hotel does better and the owners say, "no problem" when we present the next project which keeps our staff employed during the slower times.

Sheraton has an initiative called 30-20-20. They want us to save 30% energy and 20% water by the year 2020.

Secondly, we consider our property 'green' and we are always looking for ways to improve performance and becoming more sustainable. I'm the green cop here at the property, and everyone on staff takes pride in how we are doing. As a result of our efforts we have won both local and state awards.

Sheraton has an initiative called 30-20-20. They want us to save 30% energy

and 20% water by the year 2020. A lot of things we have been doing are working towards this goal so we are ahead of the game in lighting and energy conservation.

I remember when I started here I had to change 20-30 light bulbs a day. We began replacing our lighting in the 1990's and after our 2010-11 renovation we have replaced 95% of the lights with Compact Fluorescent Bulbs (CFL), Light Emitting Diodes (LED) and T-8s. We also converted our wall sconces from 40 watt bulbs to a 10 watt CFL that give off an excellent bright light.



Tom and Mike are working on the Energy Management System

We just completed a big lighting project in our parking garage that should prove to be very cost effective and friendly to the environment. All lights have been changed to LED fixtures. We removed a total of 148 lights each burning 150 watts and replaced them with LED fixtures that burn only 40 watts. Lighting levels are actually a little brighter and the yearly replacement and maintenance costs associated with replacing bulbs each year is gone. I'm

looking forward to the coming year to see how much energy we will save.

Now we are focusing on installing LED efficient pool lighting. We brought in Ephesus Technologies, a local company to replace the pool lighting fixtures and we're waiting on approval from the health department to complete the project.

How about HVAC...Any 'green' initiatives?

In the HVAC department I'm working on replacing the VFD (Variable Frequency Drive) on our main heat and air loop pump. It failed a few years ago so we

have been running it at 100%. We are looking at an incentive proposal to replace our current system with two highly efficient motors with VFDs and wiring this into our Apogee InSight energy management system from Siemens. Our energy management system controls the in-room heat pumps, fans, and most of the lights in our hotel. It automatically turns the kitchen exhaust fans on and off when not in use and we use it to start the heat in our ten meeting rooms an hour before the event.

We also installed an in-room energy management system, GEM System®.

With the new system we've seen a decrease of 35% in energy consumption, improved guest comfort and we haven't had any humidity issues using this system. The GEM system resets the room temperature to a selected energy saving level and it works really well with our Siemens system. They talk to each other and this has turned out to be a great addition to the hotel.

We also use Berner Air Curtains and they are linked into the energy management system too. They're phenomenal and I'll be happy when we have additional air curtains at the loading dock and the restaurant vestibule. Our team also makes sure our vendors and delivery agents are trained to shut the loading dock door each and every time they enter.

Do you take advantage of rebates?

To help fund our projects I'm always looking for rebates at the local power authority, National Grid. They offer quite a few incentives we qualify for. If we get the rebate we will do more work upfront, otherwise we will do a little bit year by year.

Rebates are also offered by NYSEDA (www.nyserda.ny.gov) the New York State Energy Research and Development Authority. Their big initiative is going Green and they focus on reducing petroleum consumption. Starwood is having a big push by

identifying a Sustainability Champion at each property. Anything we can do to be greener lowers your operating costs.

So, what's next?

Our next big push will be to install sensors that turn off lights when not needed. In the public restroom, we'll have one emergency light and the rest of the lights will be on a sensor so when you open the door the lights will come on. It's a little tricky because some of our restrooms have a number of corners. There are some great sensors so it's just a matter of time until we find the one or two sensors that will cover everything in the hotel. This keeps things simple.

I try to keep everything simple. We have gotten the number of different bulbs in the hotel down to 10 and counting a variety of specialty lights we have less than 20 in the entire property. When my guys go to replace a light bulb in a guest room they only have four options, in hallways two and public spaces two. My goal for this property is to be AS-19 (standard incandescent) free by the end of 2013. We are now testing a couple of different dimmers with dimmable CFLs that range from 75% to 85-90% of the original lights. We also want to use more LED lamps. The price is coming down, but doesn't pay in these areas just yet. I now buy the CFLs locally because with our corporate buying power the prices are competitive.

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I have 57 lights in the main lobby to be replaced. I had two samples sent to me to test. I also had a local company providing an LED solution for the pool and the porte cochere. Between Phillips and GE they have every light we need excluding the elevator halogens, which Phillips says they are working on.

How do you manage all these projects?

I keep track of all projects in my Excel program. I keep track of current projects and then I add new projects. It's relatively simple. Guest repairs are top priority and are taken care of immediately. Anything major I go with my team to determine a solution and who is responsible for the repair. It's great to have a talented team you trust.

Do you attend the Hotel Executive Committee meetings?

We call it Leadership. Yes, there are seven of us, we used to meet weekly, but with the advent of email we pushed it to bi-weekly because each department communicates what they are doing through email so we are always informed on a daily basis. We meet twice a month for an hour to discuss a few things.

Do you have a Recycling Program?

We recycle everything. We recycle all of our batteries, fluorescents and ballasts through a service provided by Grainger. It works well. We only purchase 24 batteries a month. Our door locks are Saflok and we change our door lock batteries every five years. They are good for 5-7 years, but we don't want irritated



Our goal is to replace the dead bulb while it's still warm.

guests from a non-performing door lock. Every four years we start stocking up and at five years we exchange them all at one time. This way we never have a problem with our door locks. Our remotes are provided by LodgeNet. Housekeeping tests our guestrooms' remotes and door locks every day. Any dead remote is replaced and batteries are changed in our shop. Housekeeping also checks all the lights in the room every day. A dead light bulb creates a very poor image of the hotel. Our goal is to replace the dead bulb while it's still warm.

Have you upgraded your Wifi and in-room entertainment?

Just had a Wifi upgrade. Other than one little hiccup everything worked out fine. Road Runner increased our bandwidth and Clearwire increased the wireless points in the building. We've had some growing pains, but we worked it out. I have an app "Network Analyst" downloaded on my personal iPhone. It checks connections. I can walk the halls, ping sites, and perform Speed Check (another app) which tells me how well the Wifi is working. For the television we installed LG HDTV's (32" and 37") throughout the property in 2011. We have LodgeNet and Time Warner free channels. Our owners require New York sports channels like Yes (Yankees), MSG network (Madison Square Garden) and of course, you have to have ESPN.

How do you train your staff or do you just steer them to nahle.org and they train themselves?

I wish it was that easy. We utilize checklists to ensure that we cover everything, and we review it constantly, not just a few times. It's better to take an additional week going over things as opposed to starting them too soon and then have them fail. We are always saying, "the only dumb question is the one you didn't ask." I will never ask anyone to do something that I will not do myself.



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What do you look for when you are hiring a new engineer?

By far one of the greatest persons I've had the pleasure of working for is our general manager, David Heymann. I know this will most likely get printed and I'll probably catch some grief, but he is a real leader and always ready to help out. So, I look for someone with some of those same traits who I believe will really care about the people they work with and will step up and help out when called upon. Considering as a hotel we never close and we have a small staff, that's important. And, I always look for someone who has both good mechanical and people skills.

Do you have anything you can add that is interesting or unique about your property?

A lot of our staff here are fans of the Syracuse Orange and during game days, many of us wear our Orange shirts and with great pride. As you can imagine, it gets pretty interesting during football and basketball seasons as both programs are nationally recognized. Working at a university hotel and conference center has allowed me and my staff to develop a real appreciation for the term "March Madness."

Is your property currently facing any challenges or unique opportunities?

Any time you have a building growing in age such as ours, just trying to keep all the systems running is a constant challenge. On the other hand, sometimes it provides a great opportunity to recognize my staff and all their effort.

So, Peter you've had the good fortune to be at the same property for over two decades? That's a long time. Ever wonder "what if I had done... this or that... different?"

Not really, after 20 years at the same hotel, I could not see myself doing anything different. I



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take great pride in my work and have been known to call the building "my hotel." My wife calls the hotel my girlfriend. I believe that if you treat the hotel as if you own it, you will go that extra mile and do your best to make her shine. I always tell my engineers, this is your building, treat her nicely and she will always shine for you. I want them to have as much pride in the building and their work as I have.

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The 50 Best Inventions of the Year, Time Magazine, December 2011

Innovation Award Winner at Consumer Electronics Show, January 2013

Edison Award Winner, April 2012



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Roanoke, VA – January, 2013 – Tropic Sun Towers in Ormond Beach, Florida, selected Lodging Technology's GEM Link® Wireless energy management system to reduce energy consumption 35% to 45% by automatically resetting room temperature to an energy conserving level, pre-selected by management, only while guests are out of the room.

Toni Peterson, General Manager of Tropic Sun Towers, stated, "After reviewing many companies, the Board of Directors chose Lodging Technology to install their GEM Link® Wireless system in all 84 units to the HVAC and electric hot water heaters to significantly reduce energy consumption and expenses. The installers, Rob and Scott, actually stayed on site during the entire installation and were very professional and courteous and kept me updated each day on the progression of the installation. Rob and Scott insured that our maintenance supervisor was involved in the installation as well, so they could answer any questions he may have regarding the operation of the product. I am extremely happy with the courtesy and professionalism that Lodging Technology showed during our project and would recommend them to anyone that is interested in their products."



The GEM Link® PIR Sensor mounted on the wall of the condo is barely noticeable.



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In addition to significantly reducing HVAC costs, GEM Link® also wirelessly controls the 3 kW electric water heaters at the Tropic Sun Towers.

GEM Link® uses a combination of wireless passive-infrared (PIR) occupancy sensors, door switches, and a Transceiver Control Module connectable to any HVAC unit, regardless of brand, model, age, or voltage to reduce consumption and expense.

William Fizer, President of Lodging Technology, said, "We are pleased that the Board of Directors of Tropic Sun Towers Condominium Association approved installation of GEM Link® to reduce energy expense for the condo owners." He continued, "We were able to meet the challenge of also reducing the expense of the electric water heaters during periods of unoccupied time to further reduce energy costs."

On the quiet north end of Daytona Beach area, Tropic Sun Towers (www.tropicsuntowersresort.com) features 1- and 2-bedroom condominiums. Tropic Sun Towers is designed to provide all the comforts of home combined with an incredible beachfront location, fantastic amenities and unrivaled service. Guests can savor the sensations of the rolling waves from their private balconies, relaxing poolside or lounging on the beach. For the more energetic, they can occupy their time playing shuffleboard, working out in the fitness room, or renting bicycles and body boards as well as participating in the activities available at the resort. Tropic Sun Towers is part of SPM Resorts, Inc.'s portfolio of full-service professionally managed resorts from New England to the US Virgin Islands (www.spmresorts.com).

Lodging Technology (www.lodgingtechnology.com) is the originator and unsurpassed leader in infrared sensor-based energy conservation for the lodging industry. The company is one of the most trusted names in energy management and has sold their products across the US and internationally for more than 33 years. Lodging Technology's products reduce guestroom energy costs 35% to 45%, with typical paybacks under two years and ROI of 50% to 60%. Designed primarily for hotels, Lodging Technology's products are equally applicable to other facilities such as school classrooms, college dorms, offices, conference centers, and military lodging facilities.



NO PREACHING, JUST RECOGNITION

Manny Mercado, CCE, CPO

I would like to write about recognition because I feel we can do a lot more. Have you ever taken time out and just looked into what makes our hotel property shine? I wrote an article once

Sometimes that budget is not enough or the funds are being reduced or just cut off entirely. We at the property level don't have to bury this because of the cuts, but should find other ways to keep it alive. Do your research. There are many ways to show recognition with little or no money at all. The resources are there at your property, make a meal, print an award and frame it, type up a property

dedication and I wanted them to know that I recognize their efforts. So today, stop the preaching and do research on what we can do to make this happen. Don't start off thinking about the expense. Gather your ideas at the next management meeting and think about a cost effective way to make those plans come to life. We all have many talents and let's put them to good use. If you need help with resources let me know, I am a manager and a chief engineer and I do care. Your next management meeting topic should be, "what are we doing at our property for recognition, is it working and what more can we add or do?" The end result will get staff members excited and looking forward to be the next top performer.

I know some properties are still feeling the blues with the economy, but it's not an excuse.

before about manager on duty and how it changed my perception of the very hotel I have been working in for years. When I was manager on duty it taught me a lot about what really makes us complete. As chief engineer I had tunnel vision which most of us have. I thought in terms of my department, only my team and just us. That was my wake up...to realize that my department was not the only department that strives to be the best. Just the interaction alone with each department tells me that we need to do more as managers.

My focal point is on the property level only because we see everything first hand on how we are doing. We don't need audits to tell us we are doing a good job. We need to look at ourselves doing it, believing in it and coaching our team. I feel we need to not preach what the company wants us to preach, which at times are merely excuses for the little things that really do matter; like the lack of recognition. Just the interaction alone with hourly staff members from other departments let me know they have a voice that sometimes is unheard of. Yes, we have budgets for associate recognitions.

monthly newsletter, give them a day off with pay. Just a FYI, National House-keeping Week means a whole week of recognition not just one day of that week. At the full service property I worked at they had all types of conventions. The one I liked most was the chocolate show. Giving away free tickets to staff members is a big plus.

I know some properties are still feeling the blues with the economy but it's not an excuse. If you allow the blues to trickle down to your staff you will end up feeling the blues in service scores. I was recently a maintenance manager for an apartment complex and was allowed 1 day a month to take the crew of 3 out for pizza. I took them out a second time each month at my own expense because of their





IMPLEMENTING A WATER CONSERVATION PROGRAM AT YOUR HOTEL

Bill Hoffman

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Thirty years ago gasoline was so cheap that a car's gas mileage wasn't the decisive factor when purchasing a new car. In the last 30 years, water and sewer rates have increased faster than the cost of oil. What was once thought of as a virtually 'free product' with little regard to usage or waste is now a serious discussion among energy conservation managers as water management is rapidly becoming synonymous with fossil fuels and other utilities. This means that the cost of water and sewage services are and will continue to increase the hotel operator's bottom line. What was once an abundant ubiquity is now a precious and sustainable resource. This is the first in a series of articles on how hotels can get a grip on these rising costs while at the same time taking some positive steps toward becoming more environmentally responsible and seeking sustainable operations in today's world of "green hotels."

INTRODUCTION

As water and wastewater costs are continuing to rise, today's hotel managers and engineers are challenged with reducing the property's usage and curbing rising utility bills while still providing guests an uncompromised level of quality water usage and benefit. This first article addresses ways that facility managers and hotel engineers can get control of these rising costs. In this installment, we will look at:

- The rising cost of water bills
- Water use benchmarks for hotels
- Getting started, and

- An introduction to national codes and standards and rating systems that will impact hotel operations.

Future articles will drill down into actual ways to reduce water use, techniques to calculate payback, and ways to make water efficiency work for them.

RISE IN COSTS

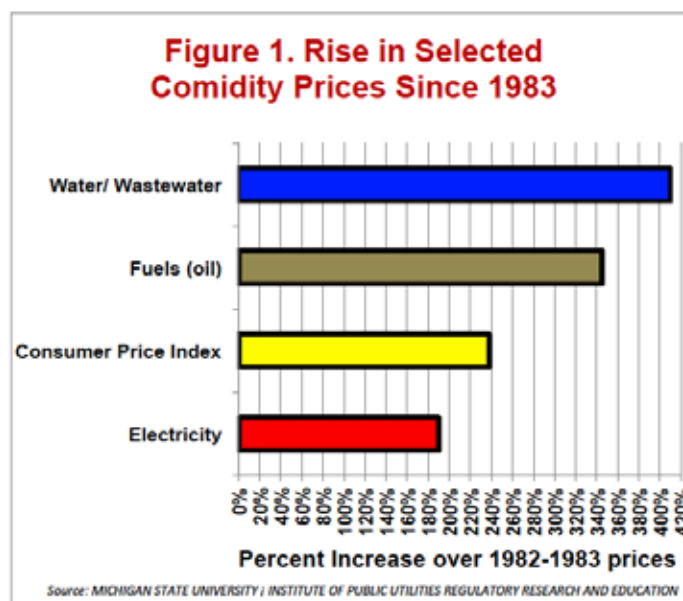
Silently, almost without notice, water and wastewater costs have been skyrocketing. As the following graph shows, water and wastewater rates nationally have risen even faster than oil over the last thirty years and, based on recent trends, this increase is not slowing down. Many hotel managers are finding that becoming more water efficient is a very effective way to improve their bottom line.

According to the Earth Policy Institute, between 2002 and 2007, municipal water rates increased an average of 27 percent in the United States, 32 percent in the United Kingdom, 45 percent in Australia, 50 percent in South Africa, and 58 percent in Canada. This is a worldwide trend.

The Institute of Public Utilities at Michigan State University found that water and wastewater rates have increased faster than any other utility or service commonly purchased by facilities. Figure 1, as shown below, summarizes the increase of the consumer price index and selected commodities in the United States since 1982.

Hotel managers can expect costs for water and wastewater to continue to rise further impacting the bottom line of the facility's balance sheet. In addition to the cost water and wastewater, costs associated with the use of water need to be considered. Dishwashing and laundry operation involve the use of chemicals and detergents, and there are equipment costs and other considerations. National water and sewer rates average about \$7.50 per thousand gallons (\$5.60 per hundred cubic feet -CCF).

But, this is not the whole picture. The most commonly encountered additional cost is that of water



heating. Heating water uses energy. According to the US Department of Energy, energy costs for commercial users such as hotels average \$8.17 per thousand cubic feet (MCF), (\$0.817 per therm) for natural gas and 10.17 cents a kilowatt hour for electricity. The net impact is that heating water by gas costs about \$6 to \$8 per thousand gallons of water, while heating by electricity costs more than double, \$16 to \$20 per thousand gallons of water heated. This means that regular tap water in a hotel costs about \$0.75 cents a gallon, less than a penny a gallon, while hot water heated by electricity can cost over 2.7 cents a gallon!

It is hard to get your head around costs in thousands of gallons or a MCF of natural gas, but if you visualize the cost for common uses, then the picture becomes much clearer. Let's look at the cost to use a toilet, take a shower and operate one irrigation zone.

- **Toilet** - At a cost of \$7.50 per thousand gallons, a five-gallon per flush toilet costs about 4 cents to flush. If a 1.28 gallons per flush toilet is used, then each flush costs only about 1 penny, or a 3 cents per flush savings... *How many toilets in your facility require more than 1.28 gallons per flush and how many times are they flushed each day?*
- **Shower** - A shower head that flows at 2.5 gallons a minute for a ten minute shower will use 25 gallons, of which approximately 15 to 20 gallons will be hot water (bathers typically like water temperatures between 102 and 110 F). If you consider only the water cost for the shower then this will cost the hotel about 19 cents. However, if 75 percent of that shower's water is hot water heated with electricity at the national average of 10.17 cents per kilowatt hour (2.0 cents per gallon), then that shower will cost 55 cents. Are you looking for a way to conserve water and energy consumption at your property and save at least a nickel every time one of your guests takes a shower? If a new EPA recommended shower head using only 2.0 gallons per minute is used instead of the 2.5 gallon head, the cost for that same 10 minute shower will be reduced to 44 cents, an 11 cents savings!
- **Sprinkler** - The typical pop-up sprinkler head that sprays a 360 degree pattern, has a flow rate of 4.0 gallons per minute. This equals 3 cents a minute or about 45 cents (\$0.45) for a typical 15 minute run time on the sprinkler system. Each zone will have ten to 15 heads. This means that one irrigation event with only one zone would cost between \$4.50 and \$6.75 per watering event.

How many zones do you have? Installing weather-based controllers, new rotator heads, and other irrigation improvements can often cut these costs by 25% to 50%.

HOTEL WATER USE METRICS

Across the nation, the hospitality industry is beginning to look at water costs seriously. To do this, some statistics from the US Environmental Protection Agency may help. Figure 2, below, shows typical water use in hotels across the nation based on EPA's Water Sense program and Figure 3 is taken from Energy Star's Portfolio Manager program.

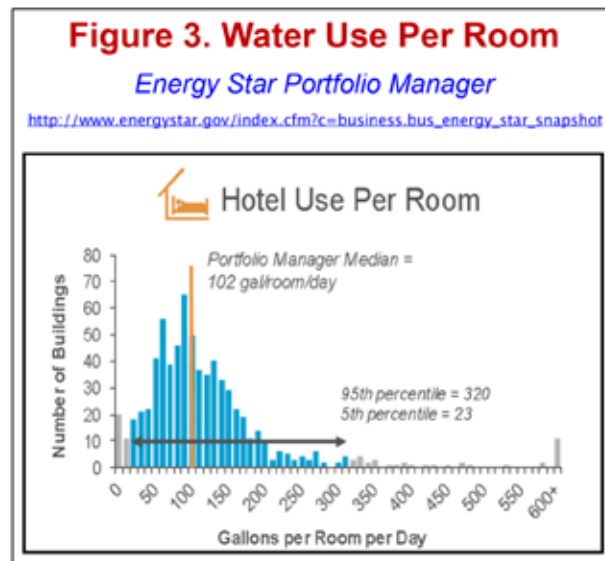
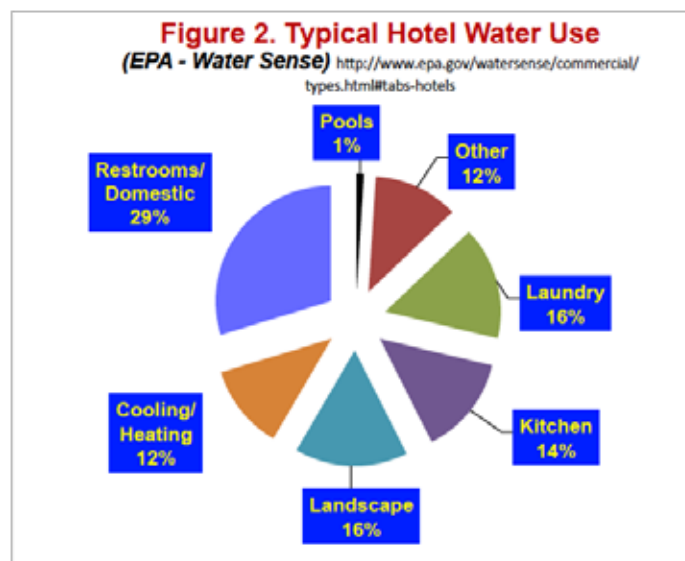
So where does your property stand and what can the Hotel Manager and Engineer do?

GETTING STARTED

Remember that the title of this section is getting started - things you can do first. Implementing a program will be discussed in future articles, but you have to find out where you are before you can logically determine where to go.

There are three tenants of beginning a program.

1. You have to understand the purpose and need for each water use at your facility,
2. Your employees are your ears and eyes - they must be part of the process, and



3. If you don't measure it, you can't manage it.

1. The purpose and need for each use:

You already know where water is used. Some uses are obviously needed and vital to your operation. Therefore, this step may appear to be unnecessary, but it can help focus where future operational improvements can be made. Also, by walking the facility and talking to the employees about the ways they use water is often eye opening. It is also a good way to discover uses, leaks, malfunctions, and other things, that even though you keep a keen eye on things, just slip under the radar. As a guide, write down all uses in your facility after your walk-through and answer these seven basic questions:

1. Where is it being used?
2. When is it being used?
3. How is it being used?
4. Who is using it?
5. Why is the water use necessary?
6. Can the amount of water being used be reduced by simple change in procedure?
7. Is there a way to accomplish the same thing without using water?

Most facility managers and engineers find that they will have some revelations as they attempt to answer these seven simple questions for each use.

2. Involving your employees: Employees are your eyes and ears, the ones who actually use the equipment that uses water, and are often an excellent source of information on better and more cost effective ways to reduce all utility costs not just water. Providing them with the incentive to look for better ways and even providing them with summaries of utility costs will help empower them to become part of the solution.

3. Measurement: A few years ago, a facility with a rather large cooling tower had the overflow pipe for the tower basin literally come loose and fall over on the bottom of the tower. The tower did not have a conductivity meter or a makeup meter. Because of that, the float valve for

the tower ran wide open at about 15 gallons a minute. Based on that city's water and sewer rates, this amounted to over a \$5,500 dollar a month water and wastewater bill, not to mention the wasted cooling tower chemicals. By the time the bill arrived and accounting flagged a "possible" problem, almost two months had gone by.

The facility engineer called in experts to figure out why the water and wastewater bills were so high. The only water meter on the property was the one from the utility. This meant that finding this "unexplained increase in water use" would be difficult. Luckily, the cooling tower was one of the first places examined. By the time it was found and fixed for under \$100, the facility had paid \$8,000 in additional water and wastewater bills.

If you don't measure it, you can't manage it.

The point of this is that if you don't measure it, you can't manage it. If just a makeup meter was in place or if a conductivity controller was installed, the problem area could have been quickly identified. Much has been written about energy management systems, energy "dashboards" and the like. Monitoring water use is also critical to good control. If your facility already has water meters that are electronically connected to their central information system or the property management system, you have a system that will let you know if there is a problem. Smaller hotels may not be able to afford a "dashboard" type system, but having employees read the water meter on a regular basis and plotting the use on a daily basis will establish use patterns that will let the facility manager or engineer know there is a problem. Submeters - meters that are located within the property for use by the property owners as opposed to the utility meters that are the basis for billing - can help manage water costs and identify costly problems

in the property's various water using systems.

CODES, STANDARDS, REGULATIONS, AND RATING SYSTEMS

No discussion of water conservation in commercial and lodging facilities would be complete without the mention of the significant changes that are occurring across the nation. Both major plumbing code bodies, the International Association of Plumbing and Mechanical Officials (IAPMO) and the International Code Council (ICC), have issued new green code supplements, as of 2012, that will significantly impact both new construction and selection of water using equipment from guestroom toilets to kitchen appliances. Several organizations, such as the Association Society of Heating, Refrigerant, and Air Conditioning Engineers are developing standards for water



South facing green roof in Atlanta

use similar to those previously developed for energy. Many States are promulgating legislation regarding water efficiency and new rating systems such as the soon to be released LEED 2013, all contain major new water efficiency related sections.

Keeping up with the rapidly changing codes and regulatory environment is a herculean task for hotel engineers and managers. The past decades were about energy efficiency, but both energy and water will be on the radar screens of all who manage facilities wisely in the future.

THE ABC's OF HOTEL BATTERIES

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An average 200 room property running at 60% occupancy will spend as much as \$5000-\$6000 a year on batteries for door locks, remotes and smoke detectors. Batteries are available nearly everywhere from the convenience store to major distribution companies. Some folks will send a staffer down to the corner store and pay retail pricing without a thought. Others buy from equipment manufacturers, and still others from distributors and spend far less. Buying from your local retailer will cost you plenty. You can pay up to \$5.99 for a 2 pack of name brand 9v cells, (\$3.00 each!) when a distributor can sell you a non-branded cell that will perform just as well for less than \$1.00! Likewise, you can pay up to \$1.50 each for AA cells, while you could be buying the same performance for around \$.25. Fact is, if you could save thousands by simply buying from a distributor and erasing the brand name, wouldn't you want to?

Small batteries in all common sizes; AA, AAA, C, D, & 9V come in a variety of chemistry choices these days. Believe it or not, there are still many uses that are served by the old standby Carbon Zinc batteries of old. These are now known as Heavy Duty or Super Heavy Duty. In uses that are not high drain and long life is not an issue, Carbon Zinc batteries are cheap, light, and very reliable. We have a client that builds an air freshener unit in which the replaceable fragrance unit contains the battery power, and the Alkaline cells they were using lasted far longer than the fragrance did, clients were not happy. Switching to the Carbon Zinc, saved 50% on their battery cost, and the cells now

expire at the same time as the fragrance. The clients are now quite content. Plus, this chemistry is completely biodegradable.

Alkaline cells have evolved to a very high state of performance. These batteries

will last longer than the older carbon zinc by 5 times or more. This makes them the perfect choice for most of our common devices and they are by far the most widely used batteries on earth. These too are completely biodegradable and can be disposed of in normal landfill bound trash. The alkali materials used to create the chemical reaction are all naturally occurring and safely breakdown in a surprisingly short time. They no longer contain any mercury or cadmium. The FDA supports this and does not classify these as hazardous for transport or disposal. All alkalines are not created equal, however. Small changes in chemistry blend can create very different performance in batteries.

One major brand advertises their brand by always showing it in flashlights or night vision goggles, but they never show you their batteries in toys or high drain devices. While the other major brand always shows you their batteries in high drain toys and the like. Ever wonder why? It is because their specific chemistry is



Small batteries come in common sizes with a variety of chemistry choices.

designed to perform well in that application. That same cell will do poorly in an application it was not designed for. Electronic door locks use alkaline cells almost 100% of the time. Only in areas of extreme temperature exposure or almost constant use are other chemistries indicated. Only **one company** has ever developed

a battery chemistry specifically for the electronic door lock.

In rechargeable cells, the old Nickel-Cadmium (NiCD) cells have been replaced almost totally by Nickel Metal Hydride (NiMH). The newer NiMH cells no longer have the charge memory problems that plagued early users of NiCD. Basically, if you charged your NiCD cells up only halfway to capacity, the battery would remember the half charge and that would become the new full charge. Eventually, they would not hold a useable charge at all. NiMH cells, however, are more receptive to the way we actually use rechargeable battery devices. Ask anyone who uses a radio. While it should sit in the charger all night, it might be left in for half an hour, then you need it, drop it back in for 10 minutes, and go again. They are suitable for lower drain devices only. NiMH has no problem with this, and will take a full charge any time you can give it one. Both these and their older counterparts must be recycled.

Lithium batteries, from the button cells in your watch to the massive units that power today's electric vehicles, are still relatively new. Early on, these cells proved very dangerous indeed. Laptops bursting into flames, folks being burned by their cell phones, even airplanes crashing who were transporting them, are only a few of the known reports of failures. As a result of these early problems, most lithium compositions now feature some level of protection built into the battery to prevent overcurrent and heat failures. It continues to expand ever day as new blends, Lithium Ion, Lithium Polymer, Lithium Manganese and more, surface in the market. In Lithium cells, the activator is lithium, just as alkali chemicals are in alkaline cells. The difference here is that lithium is a much more powerful activator, and is far less stable. It is also a rare element, so costs are high. A Lithium AA cell will cost up to 10 times more than its alkaline counterpart, however it will not last 10 times longer. In fact, in most applications, it may only last twice as long. So at up to 10 times the price for only 2 x the service life, it is still not a good value proposition for most applications in hospitality. Plus, it costs more to ship due to International Air Transport Association (IATA) regulations, and must be disposed of via a recycler.

Door Locks - Most engineers with experience in electronic door locks place the maintenance of these locks on a PM schedule. The batteries or battery packs should be replaced every 6 months under normal to heavy use. A quality pack could easily last a year, but being proactive is always the best plan when it comes to direct guest services. The card reader in the lock should be cleaned out every month with a quality door-lock cleaning card. The actual reader head is very small and cards are constantly handled by guests and pick up skin oils, makeup, pocket lint, suntan oil, you name it; and it all gets deposited on the reader head. If the reader head cannot read the code, the door will not open. And, who is going to get that call? The newer systems have



Most folks will be happy to change the TV remote's batteries.

monitoring systems that allow a master computer at the front desk to collect data on the room use, access times, and even battery life in some cases. If your property has this resource, put it to use as a regular part of your PM programs.

TV Remotes - Most of today's replacement TV remotes use AAA alkaline cells. I say replacement remotes, because an astounding 25% of all TV remotes are stolen out of guest rooms every month, so you are always buying replacements. Even with a screw through the battery door, many guests find it irresistible and simply have to snatch the batteries out of the TV remote and either replace them with their dead ones, or leave it empty. So buying expensive cells is a real waste of resources here, since either the batteries or the remote itself is going to disappear long before those batteries run out. You can expect a year of service from a high quality non-branded cell. This task of replacing stolen or worn out batteries is really best suited to housekeeping. It only takes a minute to find the remote and pop open the battery door. If the batteries are not yours, have a supply on the housekeeper's service gurney so the housekeeper can change them immediately. I know of

several engineers who actually place a 2 pack of AAA cells in the desk drawer of each room. It really helps deter theft from the remote, plus when a guest calls the front desk complaining of a non-functioning remote, batteries are already in the room. Most folks will be happy to change them. Outside of these measures, change the remote batteries when you visit for the door lock battery change.

Inventory - Batteries are little and everyone uses them. Fact is they have legs. Sad to say, but these are best kept locked up in a cage. Batteries are a commodity with a 5-year shelf-life. Buying in quantity saves money and assures you have product on hand. We recommend a min/max inventory system with a 'first-in first-out' method of usage. A good rule of thumb for door lock batteries is to keep on hand 25% of your room count in door lock packs. These are custom made, by hand, so if you wait until you are out, you roll the dice. You simply have to have them when you need them, nothing else can substitute, and you cannot run over to the hardware store and pick some up.

Recycling - Recycling is a good thing, no questions about. But it does have a real cost. Recycling has become a big business. Think about it, you must pay a recycler to come and pick up your old batteries. Then, the recycler sells the materials and gets paid again. Nice work if you can get it. You most certainly want to do this with any and all hazardous materials and the obvious things at your property, but you might be surprised to find out what the recyclers simply throw away. Carbon Zinc, Alkaline, even some Lithium cells containing very small amounts of the compound are not considered hazardous waste and can literally be considered "green." These can simply go with your normal trash removal and will decompose nicely in a landfill. For more information on what your state stipulates, visit your state government website or contact your local hotel/motel association for location specific requirements. As a last resort, visit the EPA website and be prepared for a deep search and another pot of coffee!

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FEBRUARY 1, 2013 – IS YOUR PROPERTY IN COMPLIANCE?

Lew Daly
Triad Technologies
www.triadtec.com

The Department of Justice is responsible for federal enforcement of key provisions of the American with Disabilities Act, including the ADA standards. DOJ works closely with an independent federal agency commonly referred to as the Access Board who primarily develops regulations interpreting the ADA. Several other agencies are also responsible for enforcing sections of the ADA (the Department of Transportation (DOT), Equal Employment Opportunity Commission, and the Federal Communications Commission). The DOJ makes sure through various enforcement actions such as lawsuits and fines that hotels comply with ADA requirements.

The design requirements of the ADA are first established as guidelines by the U.S. Access Board. The ADA requires DOJ (and DOT in the case of transportation facilities) to use these guidelines in setting mandatory standards. The ADA standards and the Board's guidelines, like all federal regulations, are developed through a process that invites input from the public. They are first published in proposed form and made available for public comment. Public hearings are usually held during the comment period. The Board and standard-setting agencies finalize the documents and rules based on the comments received. This open rulemaking process assures stakeholders that the guidelines are publicly vetted meeting the needs and rights of affected disability groups and addresses industry with respect to manufacturing and balancing the rights of disabled persons and other stakeholders with the demand for public accessibility and its

associated cost. Following this process, it was the Access Board and not DOJ who promulgated the new access requirements for hotel swimming pools.

ISSUE

Hotels that have a public pool with a 300 lineal foot and over perimeter must meet the new ADA requirement for a secondary means of pool access in addition to the primary lift or ramp already required. Not addressing this requirement with a plan now could turn into a costly litigation nightmare down the road as there are already law firms ready to pounce on the February 1 compliance deadline.

There are three additional ADA recognized methods of secondary access: Transfer Walls, Transfer Systems, and Pool Stairs. All three categories are outlined in the new 2012 ADA Guidelines with specific design parameters. For reference, as found in the 2010 Guidelines, a second Pool Chair Lift or Ramp

on any general assumptions of swimming capabilities. However, the secondary means of access provides the broader population of ambulatory, but marginally capable swimmers who could not negotiate a vertical pool ladder with an alternate means of entry that would maximize their ability. This population includes the arthritic, elderly, mothers-to-be, children, overweight, veterans, and more generally those persons with limited abilities.

Both the Transfer Wall and Transfer System are more limited in general usability, but are designed to allow a swimmer with only upper body mobility to execute a lateral transfer from their wheelchair onto either system and then enter the pool in a series of bump-slide transfers. The original thrust in the late 90's by Indiana University as part of the ADAAG program was that both of these designs would offer the user a more dignified and self-sufficient means of pool access as opposed to the then-prevailing sling lift designs.

The basis for the requirement for at least two means of access at larger swimming pools is to allow more options and flexibility in accessing pools; it is not based on any general assumptions of swimming capabilities.

can also be used to satisfy this secondary requirement.

ANALYSIS

The basis for the requirement for at least two means of access at larger swimming pools is to allow more options and flexibility in accessing pools; it is not based

For the hospitality and lodging sector these two methods would not enhance the versatility of the pool and essentially duplicate the function of a Chair Lift. The far more universally useful Pool Stair category of secondary access offers safe and speedy unattended pool access and throughput to a much broader

population and, therefore would be a preferred choice.

Pools with built-in permanent steps should fully review their existing stairs for compliance with the 2010 ADA Standards. When considering whether to buy new or modify existing access, one should consider the costs of both the basic concrete rework and the pool bonding if additional modifications and/or handrails will be required to make the permanent steps ADA compliant. It may be less disruptive and more cost-effective to consider a drop-in ADA compliant Pool Stair that requires no pool modification.



No pool modifications are required with drop-in stairs.

The 2010 ADA Guidelines fully define the architectural details of pool stairs and their handrails. A minimum 11" tread depth measured horizontally from one nosing to the next nosing is required. Open risers are not allowed. There are also requirements for handrails to be on both sides of stairs with a height ranging from 34" to 38" above stair nosings and ramp surfaces. The width between handrails must be no less than 20" and not greater than 24 inches.

ADA regulations are mandatory across the U.S. and no state can pass a law or

ordinance that lessens their effect or requirements. However, states and local jurisdictions may add more stringent requirements by statute or local ordinance. The ADA does not intrude upon the authority states and local jurisdictions have traditionally exercised over the built environment. Several states have their own unique access code, while others have implemented requirements based on those of the ADA or adopt access provisions contained in model building codes. The ADA standards apply nationally in addition to any applicable state or local access requirements or codes. One does not overrule the other, and both apply

equally and must be met. In essence, the DOJ enforces federal compliance, but it is the Access Board that does all the legwork making the guideline's provisions in sync with federal law (the ADA).

The Accessibility Guidelines and DOJ Standards may be downloaded from NAHLE's website. See NAHLE.org/Document Search/Federal Regulations/ADA:ADA Accessibility Guidelines and the DOJ Standards Title II and III for further reference.

For further information on require-

ments for swimming pools and spas see: DOJ's website at: www.ada.gov/pools_2010.htm and, the Access Board's at www.access-board.gov/recreation/guides/pools.htm.

The National Association of Hotel & Lodging Engineers would like to express our most sincere condolences to the disability community and family of Gordon H. Mansfield, former Chairman of the U.S. Access Board, who passed away during surgery on January 29, 2013.



*Gordon H. Mansfield,
former Chairman of the
U.S. Access Board*

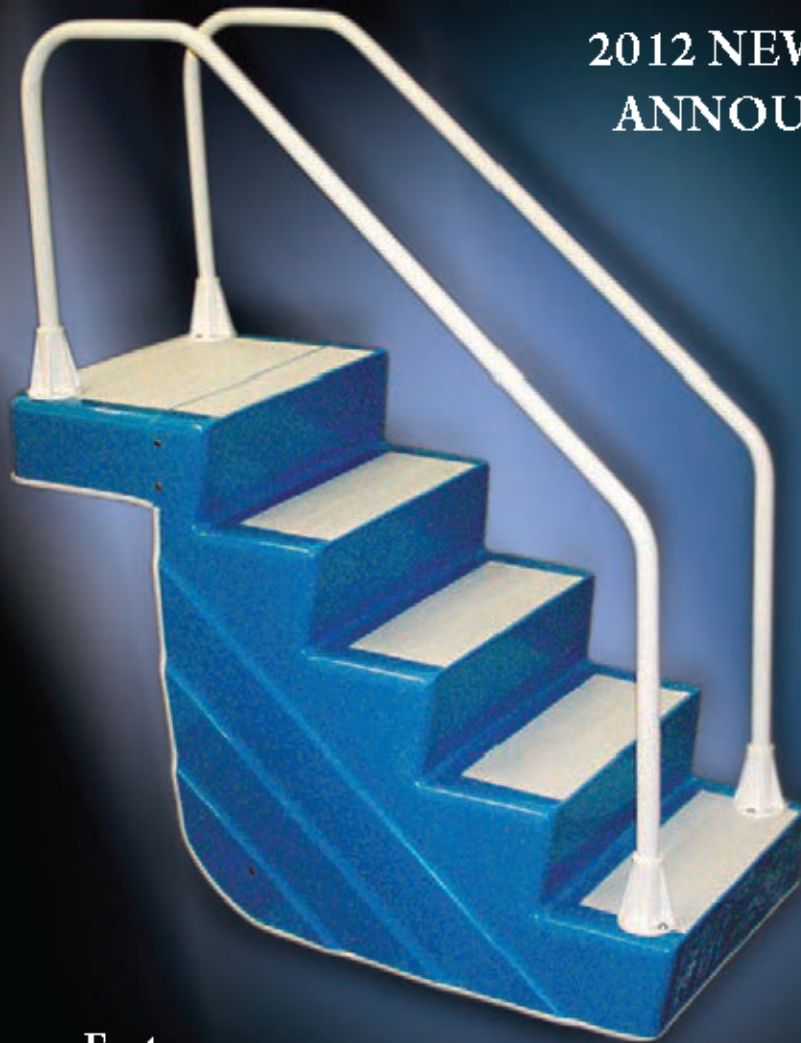
An advertisement for a study guide titled "HOTEL ENGINEERING" by Robert F. Elliott. The cover features a blue background with a stylized city skyline and the title in large orange letters. Below the title, it says "Certified Chief Engineer Study Guide". At the bottom, there are logos for "nahle", "GRAINGER", and "American Hotel & Lodging Engineering Institute". The text "JOIN NOW!" is in large red letters, followed by "\$99.95" and the website "www.nahle.org/Join".

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Maintenance Tip

INTEGRATED PEST MANAGEMENT AN EXCERPT FROM OUR CCE STUDY GUIDE



Modern, responsible pest control is often termed “Integrated Pest Management (IPM). IPM can be defined as: A coordinated system of technological and management practices to control pests in a safe, environmentally sound, and economical manner. It is a process for minimizing pesticide use and risk while maximizing the control of pests that affect public health, impede operations, or damage property.

There are four basic steps in IPM:

■ Altering the pests’ environment: Making the area less attractive to pests, for prevention, and also as an appropriate reaction to existing pest problems. Examples include improving sanitation and storage practices, practicing proper garbage disposal or recycling, and caulking pest entry or breeding locations.

■ Using mechanical traps to catch pests: Usually a control technique or, more often, a step to monitor the success of the control program or determine if the action threshold has been reached.

■ Developing action thresholds: Selecting the level of pest activity that will be tolerated before reactionary measures are implemented.

■ Considering the use of pesticides: If the pest problem persists despite taking the previous steps, pesticides may be contemplated. When selecting a pesticide, consider the environment in which it will be applied as well as its attributes, such as odor, volatility, toxicity, and persistence in the environment. A common pesticide hierarchical approach is used. This hierarchy looks beyond toxicity issues and instead evaluates the level of human exposure. Baits are the most acceptable choice, followed by wettable powders, dusts, and, finally, liquid residuals. If the pest in question is originating from outside the building, then the exterior should be treated before the interior.

of the pest-control technician

- The degree of implementation of cultural, mechanical, and structural recommendations.

Many people view IPM as complex and more difficult than setting baited traps or applying pesticides. However, when it is handled correctly, a conversion to IPM should occur smoothly. Even if a complete IPM program is not undertaken initially, adopting some techniques of IPM will foster an easier transition to IPM in the future. Regulations will continue to tighten, favoring an IPM approach in response to pressures applied by environmental groups. These pressures already have appeared in many school systems and hotels in which IPM programs have been mandated.

The pest-control expert essentially becomes a consultant and less a pesticide applicator.

In applying this four-step process, the pest-control expert essentially becomes a consultant and less a pesticide applicator, providing recommendations on maintenance, sanitation, and environmental changes for pest prevention. When pesticide applications become necessary, the pest-control expert presents various chemical options with their advantages and disadvantages from the perspectives of effectiveness and safety, in addition to applying the chemicals. Factors affecting the success of an IPM program include the following:

- Proper education of the property manager and occupants in IPM philosophies
- The level of knowledge and expertise

Ultimately, an IPM program may produce additional benefits. Many property management companies that have introduced IPM have been able to use it in their tenant retention programs. These companies position their buildings in an environmentally friendly light by showing tenants the proactive approach they take in reducing pesticide exposure while maintaining a high level of pest control. There is also a risk management consideration, since the reduction of pesticide exposure further reduces potential claims of pesticide poisoning (whether real or imagined.)



KEEPING a L.I.D. on HOTEL WATER COSTS

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Do you know that fees for water, wastewater, and stormwater are increasing as fast if not faster than any other product or commodity in the U.S.? The majority of local jurisdictions in the U.S. now charge stormwater fees. Before the recent assessment changes, these fees were included in a hotel's tax bill, but increasingly these fees are being transitioned to your water and/or wastewater charge. This trend in new fee structuring is based upon charging a fee for stormwater run-off that is commensurate with a property's overflow of water and the municipality's removal of that water. Hotels and lodging facilities will increasingly find themselves subject to new fees and rising utility costs based upon the impervious nature of roofing and parking lot materials. In other words, the more roof and parking lot area (square feet) you have, the more stormwater runoff you will require the municipality to remove. Hotels and motels under new fee structures will be subject to unanticipated rising costs and scrambling to reduce excess runoff.

Most municipalities combine storm and sewer systems. However, many communities are strapped with collection systems dating over 100 years old. And, these systems are often in need of repair and upgrade. One legacy of 19th century municipal engineering is the Combined Sewer Overflow system that was designed to collect both sewage wastewater and storm runoff in the same pipes. These systems are mostly found in older cities along the east coast like New York City, Washington, DC, and Philadelphia, but are in fact found scattered throughout the



Clean water through Low Impact Development (LID).

U.S. Fortunately less than four percent of the U.S.'s 20,000 some municipalities have these antiquated combined sewer systems. Newer 20th century cities like Phoenix and Columbus are typically designed with separate sewage and stormwater systems.

ing storm water service fees as part of a storm water utility.

A stormwater utility is simply a funding mechanism dedicated to recover the costs of stormwater infrastructure regulatory compliance, planning, maintenance,

The new paradigm seeks to shift stormwater tax fees to a utility fee thereby including all contributors, both taxpaying properties and tax exempt properties, based on property area.

New EPA regulatory requirements, flood concerns, water quality issues and population growth all contribute to rising system costs of both maintaining and upgrading a storm sewer system. So how are municipalities responding to these new costs? They are doing so by adopt-

capital improvements, and repair and replacement. The new paradigm seeks to shift stormwater tax fees to a utility fee thereby including all contributors, both taxpaying properties and tax exempt properties, based on property area. Approaching the problem from a stormwater

utility perspective addresses the inadequacy of funding stormwater management by property taxes or water/sanitary service fees and moves directly away from Combined Sewer Overflow Systems (CSO) and focuses on separate stormwater and sewer systems for communities.

In theory a sanitary sewer system collects sewage and other wastewater and transports it to a facility for proper treatment and disposal. Even the best systems are subject to occasional blockages or failures due to structural, mechanical, or electrical problems. Sanitary sewer overflows can occur when any untreated sewage is discharged from the collection system. This excess discharge is often associated with pipe blockages, pipe breaks, infiltration and inflow from leaky pipes, equipment failures, or the population has out grown the system's capacity. During periods of heavy rainfall or snowmelt the wastewater volume in a combined sewer system can exceed the capacity of the sewer system or treatment plant. Combined sewer systems are designed to overflow occasionally and when they do, they typically discharge excess wastewater directly to nearby streams, rivers, lakes, or estuaries.

Excess wastewater discharge may be dangerous to the public carrying with it harmful substances. The Environmental

Protection Agency (EPA) is mandating in over 750 cities a reduction in Combined Sewer Overflow (CSO) events. In December 2010, the EPA set limits on the amount of nitrogen, phosphorus, and sediment from sources necessary to attain adopted water quality standards. EPA established the mandatory regulatory requirement of a total maximum daily load (TMDL) requirement only after years of mostly ineffectual voluntary and required efforts of the various jurisdictions to reduce pollutants. The cost of compliance has not been fully realized and will likely cost our nation billions of dollars. Faced with tougher water quality standards and rising disposal costs numerous environmentalists are approaching the problem from differing perspectives. One leading expert, David Eckert, suggests clean water through Low Impact Development (LID). This approach addresses five essentials principals:

- Conserve sensitive lands
- Minimize pavement and building footprints
- Disconnect stormwater flow from current system and use water for other uses
- Infiltrate rainwater into groundwater through bio-retention basins
- Educate, maintain and enforce

As a water conservationist, I recommend

starting with simple steps that can be easily adopted to reduce run-off such as:

- Rainwater harvesting systems
- Bio-retention basins and
- Green roofs.

As some jurisdictions such as Philadelphia and Richmond are already discounting stormwater fees for businesses that are taking efforts to alleviate the run-off from their properties, others municipalities, such as our nation's capital are implementing innovative stormwater credit trading programs. With minimal planning and effort, hotel owners can reap the benefits of implementing LID and sustainable practices and help reduce the hidden costs of impervious roofs and parking lots.



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THE NEXT FRONTIER: CAR BATTERY CHARGING STATIONS

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Gaining a competitive advantage in today's hospitality market is no easy task, but many savvy GMs and several leading hotel brands are taking a very calculated risk in anticipation of some very high returns. Since 2005 over 2 million electric vehicles (EV) and hybrid plug-in electric vehicles (HPEV) are on the road. And, projected combined sales for 2013 is now up to an astonishing rate of 40,000 cars per month. Soon, all of these new travelers will be looking for alternative electric vehicle charging stations (EVCS). And, then it won't be long before offering a complimentary \$1 - \$5 EV charge will be all that it takes to capture a room night or dinner at a property's restaurant.

One such early pioneer is Hilton's Frank Vismeg, Managing Director of Marketing & Sales, Hilton Garden Inn & Conference

Centre. "I just thought it made sense to offer this service. If our guests are driving an electric vehicle they are going to need a charge, so why not stay at our hotel? For a \$3 dollar charge I sell another room night. I installed two charging stations in October 2012 for a total of \$9,000. It was not a big deal and it has already increased our business."

"When the idea of installing electric-vehicle charging stations came to us, we knew this was an opportunity we couldn't pass up," said Dan Egan, Director of Sales & Marketing, InterContinental, Chicago. "In addition to benefiting our hotel guests, these charging stations are available to the public for shopping or dining at one of Chicago's outstanding restaurants. Guests can also reserve a charger at the InterContinental by downloading a network app on their phones."

Jeff Zarrinam, General Manager at Hollywood Hotel, says, "the decision to install a charging station back in June was a 'no-brainer.' It's also just good prudent business



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for everyone and gives us a good reputation of doing the right thing."

The Holiday Inn Washington, DC-Central, installed electric vehicle charging stations in August 2012. Guests will be able to charge up their electric vehicles on site and commuters and local residents will also be able to pay a fee to charge their vehicles at the station.

In addition to Hilton and InterContinental, Starwood's Element brand has mandated EVCS with priority parking at all of their properties. Kimpton Hotels offers discounted EV parking at most of their 52 properties. Marriott now has a website listing 22 properties with charging stations.

So, if you are wondering whether this is just a passing trend or the next frontier, now is a great time to begin researching the selection and installation of EVCS for your hotel. To learn more visit NAHLE's website at www.nahle.org.



The InterContinental Miracle Mile is the first Chicago hotel to install two EV Blink charging stations supporting the Mayor's retrofit efforts for energy efficiency.



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