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# PRESIDENTS MESSAGE



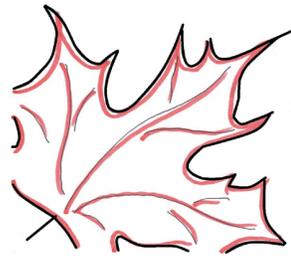
**I hope this message find you and yours well and in good health**

In this time in Calgary, the strength of the Building Operator as an integral part of the Operations team has never been more important than it is today. The skillset the Operator has in running and efficient building not only saves large operating dollars it as well is key in client retention. People are reluctant to change if they are satisfied. The building Operator as a part of the operations team plays an important role in the health of the facility.

I have been looking at educational materials that the Building Operator uses to increase their knowledge. First are the service providers for the support they bring to the buildings. The usage of their equipment and procedures along with safe operation procedures on the products and or equipment specific to that provider will maximize effectiveness. I realize it is a small part but compounded to all providers in the facility it becomes larger in scope. The training we receive by the providers will not only have the system running better but longer too.

Attending BOA meetings. We have at every meeting a guest speaker that delivers to those in attendance an education on their area of expertise, there is a nugget of information that everyone can take back to their place of work, knowledge is power. BOA tries to bring in speakers that we support because of knowledge in their field but we also keep the topics timely to the needs of industry. Each talk is long enough to educate short enough so as not to bore. There is as well time at the end for questions and answers.

We need to be current with technology advances in our building. Owners and customers want “smart buildings” we need to be the smart operators of those buildings.



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Training and formal education. BOA has been a supporter of ongoing education from the beginning. We are currently looking at courses to support learning materials that we feel support the development of our discipline our industry. We recently lost BOMI Canada who were developing the “Red Seal” initiative in Ontario. Jim Preece formerly of BOMI Canada will try to continue. I wish him luck.

I hope to see you at the meeting January 14, 2020

Warm regards, Les

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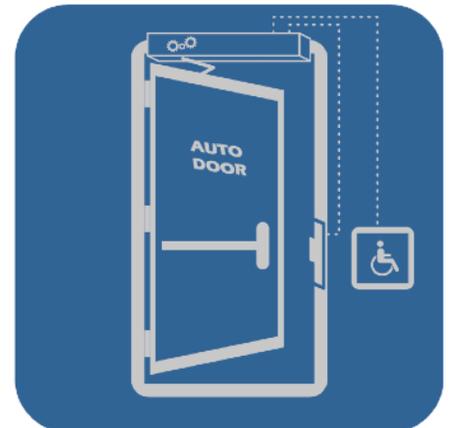
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# Test Your Operator IQ!



Are you equally adept at troubleshooting problems in the boardroom and the boiler room? As the resident facility guru, there's a lot riding on whether or not you know the difference between sounds control and a sound investment.

If you're ready for 21st century challenges, then you are ready for our monthly Operator IQ challenge...answers on page 17.

**1. To prevent corrosion in the expansion tank it is sometimes filled with:**

- A. nitrogen
- B. air
- C. oxygen
- D. helium
- E. hydrogen

**2. To regulate the flow of hot water to a zone circuit a:**

- A. flow control valve is used
- B. diverter fitting is used
- C. gate valve is used
- D. pressure reducing valve is used
- E. balancing valve is used

**3. Valves in heating systems should be \_\_\_\_\_ if they do not shut off tightly:**

- A. discarded
- B. heated
- C. bypassed
- D. repaired
- E. reported

**4. What type of boiler would you expect to find in a hot water system, incorporating a converter?**

- A. hot water boiler
- B. steam boiler
- C. forced circulation boiler
- D. reverse flow boiler
- E. once through boiler

**5. A hot-water heating system is about to be started. How full of water should the expansion tank gauge glass be?**

- A. empty
- B. 1/4
- C. 1/3
- D. 3/4
- E. full
- F.

## What should a facility manager look for in choosing a green cleaning vendor?

Choosing a green cleaning vendor is no different than choosing any great vendor. We always begin by pre-qualifying all vendors interested in providing services. Use the available certifications and awards to facilitate identifying the few who are most capable. For example, Green Seal's standard on cleaning service providers and ISSA's Cleaning Industry Management Standard for Green Buildings are a good start.

In addition, buyer-specific issues should to be included, such as vendor financial resources, local offices, local business base, safety record, and industry and building-type experience. As a follow-up to a prequalified short list, I'd also suggest focusing on the following key issues:

- \* Focus on identifying the best-available project manager, one who has great green cleaning experience in a facility like yours.
- \* Next, look for those vendors who can present a comprehensive and convincing cleaning system, highlighting their green cleaning practices.
- \* Look for companies that have a record of constant innovation, exploring better and best green products.
- \* Finally, apply the "right price" test to the price quoted.

### **How would you assess the current popularity of green cleaning?**

Is everyone adopting a green product model? Well, no. I see a growing green continuum that offers buyers greater product options. Keep in mind that whatever product strategy used, the

in-house or vendor provider of cleaning services must deliver remarkable results. And, they must deliver those results using any product they will get the job done.

Service providers are still using toxic (certainly not green) products where they cannot get the results needed. Also, for some, being green is not well understood; there is a kind of bandwagon effect that is drawing many into this movement on a (valid) faith that it is the right thing to do. It's no surprise that these results might be inconsistent and could create dissatisfaction with the green cleaning model.

Nonetheless, my own estimate is that green cleaning has reached its tipping point, with over 40 percent of the companies contacted using or intending to adopt a green cleaning product strategy. The logic is clear. Green cleaning is less harmful to the environment, less harmful to the workers who handle these products, and less harmful to building occupants who come in contact with these products. We've done over 340 outsourcing contracts for just about every type of property, and the requirement for green products is fundamental to any contract we manage. I don't know of any industry advisor, vendor, or supplier who is not advocating for a green product strategy.

What are some new products or approaches in the green cleaning field?

It is exciting to see the innovation that has emerged over the last dozen years or so. For example, microfiber, once a "new technology,"

*Continued on page 9.....*



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# KENKEN PUZZLE

How to solve the Kenken puzzle: (answer on pg. 21)

- Fill in the numbers from 1 -6 (in this case 6, because the kid is 6x6).
- Do not repeat number in any row or column.
- The numbers in each heavily outlined set of squares, called cages, must combine (in any order) to produce the target number in the top corner using the mathematical operation indicated.
- Cages with just one square should be filled in with the target number in the top corner.
- A number can be repeated within a cage as long as it is not in the same row or column.

1	10x		1-	2-	3-
3+		2÷			
20x	2÷		3÷	2÷	4
		2			6+
2÷	20x		6x		
	4	5-		3-	

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...continued from page 7

has become ubiquitous. Newly emerging, the introduction of water as a cleaning and sanitizing solution required a double take by many. Activeion was the first company to mass-market this technology; and it was also the first casualty. Yet, the chemical glass was cracked by them.

We've seen a number of hypochlorous acid, aqueous ozone, hydrogen peroxide water-based technologies gain market share at the expense of traditional (even some "green") chemicals. Project-based floor care has been impacted by the emergence of oscillating "square" floor machines that are also challenging rotary machines for growing market share. Steam vapor has begun to find acceptance. Spray-and-vac systems are gaining recognition as a go-to option for restroom care. Even the traditional floor pad has introduced better pads, including diamond-encrusted versions to refinish and strip hard-surface floors without harsh chemicals.

In terms of approaches, we're seeing the cleaning industry become better structured and organized. For example, there is an expansion of "day cleaning" systems, with a number of consultants ready and willing to help companies get organized. I've watched Rex Morrison gain real acceptance for his innovative Process Cleaning for Healthy Schools (PCHS) program. State- and federally-mandated performance-based cleaning contracts, along with green and least-harmful requirements, are becoming more common, and are being adopted more and more by industry buying innovators.

Gazing into the crystal ball for a moment, where do you think green cleaning is headed in the near future?

Well, the crystal ball is a bit cloudy, with some harsh residual chemicals still in the future. Yet, continued innovation in products, systems, and resources are moving us toward extreme green cleaning, and ultimately to toxic-free, less harmful products.

We'll see a number of the large chemical companies begin to move aggressively beyond today's green products to even more remarkable toxic-free products. They'll do it to protect and gain market share and they'll move from skunkworks experiments and one-off strategies into full production for extraordinary product lines that protect workers, building occupants, and our environment.

Look for the emergence of robotic cleaning, self-cleaning spray-on solutions, self-cleaning building surfaces, living walls, photocatalyzing filters, antimicrobial coating in restrooms, and the growth in the use of enzyme cleaning strategies. I also think that we will see greater automation of the buying process, through ecommerce applications. For such a mature industry, the technological advances are just beginning, and I believe that you will be amazed by what the next few years will bring.

Answers from Vince Elliott, an entrepreneur, author, speaker, and industry innovator advocating on behalf of buyers of facility services for over 40 years. He has also delivered more than 100 conference presentations and written two industry-leading books and some 300 articles, white papers, and ebooks. Reach him at [velliott@ealtd.com](mailto:velliott@ealtd.com).

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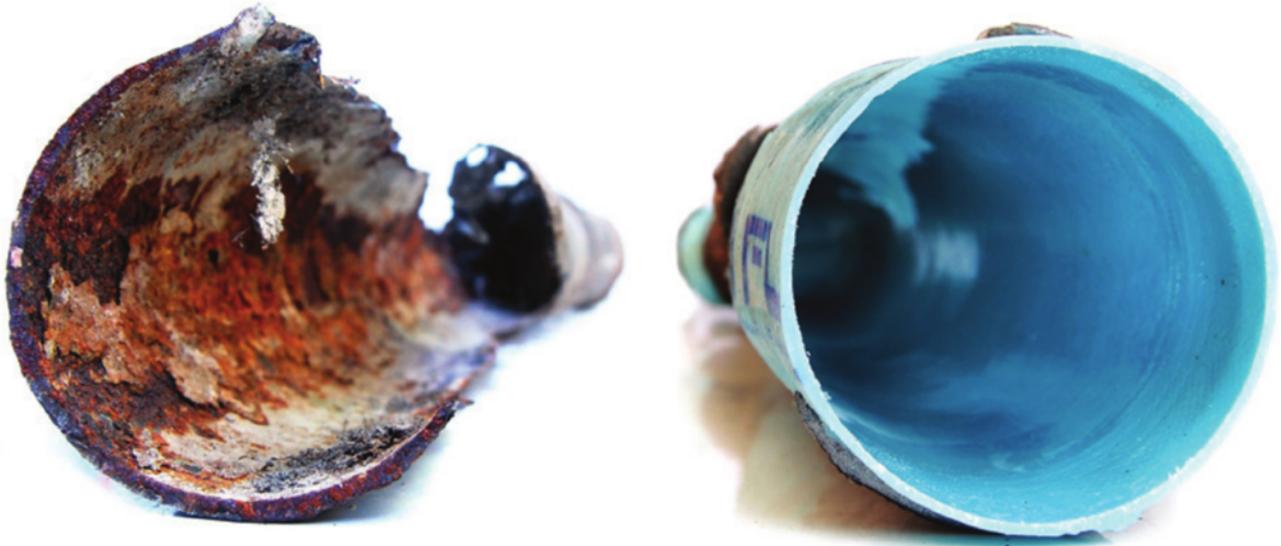
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# Maintenance: From Cost Center To Successful Investment

*Engaged technicians can help managers revamp a department's image and drive an organization's success*

Workforce engagement is a key topic for institutional and commercial facilities. More than training and incentives, the issue of engagement speaks of workers who are dedicated to the tasks they perform each day, contributing their best efforts and seeing themselves as a committed part of the organization. Whether they are overtly noticeable or quietly acting, engaged employees are important team members who can help drive the organization forward.

How does engagement work in facility management? Maintenance and engineering managers might be tempted to think of facilities technicians as fundamentally behind the scenes, people who support the organization but are not directly contributing.

In my experience, that is an all-too-common perception, unfortunately. I've lost count of the number of times I have heard some variant of, "Facilities is a cost center, not a revenue generator." The inference is that facility services somehow are less important to the organization because they do not generate revenue.

I would like to challenge the perception. Rather than a cost center, facilities is an investment in an organization's success. Without facilities services, essential business functions — revenue generating and otherwise — cannot function.

But that's the business side of things. Why would that issue matter to the facilities workforce? What does that discussion have

to do with an engaged workforce? I promise, it matters.

## Images of engagement

Let's start by identifying an engaged employee. Employees who are engaged:

- See themselves as part of the larger organization. They look for ways to make things better, not just by the suggestions they provide on the way others can improve but instead through their own actions.
- Are emotionally invested. They contribute because they care. This sense of investment leads them to be concerned more with what they give and less with what they get.
- Focus on solutions. They are not content to merely identify a problem or log a situation.
- They tend to think more broadly. They consider the way problems affect others and look for ways they can help.
- Have a sense of purpose.
- Are more productive.

These people are inspiring, and we want to work with them. I believe that while each of us is unique with our own motivations and drivers, fundamentally we want the work that we do, the time that we spend, and the effort that we

*Continued on the next page...*

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contribute to matter. To do that, we need to understand the things that are important. Another way to look at this dynamic is that whatever the organization is about, that is what facilities must be about.

## **Strategies for Engaging the Maintenance Workforce**

Facility managers have a few strategies they can use to engage their departments' supervisors and front-line technicians:

The vision-mission link. Connect the vision of the organization to the mission of the facilities department. Help the facilities staff understand the way they fit in the overall picture. Facilities plays a fundamental role in helping the organization work well.

Consider this example: Without such essential responsibilities as thermal control, plumbing, lighting, and housekeeping, places of business would be much less than ideal and, in some cases, they would be dangerous. Given that in most organizations, employee salaries make up the majority of the expenses, it is not hard to understand that when employees are uncomfortable and dissatisfied with the state of the facility, they are less productive, which ultimately costs the organization. When facilities workers understands that connection, they will be better able to see that they are not just managing work orders and preventive maintenance tasks. They are facilitating organizational productivity.

The personal mission. Connect the facilities mission to the individual's daily activities. One of my favorite examples of this link came from a colleague who is a facility engineer in a research and development company. He told me the reason he worked so hard to make his buildings more efficient was that he believed the research conducted by the scientists in his buildings would help make sick people

well, so if he could be more efficient in facility operations, the resulting environment would result in more money going toward research. He saw himself and his responsibilities in facilities as an extension of the company mission. He carried this connection into his projects, and he spread it to his teams. Through his leadership and dedication, he was effective in getting his teams to perform well. They understood that they, too, were a part of something larger than a task or a project and were willing to go above and beyond.

Early expectations. Set expectations from the beginning. Employees who start their careers by understanding their place in the organization, their performance goals, and ways they can move forward in the department have a better sense of ownership of their roles. They also are more empowered to act on behalf of and in concert with the team.

Relationship matters. Create relationships — an essential building block for any successful team. The most effective leaders foster team relationships, loyalties and support. Strong teams back each other up and work toward a common purpose. Conversely, a lack of connection and poor relationships with colleagues are top reasons people leave a job.

## **Engaged Managers Drive Maintenance Success**

Part of managers' efforts to engage their staff is to be engaged themselves. Have you ever been in conversation with someone who seems to be anywhere but with you?

Recently, I met with someone who kept checking their phone, regarding the screen contents intently to a point I wondered if the person had forgotten that I was right across the table. As irritated as I was, I fear that I have similarly offended someone. While these little moments can happen occasionally to many people, problems arise when

*Continued on the next page...*

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they become part of a larger, practiced habit that ultimately leads to lack of engagement.

### **Here are five things managers can do right now to improve their engagement:**

- Understand where you fit in the organization and what you must do to play your role most effectively.
- Focus on solutions.
- Focus on ways that you can contribute, and worry less about what you receive.
- Put away your cell phone during meetings.
- Turn off message alerts on computers and cell phones when meeting with others or when it is important to concentrate on a task.

An engaged workforce is essential to an effective, efficient facilities organization.

Fostering that environment not only contributes to better performance and productivity. It is more rewarding and inspiring to be a part of and truly demonstrates facilities as an investment in organizational success.

Laurie Gilmer is vice president and chief operating officer of Facility Engineering Associates, [www.feapc.com](http://www.feapc.com). Gilmer is a published author who has co-authored the International Facility Management Association's (IFMA) second manual in the Sustainability How-To-Guide Series, EPA's Energy Star Portfolio Manager. She is serving a term on IFMA's Board of Directors, and she serves on the Northwest Energy Efficiency Council's Building Operator Certification program advisory committee and the National Visiting Committee of Building Efficiency for a Sustainable Tomorrow Center.

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## **Dear Maintenance Men....**

**Dear Maintenance Men:**

**I am planning to install new ceramic tile into some of my building's kitchen and bathrooms. On some floors there is a raised foundation. What can I do to prevent cracks along the grout lines?**  
**Robert**

Dear Robert:

Cracks along the grout lines are always a problem in a raised foundation building. If you have bounce in your floors, first thing will be to install bracing under the floor to reinforce the foundation. Either bolting or nailing additional 2 x 6 boards to the existing floor joists or installing a beam or girder across the floor joists and adding posts for support can accomplish this. Now that your floors are firm, make sure the sub floor is securely attached to floor joists. The next steps are very important. Measure, cut and test install sheets of Hardie Back ceramic tile underlay cement boards over the sub floor. Remove the cement boards keeping them close by. Now is the most important step: using Thin Set cement, trowel cement onto the sub floor using a one half-inch notch trowel. Lay your first Hardie Back board into place and using cement board screws attached the board to the sub floor. The screws should be about six inches apart along the edge and eight inches apart in the middle of the board. Now trowel more Thin Set cement and continue installing the boards. Spread out any thin set cement that oozes out between the seams.

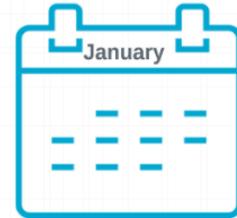
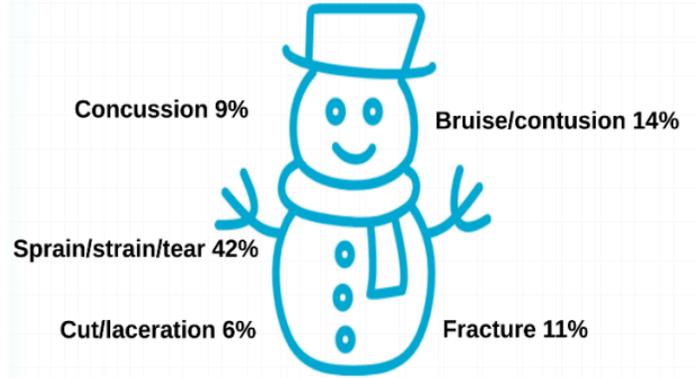
You have now formed a strong base for your tile work. Using the Thin Set cement between the sub floor and the cement boards will fuse all the sub floor materials together and lessen the likelihood of grout cracking due to floor movement.

# Workplace Injuries on Ice, Sleet, Snow

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1. Trucking Service - General	7%
2. Cities	6%
3. Ski Resorts/Gondolas	4%
4. School Boards	4%
5. Mobile Equipment Operation	3%

Data Source: 2014-2018 Workers' Compensation Board claims database

## Top 5 Injury Types



January had the most workplace injuries from ice/sleet/snow.

Infographic reprinted with permission from OHS Alberta



## AMMONIA REFRIGERATION EXAMINATION AVAILABLE

In October, ABSA began to offer the newly introduced 'Introduction to Ammonia Refrigeration' examination to interested candidates. This optional examination provides an opportunity for interested individuals to demonstrate their knowledge of ammonia refrigeration plants to the standard established by the recently released reference syllabus, AB-309: Reference Syllabus for Introduction to Ammonia Refrigeration Examination. As discussed in a previous issue of The Pressure News, it should be noted that there is no Alberta certification associated with this examination. Those interested in applying to write this examination should contact the Examination and Certification department for more information.

The above article is reprinted with permission from ABSA.



# December General Meeting Minutes



<b>Building Operators Association</b>			
Chaired by: Mark Arton	Minutes by: Monika Bhandari	Call to order: 5:08pm	Location & Date: Danish Canadian Club, December 10, 2019

- **Introduction of Attendees**
- **Guest Speakers:**
  - **Name:** Jean Darius, KPI Staffing  
**Topic:** "Gig Economy" A new way of working that offers flexibility through project-based work.
- **Safety Talks!**
  - The Front Line of Workplace Security
- **New Business:**
  - James Electric Gift card \$200 draw at the end of the year for those Operators attending 4 out of 9 meetings in the year
  - Bi-annual Trade Show will take place in May 12, 2020; first pick given in March to those who had a table last Trade Show; open to everyone in April

- **Networking**

## See right:

Les Anderson, President of BOA Calgary with Jean Darius of KPI Staffing



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### JANUARY AGENDA BOA CALGARY GENERAL MEETING

- Approval of Agenda
- Approval of Minutes
- Guest Speaker
- 50/50 Draw
- Snowball
- Safety Talks
- Old Business
- Executive Reports:
  - Activities
  - Education
  - Treasurer
- Membership & Promotions
- Technical Concerns
- New Business
- Adjournment

### DECEMBER GENERAL MEETING ATTENDANCE

<b>Les Anderson</b>	<b>BOMA</b>
<b>John Rutherford</b>	<b>Quality Combustion</b>
<b>Mark Arton</b>	<b>Westcorp PM</b>
<b>Monika Bhandari</b>	<b>CCIS Building Operator Training Program</b>
<b>Mike Thompson</b>	<b>ADD/CPWW</b>
<b>Mauro</b>	<b>Student (SAIT)</b>
<b>Tim O'Donnell</b>	<b>Paragon Mechanical</b>
<b>Soroush Solook</b>	<b>Johnson Controls</b>
<b>Barb Rae</b>	<b>KPI Staffing</b>
<b>Jean Darius</b>	<b>KPI Staffing</b>
<b>Melanie Prefontaine-Darius</b>	<b>ASC</b>
<b>Braeden Davis</b>	<b>Student (SAIT)</b>
<b>Leonard Maglalang</b>	<b>Oxford Properties</b>
<b>Grace Tian</b>	<b>Chinese Cultural Centre</b>

### Kenken Puzzle Answer

<sup>1</sup> 1	<sup>10x</sup> 2	5	<sup>1-</sup> 4	<sup>2-</sup> 6	<sup>3-</sup> 3
<sup>3+</sup> 2	1	<sup>2+</sup> 3	5	4	6
<sup>20x</sup> 5	<sup>2+</sup> 3	6	<sup>3+</sup> 1	<sup>2+</sup> 2	<sup>4</sup> 4
4	6	<sup>2</sup> 2	3	1	<sup>6+</sup> 5
<sup>2+</sup> 6	<sup>20x</sup> 5	4	<sup>6x</sup> 2	3	1
3	<sup>4</sup> 4	<sup>8-</sup> 1	6	<sup>3-</sup> 5	2

### TEST YOUR OPERATOR IQ ANSWERS:

- 1) A    2) E    3) D    4) B    5) C

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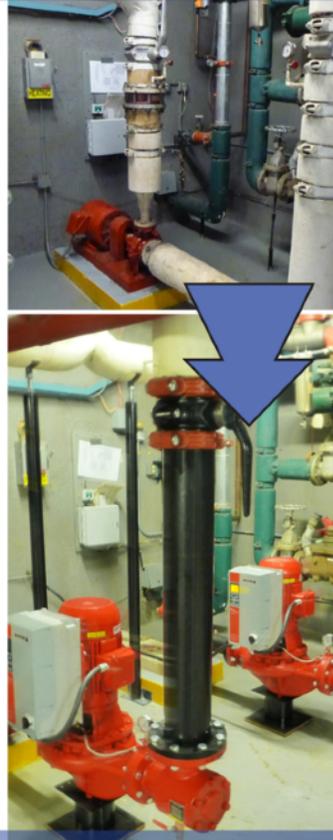
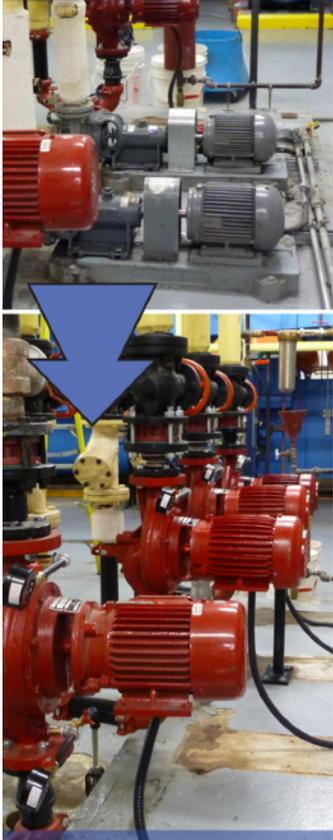
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