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Sizing Up The New Facility Cleaning Decisions

As I turn the page on another calendar year, I can't help but reflect on a few accomplishments from the last 12 months.

I'm proud to say that in 2015, Facility Cleaning Decisions successfully added two additional issues to our frequency. Now, readers have more frequent access to industry trends and topics pertaining to their careers and departments.

Personally, 2015 marked my 10th year as editor of this great publication.

I remember my first couple years, still meeting

readers and building relationships. And now, it's all

hugs and warm hellos as I walk industry events. This

Lastly, 2015 marked the year where I was finally

able to respond to the many requests from readers

is an industry I'm extremely proud to be a part of.

regarding the size of the publication. As you can

see, Facility Cleaning Decisions is no longer "the

big magazine" that doesn't fit in your briefcase or

on your bookshelves. Instead, we've changed the



Corinne Zudonyi

size of the pages, and added a whole lot more of them.

In response to reader feedback, we're offering some new and exciting sections aimed at helping you stay abreast of industry tends and better manage your department for the future.

You'll notice that we've brought back an "Industry News" section. Turn to page 6 for departmental recognition, awards, announcements on industry changes, association updates and educational offerings. In addition to our daily news on CleanLink.com, we'll feature industry highlights in this section every issue. If you have news to share, please send it our way.

I've also heard readers' requests for more product information. You'll notice that we've dedicated even more pages to the latest innovations, and expanded the size of our case studies.

Finally, I'm fully aware that Facility Cleaning Decisions readers aren't only interested in cleaning topics. After all, you are managers, overseeing very large staffs. You'll find Ben Walker's management column (page 32) to be very insightful when faced with employee challenges.

It is our mission to create a publication that serves our readers in the best way possible. I'm proud to say that this new design and all the new informational offerings will do just that.

Comme Grdony; Editor

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Insight and Education



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contents













features

[cover story] 12 The Cleaning Internet of Things

Technology offering data connectivity and communication in fixtures and machines has entered the cleaning realm

16 Vacuums: Strapping on Savings

Using backpack vacuums can save departments time and money

20 Signs of Healthy Hands

Hand washing compliance rates and techniques cleaning managers can implement to improve them

24 Floor Equipment: Quiet Please

Address healthcare noise levels by using quieter, well-maintained floor care equipment

26 Survey Reveals Cleaning Complaints You Just Can't Believe

Some of the wildest complaints readers have received from building occupants, as well as their biggest pet peeves

[column]

32 Breaking Bad Habits

Identifying weaknesses within the department and developing a roadmap for success

departments

- 2 Editor's Note
- 5 Advertiser Index
- 6 Industry News
- 28 Product Showcase
- Case Study 31



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ALL ARTICLES AVAILABLE ON CLEANLINK.COM



Advertiser Index

COMPANY	PAGE
CleanLink.com	3
CleanLink Member	27
CleanLink Mobile	19
ETC of Henderson, Inc	C2
HealthcareFacilitiesToday.com	23
myCleanLink	C3
New Jersey Sanitary Supply Assoc	9
NFMT Baltimore	11
Palmer Fixture Company	21
ProTeam, The Vacuum Company	17
R.E. Whittaker Company	5
Spartan Chemical Co., Inc	1

COMPANY	PAGE
Triple S	7
TTI Floor Care North America	C4

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INDUSTRYNEWS

Cornell University Staff Are Recognized For Service Excellence

Six members of the Cornell University custodial and housekeeping staff were recognized with the ninth annual Bartels Awards for Service Excellence. Recipients included:

GARY ALLEN - Specializing in comprehensive floor care, Allen has been a custodian for the College of Engineering since 1990. He's known for his "superior work ethic" and "generous team spirit."

SLAVIK BINDAS - Bindas works second shift and is known as a team player, a solid communicator and the person who volunteers when someone is out. He took on one of the most daunting floor-stripping and waxing projects on campus.

MICHELLE CLARK - Clark has "impeccable customer service skills" and "gets the job done and done right." She is always willing to help out with major campus events such as inauguration, trustee dinners, Charter Day, athletics events and concerts.

PENNY LOCKWOOD -

Lockwood works in the Cornell Child Care Center where she is known to be engaging with building occupants, is detailed-oriented and understands the importance of cleanliness and sanitation.

JANET LOTT - Touted as customer-oriented and "an excellent leader and mentor," Lott was instrumental in coordinating the renovation cleanup and new building maintenance at Stocking Hall.



MARTI SMITH - Since starting her career at Cornell in 1996, Smith has served as an acting lead custodian, offering her insight and willingness to embrace change while upholding the department's core values of truth, respect, excellence, teamwork and integrity.

According to the *Cornell Chronicle*, the Bartels Award is presented to six custodial staff members, who have at least five years of service and were nominated by the Building Care management team based on work performance. Each winner receives a certificate of recognition, congratulations from Facilities Management leaders and a monetary award.

Eight members of the Building Care staff were also recipients of the Bartels Scholarship Program, which encourages custodians and their children to take classes to further their education.

The awards are named in honor of Phil Bartels, a 1971 Cornell graduate and member of the Cornell University Council, and his wife, Susan. They were launched in 2008 to honor a custodian from the Department of Building Care who had bestowed a random act of kindness on a harried senior studying for her final exams. That student turned out to be the daughter of Phil and Susan.

Phil Bartels said in a *Cornell Chronicle* statement, "Simply stated, each year the award recipients have been amazing. To my wife and me, this award is indeed a confirmation of the truly fine quality of the Department of Building Care."

Mop Manufacturers Showcased In Box Office Movie

Algoma Mop Manufacturers, a mop manufacturing company located in Algoma, Wisconsin, was contacted by 20th Century Fox in early 2015, asking if they could provide some custom made mops for a movie that was going into production. That movie hit the big screen in late December.

"JOY" is the story of a family across four generations, but it centers around Joy Mangano, inventor of the Miracle Mop and one of America's most successful entrepreneurs. The movie is based on Mangano's rise to become founder and matriarch of a powerful family business dynasty.

During the production of "JOY," Algoma Mop provided over 500 mops in various stages of production, as well as large bales of yarn and metal-fabricated, handoperated mop looping work stations. Algoma Mop contracted with Olson Fabrication of Algoma to create parts used in the production of these machines. Some scrap yarn pieces and cotton dust bunnies were also sent to get the full effect of a mop manufacturing floor. Powered by **Clean**Link.com

ISSA Announces Innovation Award Winners

ISSA recognized the 2015 Innovation Award Winners at the Excellence Award Luncheon at ISSA/INTERCLEAN North America in Las Vegas.

The ISSA Innovation Award Program featured 39 products and services from cleaning manufacturers and service providers. Participants were entered into one of five categories: Cleaning Agents, Dispensers, Equipment, Services & Technology, and Supplies. Individuals representing distributors, wholesalers, and facility service providers throughout the industry readily reviewed what was cutting-edge in clean and placed their votes online between July 1 and October 16, to determine the online category winners.

During ISSA/INTERCLEAN North America 2015 in Las Vegas, October 21-23, exhibiting entries were on display in the show's Innovation Showcase area, and attendees voted to determine five additional Visitors' Choice award winners.

2015 ISSA Innovation Award Program Category Winners are:

- CLEANING AGENTS Clorox Professional Products Co. for Clorox Commercial Solutions Clorox Disinfecting Wipes
- DISPENSERS (CO-WINNERS) Georgia-Pacific Professional for compact ActiveAire Dispenser, and Rubbermaid Commercial Products, Inc. for Battery-Free Dispensing
- EQUIPMENT Kaivac, Inc. for Battery-Powered Auto Vac
- SERVICES & TECHNOLOGY Spartan Chemical Co., Inc. for CompuClean Mobile
- SUPPLIES 3M Commercial Solutions Division for Scotchgard Surface Protection Film

2015 ISSA Innovation Award Program Visitors' Choice Award Winners are:

- CleanTelligent for Branding
- Georgia-Pacific Professional for Compact ActiveAire Dispenser
- Sealed Air Diversey Care for TASKI Intellibot SWINGOBOT 755 by Intellibot Robotics
- Sealed Air Diversey Care for TASKI swingo 2100µicro Microrider/Machine
- Ultimate Solutions, Inc. for i-cart Cleaning System

Royal Corp. Adds Location, New Team Members

Royal Corporation, of Santa Fe Springs, California, is adding to its nationwide network of distribution centers with the addition of a new location in Jacksonville, Florida.

Additionally, the distributor made a number of personnel moves. Rob Mouw was promoted to vice president of business development. Jose Diaz was promoted to director of corporate operations. And Phil Baron was hired to enhance Royal's use of technology and social media for marketing and customer training.

Royal is also expanding its sales staff. Chuck Hill will focus on manufacturing and religious markets. Jed Zluticky will develop education and healthcare accounts. Matthew Stark has a proven track record in higher education and municipalities. And Jose Reyes will work with the independent grocers and food processors.

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USGBC Announces 2015 Leadership Award Recipients

The U.S. Green Building Council (USGBC) announced the recipients of the 2015 Leadership Awards, which celebrate the outstanding individuals and organizations at the forefront of sustainability in the built environment. The recipients were recognized at the annual USGBC Leadership Luncheon at the Greenbuild International Conference and Expo in Washington, D.C.

These 2015 USGBC Leadership Award recipients include:

• Colgate-Palmolive Company is this year's recipient of the Ray Anderson Radical Industrialism Award. Sponsored by the Ray C. Anderson Foundation, USGBC presents this namesake award each year to a leader in the manufacturing sector whose commitment to and achievements in sustainability exemplify Ray's vision.

• Juan Ontiveros, associate vice president – utilities at the University of Texas at Austin, is the winner of the inaugural Robert W. Galvin Award given to an individual. Under his direction, the University of Texas at Austin has invested hundreds of millions of dollars in energy efficiency and capacity upgrades, all of which have been covered by energy savings.

• Dr. Cornelius Murphy, former president and now Senior Fellow for Environmental and Sustainable Systems at State University of New York College of Environmental

New Officers Elected By IICRCA Board of Directors

The International Inspection, Cleaning, and Restoration Council of Associations (IICRCA) announced the new officers that have been elected by their Board of Directors. The voting occurred during the winter board meeting in December at the IICRCA headquarters in Las Vegas.

The IICRCA Board of Directors nominated candidates for all the following positions: chairman, secretary, vice chairman, treasurer and first vice president. The new executive committee consists of:

Jim Pearson – Chairman

Tony Wheelwright – Vice Chairman Craig Herrmann – Secretary

Bruce Vance – Treasurer

Jim Hirsch – 1st Vice President

Bryan O'haleck – Past Chairman

The IICRC (Institute of Inspection, Cleaning and Restoration Certification) will appoint a candidate for the one vacant position on the IICRCA board of directors.

Science and Forestry, is a leader in the academic sector and has worked tirelessly to advance the study and discussion of environmental science.

• Amory Lovins, co-founder of the Rocky Mountain Institute, is one of the heroes of the green building movement. His visionary leadership and determination to carry the global conversation about innovation

in resource use forward, and to involve stakeholders from every walk of life, has broadened the support base for the green building movement.

 Romilly Madew, CEO of Green Building Council of Australia, is a convener, a collaborator and a champion for sustainable development and the green building movement around the world.
 Honorable Katherine Hammack, assistant

secretary of the Army for Installations, Energy and Environment, has exemplified outstanding leadership in the public sector. Her unwavering advocacy for the use of LEED in Army buildings has been critically important to the green building movement.

• Chrissa Pagitsas, director of the Green Initiative at Fannie Mae, is being recognized for revolutionizing how we think about and deliver financial services to the multi-family industry. Under her direction, the Fannie Mae Multifamily Mortgage Business has originated more than \$140 million in Green Mortgage Backed Securities.

Updated Website Assists Facility Executives

The International Executive Housekeepers Association



(IEHA) unveiled a new website. This is the latest initiative in an aggressive plan to grow the Association's digital presence and online offerings.

- The new website will include:
- Improved navigation, reporting, membership renewal and document sharing
- Transformed online resource center
- New and previously published articles

See the new design at www.ieha.org.



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COMPANY NOTES

Spartan Chemical Company, Inc.

announced the promotion of Justin Eisenschmidt, Paul Roskos and Jesse Vermeersch to the role of regional manager. Eisenschmidt will manage the Boston region. Roskos will oversee the East Iowa region. And Vermeersch is responsible for the Connecticut region.

QuestVapco Corporation has

officially changed its name to QuestSpecialty Corporation to better reflect its strong core competency in the manufacturing of specialty chemicals. The company manufactures over 400 different specialty chemical products.

Consolidated Chemical Works

(CCW), donated a skid of cleaning chemicals, including all-purpose cleaner and laundry detergent, among other products, to Matthew 25 Ministries in early December. Matthew 25 Ministries provides humanitarian aid to the poorest of the poor throughout the United States and in developing countries around the world, focusing on children and the elderly.

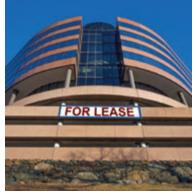
Warsaw Chemical Co., Inc.

announced their new, updated website, www.warsaw-chem.com. The website features a new design and layout that is easy to navigate. It features contact information, company and products news, literature, technical sheets and data sheets. Lehr Holdings, LLC. announced the acquisition of ONYX Environmental Solutions Inc., manufacturer of propane-powered floor grinding and polishing equipment. As a division of Lehr Holdings, ONYX will continue to offer floor care solutions to facility maintenance professionals through a network of servicing distributors worldwide.

Nilfisk Group announced the acquisition of both Redlands, California-based Hydro Tek, Inc. and Port Pierce, Florida-based Pressure-Pro, Inc. Both are manufacturers of high pressure cleaners. The acquisition significantly increases Nilfisk's market reach in this business throughout North America.

Cleaning Industry Can Capitalize On Demand For Office Space

While most segments of the economy have experienced considerable growth in the past three years, one area that has remained sluggish has been the leasing of office space. This has negatively affected virtually the entire professional



cleaning industry. With fewer office tenants, less building space needs to be cleaned, and fewer cleaning tools, equipment, and chemicals are purchased. However, according to a report by the commercial real estate

research service Reis Inc., that is changing rapidly, which should

prove positive for the professional cleaning industry. In fact, according to Reis, additional office space is being leased at the fastest clip since the recession began.

The report finds that U.S. employers added 15.3 million square feet of office space in just the last quarter of 2015. This is more than any quarter since 2007, the year the economic downturn began.

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INDUSTRYNEWS

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IEHA Recognizes New Class Of Boot Camp Participants



In October, IEHA recognized a new class of professionals that successfully earned their CEH (Certified Executive Housekeeper) and REH (Registered Executive Housekeeper) certifications. Participants of the REH/CEH Boot Camp represented a wide variety of industries, including healthcare, assisted living, education and contract cleaning. The following individuals were celebrated for their hard work and dedication to the cleaning profession:

- » Harold Rhoney Beech Island, South Carolina
- » Kalani Motta Honolulu, Hawaii
- » Paul Schmidt Landrum, South Carolina
- » Gloria Strauthers (Wesley) Brooklet, Georgia
- » Dolly Richardson Tahlequah, Oklahoma
- » Jill Sanders Canterbury, New Zealand
- » Nerissa Wild Otago, New Zealand
- » Anthony Crawford Roseville, California

» Tammy Toderean - Roseville, California

In 2016, IEHA will kick off a CEH/REH Boot Camp Tour. The educational events will be held at several locations around the country, enabling participants to earn designation in just two days. Attendees will receive a focused, one-on-one approach to the Professional Education Credentialing Program (PECP) in a classroom setting. Following the instructor-led training session, a test will be given to earn CEH or REH designation. Dates and locations of classes are:

- » Columbus, Ohio March 5/6
- » Jacksonville, Florida April 2/3
- » Oakland, California May 28/29
- » Las Vegas, Nevada July 2/3
- » Houston, Texas August 6/7
- » Wisconsin Dells, Wisconsin -September 3/4
- » Honolulu, Hawaii October (Exact date TBD)
- » Chicago, Illinois October 21/22

Do you have news to share about yourself, your facility, a new hire or an award? If so, send it to corinne.zudonyi@tradepressmedia.com.

COMPANY NOTES

ProTeam honored the manufacturer representative and rep groups who have made significant contributions to the year's success. Paul Dennis of Mid-America Distributor Sales was recognized with the Mark Reimers Award as 2015's Sales Representative of the Year. Washingtonbased Ryan, Saffel & Associates accepted the Larry Shideler Award for Manufacturer Representative Agency of the Year. And with the best five-year growth rate, Buckley & Associates was named Outstanding Rep Agency for 2015.

Elevance Renewable Sciences, Inc.

announced that its Board of Directors has appointed Tony Parnell as the company's Chief Executive Officer. Parnell succeeds K'Lynne Johnson, who has transitioned to a new role as Executive Chairperson of Elevance's Board of Directors.

CleanTelligent Software announced that Michael Jenkins will continue to serve as President and CEO, but Jason Pyne, formerly general manager and head of customer support, will now be vice president of operations, overseeing the Programming, Design, Quality Assurance, and IT/Stability departments. Caden Hutchens, formerly director of sales and marketing, will now be vice president of business development, overseeing the Sales, Marketing, and Customer Support departments.

Sealed Air Diversey Care announced the expansion of its PackForum Americas Training Facility in Atlanta. The 28,000 square-foot facility serves as a training and educational center for distributors, end users, Building Service Contractors, employees and new hires. The facility offers educational courses combining industry best practices and training on Diversey Care's products, machines and tools.

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THE CLEANING F ßS H 6 0000

By Nick Bullock

HERE'S A QUICK STORY about a cleaning professional. Before going in to work, she wakes up when the fitness tracker on her wrist pulses, telling her the ideal point in her sleep cycle to start the day. On the way to work, her car, using satellite technology, tells her to avoid the accident that's currently slowing down the interstate on her normal route. Once at work, she again uses the fitness tracker to monitor her steps as she tries to achieve her daily goal. Perhaps she sends that information, via the Internet, to her health insurer, which reduces her premium because she's staying active. On her break, she uses an app on her phone to access a camera in her house so that she can check on her dog. And, finally, after the day is over, she settles onto her couch to stream Netflix through her smart TV.

By now, the point is probably clear: More and more parts of our daily lives involve the Internet, which allows us to aggregate data on how we live our lives. The connectivity of objects to the Internet — known as the Internet of Things, or IoT — is so widespread in the consumer market that at least one janitor in every workforce is probably wearing a fitness tracker right now.

For the first time, however, the Internet of Things has arrived in a floor machine, soap dispenser or autoscrubber near you. The Internet of Things has officially reached the cleaning industry.

Manufacturers across the industry have found ways to connect their products to the Internet, allowing for the collection of data on many major tasks performed by custodians. Those manufacturers have also created cloudbased software platforms through which facility cleaning managers can analyze that data.

The goal is twofold: to improve efficiencies by streamlining cleaning processes and to improve the business model for facility cleaning managers. Already, IoT allows these managers to monitor the total run time of a machine during a defined time period, see whether the machine has left a pre-defined geographic location, view the fill levels of individual restroom dispensers, and measure hand hygiene compliance for an area of a facility or even a specific room.

To be sure, there is a learning curve with IoT technology in the cleaning industry, and manufacturers are handling that issue in different ways. Return on investment, sure to be of major concern to end users, is also a subject for debate. But manufacturers all seem to agree that the time to start collecting data is now, because data is most useful when there is more of it.

Technology offering data connectivity and communication in fixtures and machines has entered the cleaning realm "The [professional cleaner] that doesn't embrace the trend in the macro environment that we're seeing here is going to be left behind — at some point soon," says Tom Boscher, general manager of Intellibot Robotics and global vice president of marketing and technology for Sealed Air Diversey Care, based in Charlotte, North Carolina.

Cleaning Meets IoT

The Internet of Things is an odd mix of old and new. It's an old concept — that of collecting information to improve processes — but a new term. It's an old technology — by technology standards — yet recent advancement has opened up new applications. It's old — again, by technology standards — in certain markets, but new to the cleaning industry.

"I think [the cleaning industry is] a pretty low tech industry to begin with," says Boscher. "For the majority of the tasks performed, it's very labor intensive. Mops and buckets and hand towels, things like this still rule the day. I would assume [IoT] would come later to this industry than to others."

The tipping point, says Boscher, came when cleaning industry end users began to take notice of the advancement of IoT in the consumer marketplace. Using a smartphone, a person can now control their thermostat, their refrigerator, even their garage door.

"When the cleaners walk through Home Depot and there are entire sections devoted to the connected home — these start to create a tipping point, and they say, 'Hey, this might not be such a farfetched idea to see this in my workplace,'" says Boscher.

These days, technology can often create a fear of job loss or reduced hours, especially in an industry like professional cleaning, where workers worry they'll be replaced by machines. But as the workers have become more comfortable with IoT technology, they've begun to see where it can actually improve their work. In that regard, this idea to improve processes through data collection and connectivity was born from minds of manufacturers, not end users.

"It was more recognizing a need and a change in the market," says Jimy Baynum, director of market development for SCA, based in Philadelphia. "Customers weren't asking for it because they never thought it was possible. With the development of Internet of Things technology, and many things out there today, if you ask people when they see it actually developed if it's beneficial, they say, 'Yes.' But if you ask them prior to development, 'Had you ever thought about something like this,' they would say,

Technology has advanced to a point where it finally makes financial sense to bring IoT to the cleaning market

'No, it just wasn't possible.' You go all the way back to the launch of the iPhone. People didn't even know what they would want from a phone until the iPhone was actually launched, and then they realized all the benefits."

Another tipping point was that the IoT technology advanced to a point where it finally made financial sense to bring it to this market.

"Technology has gotten cheap enough and small enough to put sensors in almost everything," says Baynum. "And because of the availability and the affordability of sensors, now people are deciding, 'Well, where should I put sensors so that I could get information?'"

Some manufacturers began posing that question years ago. The engineers at Minneapolis-based Tennant Company, for example, have been working on IoTenabled technology in some capacity for more than 10 years, says Michelle Nissen, senior product category manager for Internet of Things solutions.

Initially, the work was very conceptual, says Nissen, focused primarily on the wider field of wireless communication. But as wireless communication technology matured, Tennant engineers began incorporating that technology into the company's commercial cleaning equipment, around 2012.

"Maybe we didn't know exactly how it would take shape," says Tennant's Kathryn Lovik, director of global communications, "but we've always known that data is important to our customers."

The More You Know

"If you can't measure it, you can't manage it," so the saying goes. In other words: knowledge is power. The reason data is important to facility cleaning managers is because it allows them to measurably improve processes and increase efficiencies.

In that way, the goals of many of the innovations that fall under the Internet of Things umbrella are no different than most other innovations in today's commercial cleaning industry. Budgets are being squeezed, the threat of outsourcing is real and facility cleaning managers must do more with less. At the same time, there's renewed focus on areas like hand hygiene compliance. The Internet of Things can help with all of the above.

The previous way to measure efficiencies was traditionally direct observation. But IoT technology now provides cleaning managers with objective, irrefutable data.

"One of the things we can get out of it is a new baseline for measurement," says Jason Slater, technology manager for GOJO SmartLink, based in Akron, Ohio. "Direct observation has been the gold standard for a long time. If you read articles about that, they talk about numbers being reported higher than they really are. ... It's very interesting hearing what people think goes on. Then you have a system in place that measures what exactly is happening. It's pretty fascinating, even for those folks, to have the realization that maybe workers are or aren't entering an area as often as they think they are."

As an example, some IoT-enabled restroom dispensers can track fill levels, allowing cleaning managers to know whether a restroom needs more soap without actually having to walk across the facility to look, which will save janitors time and allow for increased cleaning in other areas.

Other IoT-enabled dispensing systems feature infrared sensors that can actually track occupant traffic in and out of a restroom. Combine that information with the usage data from the dispenser itself and a cleaning manager can gauge hand hygiene compliance down to a specific restroom.

Connectivity has spread beyond restrooms, however; manufacturers have added the technology to their floor machines and autoscrubbers. This allows facility cleaning managers to know, in real time, when a floor machine needs new parts, battery levels, how often the machine has crashed in a given timeframe, usage patterns and more. Some machines even boast geolocation technology, which can help cleaning managers cut down on theft of machines or simply help them find a machine that has been misplaced.

Data Diving

The data collected by these smart machines and dispensers is funneled into software platforms created by each individual manufacturer. But what happens from there is the next great, relatively unanswered question in the Internet of Things world.

Obviously, that data must be analyzed so that trends can be identified and actions can be taken. But who will do the analyzing? Commercial cleaning equipment manufacturers have worked hard to ensure their data-management software platforms are user-friendly and intuitive. But most admit that facility cleaning managers may need to turn to outside help in order make the most of all this data.

Some manufacturers are looking into creating consulting departments to provide such services — at a cost. Others are providing that help as part of their IoT package. One manufacturer even has the expectation that analyzing IoT data is probably beyond the capability of most cleaning managers, and thus the manufacturer doesn't even share the raw data with the customer unless requested.

The approaches vary considerably. As a result, facility cleaning managers can probably expect independent cleaning industry consultants to begin offering data consulting services, as well. At the very least, a cleaning manager may need to bring the data to an information services department within their own company.

Then comes the question of a timeline for return on investment. After all, data is only useful if there is a lot of it. Small sample sizes could lead to faulty assumptions about cleaning practices, which could lead to faulty corrections to cleaning practices, which could prove costly.

Data takes time to accumulate, however, and that could take anywhere between several months and a year, depending on the size of the cleaning operation, says Baynum.

"If you have a healthcare facility, or a facility that's running 24/7, we think within 90 days we can have a significant amount of data to highlight very immediate trends," he says. "If it's a slower facility, it could take 12 months. So it's really going to depend on the frequency and number of visitors."

But that, say manufacturers, is all the more reason to embrace IoT today — it's imperative that cleaning departments begin collecting data right away.

What's more, IoT — or more accurately, data collection — isn't a passing fad.

"We all know technology comes and goes," says Nissen. "But the need for data, leveraging that data and insight to drive action that helps anyone better manage business, I think, will always exist."

Right now, says Baynum, IoT technology is still only used by the group known in tech circles as "early adopters," which usually constitutes about 13.5 percent of users. Next will come the "early majority" with 34 percent of the user base, then the "late majority" with another 34 percent. But it might only be another five years before the late majority latches on, he says.

And facility cleaning managers can probably count on many building service contractors to be among the early adopters, since the technology fits the BSC model: economies of scale come into effect with larger machine fleets, and early adopting contract cleaners can and will make use of IoT to stand out when writing bid proposals.

"Today, [IoT] is the order winner," says Boscher. "Down the road, it will be the order qualifier."

If facility cleaning managers want to take advantage of an opportunity to differentiate, the time to jump aboard the IoT bandwagon is now, say manufacturers. At the rate technology evolves, IoT will soon become ubiquitous in the cleaning industry — just as it did in the consumer market for the janitor with her fitness tracker and her smart TV.

NICK BULLOCK is associate editor for Facility Cleaning Decisions' sister publications Contracting Profits and Sanitary Maintenance.

Look for more articles and new IoT products throughout the year on www.CleanLink.com VACUUMS

Strapping On Savings

Max

Using backpack vacuums can save departments time and money

By Angelica Dudenhoefer

WHEN CLEANING FACILITIES that have multiple surfaces, it can sometimes be difficult to find the right tool for the job. That is where backpack vacuums come in.

A good backpack vacuum can clean a variety of surfaces and they have attachments for those hard to reach places. It is no wonder that this equipment has made it possible to clean facilities more quickly and efficiently than ever before, which in most cases leads to a cost savings for cleaning departments.

Going Vertical

Vacuums are most widely used for horizontal surfaces such as carpets and hard floors. But it's the vertical surfaces that are often ignored, yet they tend to accumulate large amounts of dust and dirt.

Vacuums were once overlooked for these tasks because their attachments couldn't extend up or into hard to reach areas. But that's no longer the case.

Experts agree that backpack vacuums are a great tool for tackling vertical surfaces. They come with attachments that fit on the end of the hose and are designed to fit into crevices that other cleaning tools can't.

"Today, there are specialized tools for backpack vacuums that will allow the cleaning technician to maintain vertical surfaces on a regular basis," says Richard Bodo, former textile division chair at the Institute of Inspection Cleaning and Restoration Certification (IICRC). "Maintaining vents, light fixtures, corners, furniture and other such surfaces with regular vacuuming will allow them to stay clean longer, and vastly extend the need for expensive and time consuming restorative cleaning."

Backpack vacuums and their multitude of attachments also allow custodial workers to save time by limiting trips to the janitor's closet. Quickly switch an attachment and workers can tackle ceilings, cobwebs, cube walls or upholstery.

Keith Schneringer, director of channel marketing and sustainability at Waxie Sanitary Supply, explains that using backpack vacuums to clean vertical surfaces saves time and money because most other methods are inefficient, particularly if one is using a duster or a cloth. Those tools may pick up the bigger particles, but the smaller particles are just being pushed around.

"Instead of knocking dirt and debris down or pushing it around, using the vacuum cleans, traps and removes the dirt," Schneringer explains. "You won't have to clean as frequently because the vacuum removes dust and dirt from the environment that is being cleaned."

They are also great for specialized tasks. For example, many backpack vacuums come with a brush head. This can be used on surfaces such as fabric walls, furniture and hard floors.

Benefits Of Filters

Not only do vacuums capture more dust, they contain it with proper filtration.

"Backpack vacuum filtration captures minute or micron sized particles so that the person doing the work isn't

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breathing them in or putting them back out into the environment," says William Griffin, president of Cleaning Consultant Services, Inc. "People these days are more concerned with better filtration. It is safer to use for the facility cleaners and the building occupants."

Schneringer agrees and adds that these filters can also help reduce cleaning frequencies because they prevent small dust particles from being redistributed onto surfaces during the initial cleaning process.

"It is one thing to pick up the dirt from the surface, and it is another thing to trap it in the vacuum cleaner," he says. "Other tools are good at picking up big stuff, but may vent and redistribute fine particulates back into the air. Backpack vacuums have filters that prevent this from happening."

HEPA filters, for example, capture 99.97 percent of contaminants from carpet and flooring. These filters can be found in most commercial vacuums, making them a strong alternative to traditional dusting and sweeping.

"Both upright and backpack vacuums have really good HEPA filtration," explains Rex Morrison, founder of Process Cleaning for Healthy Schools. "There isn't much of a difference between them when it comes to filtration."

The main difference between these machines lies in the vacuum attachments and the maneuverability of workers when using the backpack equipment.

Maintaining Mobility

When it comes to maneuverability, nothing beats battery-powered equipment. Thankfully, there are many backpack vacuums on the market that come with battery options. But how can battery equipment improve productivity? Simple, workers do not have to stop and unplug a cord, look for an outlet and plug it in again.

"The main benefit of a battery is that you are no longer tethered to a cord," says Schneringer.

The lack of a cord on a backpack vacuum means that the person cleaning can move around freely without interruption.

"The cleaning technician can easily maneuver around obstacles and between areas if the cord is eliminated," says Morrison. "As a rule of thumb, I always estimate a 25 to 30 percent increase in productivity when switching from a corded unit to a battery powered unit."

Backpack vacuums have revolutionized the way buildings are being cleaned

He adds that cordless equipment is also safer. Without a cord tethering workers to an outlet, there is no worry about causing a trip-and-fall situation or subsequent injuries for either the workers or building occupants.

Battery-powered equipment certainly has it's benefits, but cord or not, backpack vacuums will only add to a department's productivity if the equipment is properly fit to each technician.

Proper Fit

Backpack vacuums are designed much like the backpacks that people use for hiking and camping. When properly secured, they are engineered to distribute weight in a way that allows them to be worn for long periods of time

For even more information on vacuums, including product offerings, visit www.CleanLink.com/Vacuums

without causing discomfort.

Some experts have differing opinions regarding how to properly secure backpack vacuums. However, there are some important commonalities.

First, the backpack vacuum should be tightened so that it is snug but not uncomfortable. The cleaning technician should be able to move freely.

Second, the backpack vacuum should not jiggle or slide too much while being worn.

"If you do it right, the equipment will fit like a piece of clothing, and you will hardly tell you have anything on," says Morrison.

But even when properly fit, Griffin cautions that backpack vacuums are not for everyone. Those with certain medical conditions, back problems or those who are not capable of supporting the weight should not use them.

One good way to adapt to wearing a backpack vacuum is to ease into it. Wear it for a short period of time the first day and then gradually increase the amount of time. This will help to keep the facility worker from feeling sore due to the added weight, and it will allow them to get used to the new equipment.

Making sure staff uses the equipment is important because it is an investment. Backpack vacuums can cost 2 to 4 times as much as a standard upright, but many managers have seen a return on their investment once they factor in productivity and the price of labor. Experts agree, backpack vacuums are 3 to 4 times more productive on flat level surfaces, and significantly more productive on vertical surfaces, when compared to a standard upright vacuum.

"The way we go about cleaning has been changed tremendously," says Griffin. "We would not be doing nearly as good of a job without the innovations that came with the backpack vacuum. They have revolutionized the way we clean buildings."

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Signs Of Healthy Hands

Hand washing compliance rates and techniques to improve them

By Becky Mollenkamp

LAST YEAR, OUTBREAKS of E. Coli at Chipotle and norovirus on several cruise lines made the headlines. Those news-grabbing cases, coupled with the current cold and flu season, illustrate the importance of proper hand hygiene.

Although hand washing is critical in preventing the spread of illnesses, compliance rates remain low.

"It's abysmal," says Darrel Hicks, infection prevention consultant in St. Louis and author of *Infection Prevention for Dummies*.

A 2013 study by Michigan State University found that only 5 percent of people properly washed their hands after using the restroom. Other studies cite rates as high as 50 percent, but most agree that at least half of all people fail at hand hygiene — and that can have severe consequences, says Loie Couch, infection prevention specialist at Barnes-Jewish Hospital in St. Louis, Missouri.



"If your hands are contaminated, you can transmit that to as many as seven different surfaces," she says. "And consider the consequences when Hepatitis B can survive on surfaces for seven days. Other things can survive for three months. And you can't see them so you don't know they are there."

The cost of poor hand hygiene can be monumental. Illnesses can result in pricey absenteeism rates at schools and offices and, more worrisome, loss of lives in healthcare settings.

"People calling in sick costs this country billions of dollars a year, so clean hands will save businesses money," Hicks says. "Also, 100,000 people die each year from infections they've received at hospitals, and between 1 and 3 million people a year die in long-term care from healthcare-associated infections (HAIs)."

To curb these costly outcomes, there's growing pressure on facility cleaning managers to do what they can to boost hand hygiene compliance rates among building occupants.

"According to the Centers for Disease Control and Prevention, the single most important thing we can do to keep from getting sick and spreading illness to others is to wash our hands," says Brian Sansoni of the American Cleaning Institute (ACI). "All workplaces, schools, and office buildings should make it as simple as possible for everyone to clean their hands."

Start With Education

Some people mistakenly believe briefly running their hands under water counts as washing. Others think washing only after using the restroom is enough to prevent the spread of illness.

"I think a lot of people don't see the importance of it," Hicks says. "It's a lack of education. They may not see the connection between dirty hands and getting sick."

Educating building occupants on proper

hand hygiene can shift those flawed mindsets and begin moving compliance numbers in the right direction. There are five steps to getting truly clean hands, according to the ACI:

- 1. Wet hands with clean, running water (warm or cold) and apply soap, either in bar or liquid/foam form.
- 2. Rub hands together to make a lather and scrub them well. Be sure to scrub the backs of hands, between fingers, and under nails. Do this away from running water, so the lather isn't washed away.
- 3. Continue rubbing hands for at least 20 seconds, which happens to be the "Happy Birthday" song from beginning to end, twice.
- 4. Rinse hands well under running water.

5. Dry hands completely using a clean towel or air drier.

"The most important part of washing your hands is you have to have the friction with the soap on your hands for 20 seconds," Couch says. "Even when people do wash their hands, many don't do it for the appropriate amount of time."

Also important is washing hands at the appropriate times, which is more often than only after a trip to the restroom. The World Health Organization suggests *5 Moments of Hand Hygiene* for healthcare workers:

- 1. Before touching a patient.
- 2. Before clean/aseptic procedures.
- 3. After body fluid exposure/risk.
- 4. After touching a patient.
- 5. After touching patient surroundings.

Likewise, ACI says workers in office settings should wash up frequently, including before and after staff meetings if food is served, after touching anything in the break room, before and after lunch, after using shared equipment like a copier, and before and after shaking hands.

Basically, every time the hands touch a surface, there is an opportunity for germs to spread if hands aren't properly washed.

Signage can be a helpful educational tool. In schools, where children are still learning about personal care, Sansoni recommends posting signs all around the building. In offices and healthcare settings, use signage in the most vulnerable areas, such as kitchens and restrooms.

Although signs can be helpful, they are not the haveall-end-all. They can often go overlooked, Hicks warns.

"We've become dull to most warning signs," he says. "I worked in housekeeping for 33 years, so I know how many people don't pay attention to signs."

To make signage most effective, experts encourage managers to create a campaign that is engaging and frequently updated. Make posters fun or interactive, refresh them often and change their locations each time. At Barnes-Jewish Hospital, Couch's department now loads hospital computers with hygiene-related screensavers and changes them every other month.

Choose The Best Products

"Nobody wants to get sick, especially when it's cold and flu season," Sansoni says. "That's why facility cleaning managers should make sure the soap dispensers are filled and in proper working order. Properly maintained restrooms with sufficient soap supplies can go a long way to help prevent the spread of harmful germs that can make us sick."

Choosing soap that occupants want to use also makes a big difference in compliance rates. Bar soap has long since fallen out of favor, leaving most facilities choosing between liquid and foam varieties.

"The perception is foam is better, but I don't know of any statistical data indicating one is preferred over the other," Hicks says.

Soap preference is exactly that — a preference. The best way to determine a favorite among building occupants is to perform tests and conduct user surveys. Barnes-Jewish Hospital chose foam soap after a trial run that showed users preferred the bubbles.



Gentle soap is acceptable (or even preferred) over antibacterial in many settings. That's because the antibacterial properties only work after being on the hands for 15 to 20 seconds, Hicks says.

"If someone does a 3-second handwash, you're wasting money because you pay more for antibacterial than you do regular, good lanolin soap."

Also, many antibacterial soaps don't include moisturizers. That means they can be harsh on hands, which can cause chapping if users don't follow hand washing with lotion.

"My preference would be to have a good moisturizing hand soap that isn't going to break down people's skin, and encourage people to use it as often as they need to," Hicks says.

The notable exception, of course, is healthcare environments where there are people with compromised immune systems. In those cases, antibacterial hand soap is a must, as is educating users that it takes 20 seconds of contact to be effective.

Also, for antibacterial soaps without a built-in moisturizer, it's smart to offer hand lotion next to or near every soap dispenser.

"It's important that healthcare workers have access to lotions that are compatible with the soap and gloves they use, especially in the winter, to avoid dried and cracked hands," Couch says.

Hand sanitizer is playing a larger role than ever in the hand hygiene battle. It can provide protection when soap and water aren't available or convenient. Many facilities now offer alcohol-based, antibacterial hand sanitizer gel or wipes in as many locations as possible.

"If it were up to me, there would be one every two feet," Couch says.

In reality, however, there are limits on the number and placement of sanitizer dispensers. Hospitals, for example,

Because only 5 percent of people properly wash their hands after using the restroom, there is growing pressure on cleaning managers to do what they can to boost hand hygiene compliance rates

have smoke compartments with strict codes on the amount of alcohol allowed within. Also, placing them next to soap dispensers can lead to confusion.

To be most effective, place sanitizers strategically at high-touch points, workstations, and areas where there are large gaps between restrooms or hand washing stations.

Controversial Strategies

Given the importance of hand washing compliance, especially in healthcare, manufacturers are searching for solutions to help facility cleaning managers. New offerings include fixtures and dispensers that monitor users.

For example, a sink may have a blinking light that turns off after the appro-

priate length of wash time, or an alarm may go off if a nurse enters a patient's room and doesn't wash or sanitize their hands. Many of these systems can read a chip in the employee's badge, which offers managers data on who is or isn't complying with hand hygiene standards. Some facilities are using this data to reward and punish employees, even going so far as to terminate those who violate hygiene protocols.

In the end, Couch says boosting hand washing compliance rates is a matter of trial and error. It can take time to find the mix of education, products, and strategies that work best for a particular facility. Even then, expect to be disappointed, she warns.

"We haven't found the one thing that's the greatest thing since sliced bread to solve this problem," Couch says. "You need awareness first and foremost, as well as ease and accessibility, but there are so many human variables worked into it that it can be difficult to master." **FCD**

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Quiet Please

Address **healthcare noise levels** by using quieter, well-maintained floor care equipment

By Ronnie L. Garrett

FLORENCE NIGHTINGALE once wrote "Unnecessary noise is the most cruel abuse of care which can be inflicted on either the sick or the well." Though these words were written in 1859, they still ring true today. Understanding the basics of sound transmission and measurement, and how to mitigate it in the healthcare facility is critical for everyone, including housekeeping operations.

Studies have shown that exposure to noise can increase patient heart rates, anxiety, and contribute to slowed recovery times. And though the impact on healthcare workers is less documented, noise also takes a toll on them. High noise levels can contribute to burnout, depression and irritability.

While the impact of noise is widely known, Johns Hopkins University research found that over the past century, noise remains an unsolved problem in healthcare. In fact, acoustical engineers studying the issue at the university report that healthcare noise levels have increased steadily over the past 50 years. In 1960, average hospital sound levels were 57 decibels (dB) compared to 72 dB today, while nighttime levels went from 42 dB to 60 dB during that time frame.

Everyone in the hospital setting plays a role in keeping noise levels down, but environmental services operations can do their part by assessing and managing the noise their equipment makes. The first step is to identify the sources of noise using a digital decibel meter, which can be used to measure sound levels at different times of day. Staff can also be used to identify sound issues, reports Isaac Johnson, resident regional manager in the Department of Environmental Services at Duke University Health System in Durham, North Carolina.

"We have a huge staff dedicated to improving noise levels," he says. "We had department employees sit in various areas of the hospital and observe the sounds around them, and write down things they felt could improve sound levels." Johnson reports that the key areas in environmental services (EVS) were the equipment workers used and the carts they rolled across the hospital.

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When stressing the importance of assessing sound in this way, Allen Rathey, president of the Healthy Facilities Institute in Boise, Idaho, says: "You can't clean with dirty tools, and I would think that you can't really clean in the healthcare environment with noisy equipment."

Noise In Numbers

The World Health Organization sets noise level values in healthcare at 35 dBA (A-weighted decibels, taking into account different frequencies of sound) during the day and 30 dBA at night in patient rooms; yet peak noise levels often average 85 to 90 dBA, reports "Sound Control for Improved Outcomes in Healthcare Settings."

With this knowledge in hand, healthcare cleaning operations striving to do their part have begun purchasing floor care equipment that operates at quieter levels — anywhere from 62 to 70 dB. These numbers coincide with sound requirements set by LEED v4.

"Currently, LEED sets the standard at 70 decibels for carpet extractors, vacuums and burnishers," says John Poole, a consultant for the cleaning industry. "That's the magic number that is considered 'green."

However, levels of 85 dBA are actionable, according to the Department of Labor's Occupational Safety and Health Administration (OSHA) standards, so Poole recommends hospitals start monitoring noise levels at 75 dBA. He also recommends EVS staffs look at the floor equipment they use, the wheels on their carts and the vacuums they use.

"If existing equipment is louder than 70 decibels, it can be subbed out with quieter equipment in patient areas," says Poole. "The louder equipment can instead be used in offices and lobbies and other common areas." Managers should choose cleaning equipment not only for its performance, price and function, but also for its decibel output.

Rathey points out that vacuum cleaners are a noisier technology but backpack vacuums can be an appropriate solution. They build a lot of muscling into airflow so there is less noise. Some machines also offer a quiet mode setting that lowers performance slightly, but operates at about 62 dBA.

"Most people want a clean room, but they don't want a noisy vacuum coming in," he says. "A suction-only backpack vacuum would be a lot quieter and it tends to remove more dust than dust mopping."

While it doesn't eliminate noise, healthcare operations using quieter buffers can also select greener floor strippers to do the job. These floor strippers are mild, have less smell and are safer for vulnerable populations.

Mindful Maintenance

Healthcare EVS staffs need to fix the squeaky wheel, stresses Poole.

With all the rolling carts used today, it behooves staff to replace squeaky wheels and to maintain a stringent preventative maintenance schedule designed to keep all equipment operating quietly. It is estimated that rolling equipment noise can be reduced by up to 30 decibels by lubricating moving parts.

"We changed the wheels on our burnishers to lower the noise level," says Johnson. "The wheels weren't good or bad; we just changed them out to a material that made less sound moving across the floor. Our burnishers also have large filters on them that help muffle the sound."

Duke also has a manager on each shift dedicated to maintaining equipment. In addition, workers are charged with checking over the equipment at the beginning and end of their shifts.

"If a belt is bad, it can make a

vacuum really loud," says Johnson. "When bags are not changed regularly or not installed properly, it can make the vacuum louder."

Poole supports this level of due diligence.

"Departments need to stick to a preventative maintenance schedule," he stresses. "Preventative maintenance keeps the equipment operating properly, which keeps noise levels down."

Staff And Scheduling

The training of staff and the scheduling of cleaning also play critical roles in lowering noise generated by EVS staffs.

"Scheduling is absolutely the No. 1 thing," says Rathey. "There needs to be a management protocol to schedule the workflow when patients are not in those areas. And if the patient is in the room, a lot of your cleaning should involve damp mopping and microfiber, instead of equipment."

Duke's EVS department teams with the nurse manager on each floor to schedule cleaning. They've identified Because so much cleaning is done during the day, Duke housekeepers are armed with tablet computers, which give them instant notifications of when a room is dirty, when patients are out, when rooms are being cleaned and when the room is finished.

But even with the best schedule, there will be times when cleaning with patients in the area is essential. That's why staff should be trained in how to interact with occupants. They should enter patient rooms by first introducing themselves and announcing what they are there to do. They need to knock and ask permission to clean, rather than just start the task. Some housekeeping operations do roleplaying to prepare the staff to do this.

Poole states that managers need to professionalize training, and emphasize that cleanliness and good patient relationships are the responsibility of all staff.

"Workers must be trained to move in a quiet fashion," he says. "There needs to be synergy so that everyone works together and comes out with

"Unnecessary noise is the most cruel abuse of care which can be inflicted on either the sick or the well."

---- Florence Nightingale

that the best time to clean is after first rounds are complete.

"We do not schedule any floor care after 10 p.m. or before 6 a.m. either; the bulk of our daily cleaning and floor care is done when patients are awake," says Johnson. "Not only are we not disturbing patients when they are trying to sleep, but they get to see the great work we are doing. We're not hidden away performing the work in the background. We are at the forefront so patients can see what we are doing and ask questions." the same results. Housekeepers need to understand that people are recovering and they need quiet."

Cleaning workers should be taught that everyone in the hospital is responsible for keeping noise levels down, including them, states Johnson.

"It takes all of us to be part of the solution," he says. "We all have an impact on noise and we have to work together to address it."

RONNIE GARRETT is a freelancer based in Fort Atkinson, Wisconsin.

Cleaning Complaints You Just Can't Believe

Readers share some of the wildest complaints they've received from building occupants, as well as their biggest pet peeves

By Corinne Zudonyi, Editor

HAVE YOU EVER had a building occupant leave a piece of cereal on the floor as a "test" for the custodial crew, to then have that same occupant complain that it was not cleaned up? Or maybe you heard the one about the teacher that wanted her classroom light left on after cleaning so she wouldn't have to touch the light switch in the morning? Or just maybe you've worked with the occupant that called one Friday afternoon to report a raisin on the floor that was attracting ants, then instead of picking it up on their own proceeded to post a sign requesting it be left for Monday so you could see the situation that needed resolution?

Chances are, these three situations pale in comparison to some of the doozies you've heard in your years as a cleaning executive.

As service providers, the work of cleaning professionals is on display and open to criticism. Some of the feedback from building occupants can be constructive, leading to process improvements. But unfortunately, the bad often outweighs the good when it comes to comments.

We asked *Facility Cleaning Decisions* readers to share some of the more memorable questions and complaints they've received on the job. Here are just a few of the responses we received.

There is too much sunlight coming in through the window.

#\$@&%*! —
 There is too much snow and/or water in the parking lot following a storm.
 #\$@&%*! —

The toilets made today are too small.

— #\$@&%*! —

I placed that paper on the trash can, but that didn't mean I wanted it thrown away. If I wanted it thrown away, I would have put it in the trash can.

- #\$@&%*! -

The boxes (not labeled trash) left next to the receptacle were not removed and they were supposed to be trashed.

— #\$@&%*! —

Do you realize there are raccoons in the parking lot? Isn't that a danger? (Note: We adjoin a large woodland area) - #\$@&%*! -

Something is coming out of the unit ventilator. Maybe it's the air conditioning.

— #\$@&%*! —

Spiders have built webs outside near the entrance. Those should be cleaned with the rest of the building.

— #\$@&%*! —

My plant was not placed back in the exact location it was before you redid the floor.

— #\$@&%*! —

Why did they raise prices in the Juice Bar? - #\$@&%*! -

When I write on the walls, your staff doesn't take it down fast enough.

— #\$@&%*! —

Why must the cleaning supplies you use smell so much like chemicals?

— #\$@&%*! —

A coworker tracks in too much pet hair on their clothes and then spreads it in the office. -- #\$@&%*!- There is too much traffic on the main road in front of the facility. Can you get a sign placed to slow traffic?

— #\$@&%*! —

When I moved this refrigerator out of its place, I found this dirt and dust under it. That is gross and unacceptable. - #\$@&x%*! --

The bathroom stinks when people use it.

— #\$@&:%*! — Can you clean my desk? I have to leave early and won't have time to do it myself.

We also asked readers to comment on their biggest pet peeves on the job. Here are those that ranked highest among custodial executives.

Occupants complain that an entire room wasn't cleaned when the custodian only missed a small area.

- #\$@&%*! -

Lack of ownership over who is responsible for certain cleaning activities.

— #\$@&%*! —

Complaints that do not involve my department. — #\$@&%*! — Any theft is immediately blamed on night shift staff. — #\$@&%*! —

Anonymous complaints with no specifics so we can't follow up on the complaint.

- #\$@&%*! -It's too hot or too cold.

— #\$@&%*! —

Requests to unclog a toilet when all it needed was to be flushed.

— #\$@&%*! —

When people eat at their desk and keep food in their drawers, then complain about odors, insects or pests.

— #\$@&%*! — Communicating complaints via email and copying everyone in the company.

— #\$@&%*! —

Baiting the cleaning crew by leaving something on the floor to test whether it is picked up that evening, then complaining if it isn't.

If you'd like to share a complaint you've experienced, a pet peeve, or just an overall frustration with the job, email corinne.zudonyi@tradepressmedia.com. All submissions will be kept anonymous.



Presented by CleanLink.com

Carpet Encapsulation

Betco Corp. — FiberPRO Encapsulation

encapsulation technology with a

twin brush carpet machine for

low-moisture cleaning. FiberCAP MP, which contains polyhedral

polymers, enhances soil entrapment

and provides great release from the

Machine quickly and easily agitates

FiberCAP MP into the carpet fibers

carpet fiber. FiberCAP 20 Carpet

Cleaning Program combines

Finish Mop

ACS Industries Inc. — The Filament Finish Mop is non-absorbent, providing smoother, more even coats of finish. The loop-ends extend the lifespan and allow for greater shine. Mops come in 1 1/4-inch Narrow-band and 5-inch Wide-band coated mesh.



Recycling Receptacle

Nexstep Commercial Products, Exclusive Licensee of O-Cedar — The 28 Quart Blue Waste Basket features durable external texture for scuff resistance and a smooth internal texture for easy cleaning. It is made of high-quality, long-lasting material and has a white recycling symbol printed on it. The ergonomic handle allows for easy gripping and reduced slippage.

Foodservice Pads

Americo Manufacturing Co. Inc. — The Griddle Cleaning Kit includes one Griddle Holder, 10 Griddle Cleaning Pads and 20 Griddle Screens. The holder is designed to hold the Griddle Cleaning Pad and Griddle Screen in place while adding leverage for cleaning griddles. The Griddle Pad can be used for polishing griddles. The Griddle Screen removes food particles and carbonized grease that can collect on grill grates or griddles.





Window Cleaning Tool

Unger Enterprises — Cleaning up to 1600 sq. ft. of glass with a single pouch of Stingray 3M Scotchgard Glass Cleaner and Protector, the Stingray tool cleans 25 percent faster and uses 39 percent less cleaning agent than traditional spray and cloth cleaning. It reaches up to 18 feet for high access and the nozzle and pad design allows for safe cleaning with no airborne chemicals. The product features a low-profile, triangular head that rotates 360 degrees to reach all areas.

Toilet Tissue

BETCO

SS Gym Coat

SCA Tissue North America — Tork Coreless High Capacity Bath Tissue Dispensing System combines a compact space-saving roll with high-quality, soft, EPA-compliant tissue. The packaging reduces storage space requirements, providing up to two times more capacity per cubic foot compared to conventional bath tissue. Also, 95 percent of the packaging waste has been removed by eliminating the corrugated packaging, traditional cores and inner wrappers. Tissue rolls can last up to three times longer than conventional tissue.



Autoscrubber

Kärcher North America — BR 35/12 C Bp compact autoscrubber sweeps, scrubs and vacuums small debris and wastewater with one pass over floors. The machine features the steering concept known as KART (Kärcher Advanced Response Technology), which allows it to clean adjacent to walls at a 90-degree angle in both forward and reverse. The height-adjustable, telescoping, steering column allows operators of any height to set their ideal working position.

Drain Cleaning

Scotch Corporation — Designed for the toughest drain clogs, Instant Power Professional Heavy Duty Drain Opener uses a dual hydroxide formula to dissolve clogs and create heat that melts grease. It's safe for all pipes and septic systems, 15 times more effective than common drain openers and supported by a 100 percent money-back guarantee.



Rider Scrubber

To request product information, visit www.cleanlink.com/FCD-products

Advance — SC6500 Rider Scrubber features an AC brushless propulsion drive, highpowered dual-disc brakes and tight aisle turn capability. Available in disc or cylindrical models, the scrubber is designed for use in distribution centers, warehouses, athletic facilities, universities and more. The large, highcapacity 70-gallon tanks help maximize scrub time.

Wet/Dry Vacuum

ProTeam Inc. - ProGuard 16 MD is a 16-gallon unit that can maneuver easily around obstacles to tackle tasks such as emergency spills and construction cleanup. The compact

size and removable handle allows for easy storage and is equipped with a convenient tool bag to keep all necessary hand tools within reach.

Engineered Water

PathoSans — PathoSans system generates cleaning, sanitizing and disinfecting solutions using electrolysis, tap water and salt. Using advanced physics, PathoSans eliminates the need for unreliable pumps for the electrolytic generator, producing dependable, on-site generation of greener cleaners; simply and cost-effectively.





Grout Cleaner

Kaivac Inc. — KaiGrouter is a high-powered spray nozzle that blasts dirt from grout areas, leaving them clean and contaminant free. The nozzle attaches to existing No-Touch Cleaning system wands, offering a combination of rotary nozzle and extraction capabilities.

Odor Control

Poo~Pourri — Sprayed on the water's surface, Poo~Pourri Before-You-Go Toilet Spray stops toilet odors using 100 percent natural and earthfriendly ingredients. The spray features a professional caddy that is designed with a retractable lanyard, which serves as a theft deterrent. The caddy can be installed in public restrooms to eliminate bathroom odors for businesses and public venues.



Vacuum

TTI Floor Care — M-PWR 20v SlingVac features a hinged battery and sling providing comfort for the user, the polyurethane cover reduces noise, and washable microfiber pads improve dust pickup. The Sling Vac's tools are also interchangeable, offering a wide range of benefits. There's a hard floor tool with an 18-inch wide nozzle, an above floor tool that cleans hard-to-reach areas and an upholstery tool that cleans furniture and upholstery.

products To request product information, visit www.cleanlink.com/FCD-products

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Degreaser

Multi-Clean — Fury Degreaser is a noncorrosive, heavy-duty degreaser that removes oils and grease from a variety of surfaces. The product's controlled alkalinity makes it a noncorrosive glass cleaner, useful for shop degreasing at automotive dealerships, car/truck repair garages, industrial factories, warehouses and more. It can be used in pressure washers, autoscrubbers, spray bottles, mop buckets or sprayer/applicators for general degreasing.

Odor Control

Spartan Chemical Co., Inc. - ecore Aircare System features a dualtechnology fragrance diffusion system to deliver consistent fragrance intensity for 60 days. The product is free of solvents, propellants, HFCs and VOCs. There are no batteries to change and no energy consumption, the passive system continues to refresh the room through natural airflow. It is available in four different fragrances.

Disinfectant

Claire Manufacturing Co. — Disinfectant Spray for Health Care Use - Lavender Scent kills bacteria and viruses, including MRSA, VRE and TB. The product can be used in hospitals, hotels, restaurants, health clubs, schools, businesses, institutions, commercial establishments and homes. It is also available in lemon and country fresh scents.



Recycling Receptacle

Rubbermaid Commercial Products - Configure is a madeto-order modular recycling system that can be tailored to complement the design of any commercial environment.

Select from different sizes, color options, on-trend finishes and can insert graphic and logo options. To accommodate unique waste needs, seven waste stream label selections and four lid openings are modular options. An easy-access front door allows for ergonomic emptying and a magnetic connection keeps containers arranged.



Hand Drver

Palmer Fixture - BluStorm Bolt - High Speed Hand Dryer HD0923 is ADA compliant and offers patented dual air outlets with a quieter operation. The wide drying area with blue light makes for an efficient 10-second hand drying experience. The hand dryer has a small footprint, protruding less than 4 inches from the wall, and a smooth appearance with hidden cover screws.



Odor Control

Georgia-Pacific Professional - Compact with ActiveAire Dispenser nullifies odors in restroom stalls. The odor control dispenser is designed into the toilet tissue dispenser, near the source of the odor problem. The dispenser activates automatically when a person enters the stall; a hand-wave reactivates.

Vacuum

Sanitaire - Designed for walkways, banquet halls and vacuuming large carpeted areas in a single pass, the SC6093 Wide Area Vacuum has a 28-inch cleaning path to improve productivity. The machine has five levels of height adjustments for quick transition to varying carpet heights, and the 3-inch diameter, metal brushroll is designed to pick up debris without clogging. The handle folds down for convenient storage.

case study

Medical Center Releases Findings on Aqueous Ozone Cleaning System

Whenever a totally new technology is introduced into the professional cleaning industry, the first thing facility cleaning executives want to know is whether the technology works. If they find it does work, then they want to know how it will help them do their most important job, which is keeping building occupants healthy.

This process is happening now with what is called "engineered water" cleaning systems. These systems do not use traditional cleaning solutions in order to clean surfaces and fixtures. There are different types of equipment that come under the umbrella of engineered water, but the one that seems to be garnering the most attention is called aqueous ozone.

When used for cleaning, aqueous ozone is often referred to as "greener than green cleaning." Aqueous ozone systems create ozone — which is naturally found in the atmosphere — mechanically and then infuse it into water. The end result can then be poured into a sprayer, just like any cleaning solution, or released through the unit itself for cleaning floors or carpets, for instance.

But, does it work? That was recently answered by two studies conducted by the



University of Nebraska Medical Center (UNMC) after using aqueous ozone generated by CleanCore Technologies Ozone Systems. Entitled Qualification of Surface Disinfection, the studies found that aqueous ozone cleaning systems can prove very effective at eliminating what are called colony-forming units (CFUs) of both Escherichia coli (E. coli) and Listeriosis (Listeria) from hard surfaces. If ingested, these bacteria can produce food poisoningtype symptoms that can be very harmful, even resulting in death.

The UNMC report concluded, "there was a statistically significant decrease in E. coli and Listeria CFUs found on the [treated areas]." The cleaning power of the CleanCore systems were also compared to the main bacteria-killing ingredient found in many hospital-grade disinfectants, Peracetic Acid (PAA). The report concluded, "in several instances, there was no significant difference in reduction of E. coli and Listeria between the aqueous ozone solution and the positive control PAA."

So it's clear, the CleanCore Aqueous Ozone system does work. Now, about our other question: How will it help cleaning workers do their main job, which is to keep people healthy? It appears the UNMC answered this question, as well.

MANAGEMENT



Breaking Bad Habits

Identifying weaknesses within the department and developing a roadmap for success

Many managers

don't realize that

bad habits and poor

practices within the

department have

likely gone unnoticed

for years

By Ben Walker

LAST YEAR, I TOOK A BAD SPILL while skiing. I turned a little too clumsily and down I went, suffering from a tibial plateau fracture and a broken fibula. It required surgery, a couple of months out of the office and a lot of physical therapy.

On the first day of physical therapy, my therapist sat down and said, "Okay, let's take a look at your bad walking and running habits so I can teach you new, good ones."

Over the next six weeks, I came to understand that my walking and running style had slowly contributed to weaknesses in my knee — weaknesses that may have contributed to

my injury, and would likely continue to do so if not remedied. Physical therapy not only improved my walking and running style, it gave me interesting career insight. As a consultant in the cleaning industry, I've learned that many operations — large, medium or small — are unaware of their bad habits and practices that have

gone unnoticed for years. In my experience, most custodial managers and directors fall into three categories:

1. They have no time to manage their department the way they would like to because they only have time to handle customer complaints.

2. They have some form of management structure that is great on paper, but it's not being followed in practice.

3. They inherited the department from a long line of predecessors — with no update to the custodial operation.

These are challenging situations, but pulling a department out of the rut doesn't have to be difficult.

One of the most frequently asked questions I receive when working with a new operation is, "How do we know where to start?" The best and easiest place is the custodial closet. Take a stroll through your buildings and instead of doing a white glove test, do an archeological dig of your cleaning operation. It seems simple, but trust me, it can be unbelievably insightful. Arm yourself with a camera and document the evidence.

Take a look at the bottles of chemicals and their labels. Are they consistent with how you've trained your workers and supervisors to handle and label them? Examine

> the vacuum filters and plugs. Are they being maintained in a manner consistent with safety and cleaning protocols? Ask one of your workers if they know where to find the Safety Data Sheet (SDS) for the chemical they are using. If they were your child, sibling or other family member, would you be comfortable with their understanding of safety, based upon their answer?

> I feel fairly confident in saying that 90 percent of the management teams that have endured this simple exercise are typically surprised by the results. Most of the time they have a moment of clarity when they realize that the long term repetition of bad habits have

left their cleaning workers to fend for themselves. Using the data from this exercise can help managers develop a roadmap for improvement.

Much like diagnosing my knee, managers should take a fresh approach when truly evaluating the performance of their custodial department. This, like surgery, is often a painful task. However, the repair and restorative therapy can make a department much more stable and strong.

BEN WALKER is the Director of Business Development for ManageMen, Inc., a leading cleaning industry consultancy specializing in training, transitions, auditing and educational materials. In addition to his consulting work, Walker is the author of ISSA's best selling book: "612 Cleaning Times and Tasks."

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