

# COLDFACTS

COVER

## UNDERSTANDING YOUR CUSTOMERS' NEEDS

New research will help position member companies as food safety experts and protectors of their customers' brands.

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MESSAGES FROM GCCA LEADERS

## The Value of Talent

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may demonstrate the reach and capabilities of their fleets. Controlled environment construction companies can point to a strong track record of building, renovating, and modernizing best in class facilities.

Those are all important benefits. But there's a common thread spanning all GCCA member companies that is more important than all of these: the talent and expertise of their people.

Think about it. What differentiates great companies from good ones? What transforms a company's services from just a commodity to a critical value-added component in a customer's operation?

I think the answer is clear. That is why GCCA has embarked on a campaign to showcase GCCA member companies as value generators using talent development and expertise as the differentiator to move customers forward, while protecting and building their brands in the process.

I hope you have all seen the powerful video that captures and promotes GCCA member value. It's a compelling tool that is part of an integrated strategy to demonstrate how and why partnering with GCCA members can help customers succeed in an increasingly competitive environment where service, responsiveness, flexibility, and creative solutions are at a premium.

GCCA offers a wide variety of programs to develop talent, including the WFLO Institute, Graduate Institute, Global Cold Chain Expo, online learning programs, and more.

GCCA has also created three new white papers to support talent recruitment and development. You can find them on the GCCA website and they include: Recruiting & Retaining Top Talent, Performance Management Process Strategies, and Creating a World-Class Onboarding Experience. All are available to GCCA members at no cost.

We are also looking at turnover – a challenge that all businesses face. The results of a recent U.S.-focused turnover survey are now available online and GCCA will conduct the survey again in 2019 to generate important metrics and trend data to guide future programs and services addressing this issue.

I urge all of you to learn more about these programs and tools so you can incorporate them into your own professional development programs for everyone on your team.

Developing talent, at all levels within companies, is the best way to foster a positive workplace environment, increase productivity, and ultimately build value. It is what customers want to see from us as well because they know it means continuity and a higher level of service for them.

Finally, I want to mention that we are introducing a new column in Cold Facts next year that will highlight talent development, providing you up to date content in each issue.

I have seen firsthand the incredible value GCCA has provided in not only the development of my company's team members, but to me personally as well. I know you will experience the same by actively participating in the association and by utilizing the tools and programs it provides. **@** 



PAUL HENNINGSEN WFLO CHAIR

#### COLDFACTS

COLD FACTS magazine is published every other month by the **Global Cold Chain Alliance** (GCCA), an organization that unites partners to be innovative leaders in the temperature-controlled products industry. The GCCA Core Partners are:

The International Association of Refrigerated Warehouses (IARW), which promotes excellence in the global temperature-controlled warehouse and logistics industry.

#### The World Food Logistics Organization

(WFLO), which delivers education and research to the industry and empowers economic development by strengthening the global cold chain.

The International Refrigerated Transportation Association (IRTA), which cultivates, fosters and develops commercial and trade relations between all those engaged in the transportation and logistics of temperature-controlled commodities.

#### The Controlled Environment Building

Association (CEBA) represents the design and construction industry specializing in temperature-controlled facilities that prioritize product safety best practices. We are the source for best practices of building and maintaining the thermal envelope.

#### CONTACT US:

COLD FACTS Magazine Global Cold Chain Alliance Attn: Megan Costello 241 18th St South Arlington, Virginia 22202 USA

tel +1 703 373 4300 fax +1 703 373 4301 mcostello@gcca.org | www.gcca.org

COLD FACTS welcomes editorial ideas; contact Editor-In-Chief Al Rickard at +1 703 402 9713 or **arickard@assocvision.com**. Contact Jeff Rhodes at +1 410 584 1994 or **jeff.rhodes@mci-group.com** for advertising opportunities in GCCA publications.

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## APPEALS COURT VACATES THE RULE DELAYING RMP CHANGES

FDA food facility registration renewal is due December 31, 2018.

By Lowell Randel

n mid-August 2018, the United States Court of Appeals for the District of Columbia Circuit issued a ruling that vacated the Environmental Protection Agency (EPA) delay in implementing changes to the Risk Management Program (RMP).

One of the last regulations finalized at the end of the Obama Administration was a rule that amended the RMP program and added requirements to regulated facilities. Shortly after taking office, the Trump Administration issued a series of delays to the effective date of the RMP amendments. The final such delay





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GCCA spoke in support of the delay during EPA public meetings and provided written comments to that effect. While many industry groups joined GCCA in supporting the delay, a number of environmental groups opposed the move and challenged the 20-month delay rule in court. In August, the D.C. Circuit Court of Appeals ruled that EPA acted in an arbitrary and capricious manner in delaying the effective date until February 19, 2019.

#### Summary of Court Ruling

The court found that the EPA has exceeded its authority in going beyond the 90-day delay authorized under the Clean Air Act and did not provide sufficient reasoning for why an extended delay was necessary.

In the delay rule, EPA claimed that the additional 20 months were needed to conduct reconsideration proceedings and to consider other issues that may benefit from additional comment. The Clean Air Act provides that reconsideration of a final rule pursuant to that section "shall not postpone the effectiveness of the rule" and that the "effectiveness of the rule may be stayed during such reconsideration. . . for a period not to exceed three months."

The court criticized the delay rule by stating that the EPA neglected to explain why allowing the amendments rule to go into effect prevents the EPA from undertaking notice and comment or other tasks for reconsideration, and why a delay is needed to prevent impediments to reconsideration.

The court further stated that nothing in the Delay Rule explains why the EPA departed from its stated reasoning in setting the original effective date and compliance dates. The court also rejected the EPA claim that the Bureau of Alcohol, Tobacco, and Firearms finding that the West Fertilizer explosion was caused by arson, rather than an accident, supports the need for a 20-month delay. The court summarized the ruling by stating that, "Because EPA has not engaged in reasoned decision making, its promulgation of the Delay Rule is arbitrary and capricious."

#### **Reconsideration Rule Moving Forward**

It is important to note that the court specifically acknowledged that the EPA retains the



LANNING • ARCHITECTURE • ENGINEERING • AUTOMATION DESIGN THERMAL ENVELOPE • CONSTRUCTION MANAGEMENT primusbuilders.com authority to change regulations pertaining to RMP through the normal notice and comment rulemaking process. The EPA has already begun a rulemaking effort by proposing a rule to reconsider the regulation finalized at the end of the Obama Administration.

The reconsideration rule proposes the rescission of problematic provisions included in the amendments rule, included the removal of provisions related to third party audits, root cause analysis, information sharing, and safer technology analysis.

The Proposed Rule was published in May 2018 and the public comment period closed August 2018. The GCCA gave oral comments supporting the rule at an EPA public meeting and, along with a coalition of industry partners, submitted written comments supporting the reconsideration rule.

#### Practical Impact of Ruling

While the court vacated the delay rule on August 17, 2018, EPA has 45 days to petition for a rehearing or appeal the decision to the Supreme Court. This means that even though the delay to the amendments rule has technically been lifted, the rule will not go into effect until at least the end of the 45-day period in which the EPA decides on petitions or appeals. The EPA has yet to indicate how it will respond to the ruling.

In addition to actions by the EPA, there is a potential that industry will challenge the court's decision or reactivate litigation that has previously been filed challenging the amendments rule. Prior to the 20-month delay, industry groups sued the EPA challenging the amendments rule.

The lawsuit was put on hold when the delay went into effect. It is possible that industry will restart the lawsuit and request the courts to stay the effectiveness of the amendments rule while the litigation moves through the legal process.

Even if the amendments rule were to become effective 45 days after the court ruling, the immediate impacts on regulated facilities will be limited to those provisions of the amendments rule that had effective dates that have already passed. The only major provision with a compliance date earlier than 2021 is the requirement for emergency response coordination activities, which has a compliance date of March 14, 2018.

Should the amendments rule become effective during the fall of 2018, regulated facilities will be immediately required to have documentation that they are coordinating with their local emergency responders. Even if the amendments rule does not go into effect in the near future, the reconsideration rule proposes to maintain the coordination requirements, so such coordination will eventually be required by RMP.

For quite some time, the GCCA has been encouraging members to engage with local responders and document their coordination, regardless of whether this is a regulatory requirement. The GCCA continues to urge all members to build relationships with their local responders and maintain records of their engagement.

The compliance date for the other major provisions within the amendments rule is March 15, 2021. This date applies to requirements related to:

- Third Party Audits
- · Root Cause Analysis
- Safer Technologies Analysis
- Emergency Response Exercises
- Information Sharing

All of the above provisions are subject to rescission or significant change as a part of the reconsideration rule. It is highly likely that the EPA will finalize the reconsideration rule well before the 2021 compliance dates for these provisions. So, even if the amendments rule goes into effect this year, there will not be an immediate impact on regulated facilities related to these provisions.

While there remains some uncertainty about the effect of the court's ruling to vacate the delay of the RMP amendments rule, the immediate impacts on regulated facilities appear to be minimal. Potential appeals or other legal actions may cause a reinstatement of the delay, and EPA is continuing its efforts to complete the reconsideration rule that would rescind problematic provisions within the amendments rule.

Facilities that are not currently coordinating with the local emergency responders are strongly encouraged to build and document those relationships in the near future, regardless of the regulatory outcome. The GCCA will continue to actively engage with the EPA and its industry partners as the process moves forward.

**Registration Renewal Due December 31** Under the Food Safety Modernization Act (FSMA), domestic food facilities and foreign food facilities exporting food to the United States are required to renew their registration with the Food and Drug Administration (FDA) every two years. The 2018 Biennial Registration Renewal period runs from October 1 through December 31, 2018.

GCCA members are strongly encouraged to ensure that their accounts with FDA are up to date with a valid password. Due to security reasons, password resets are required every 90 days. If you need to reset your password, you can call the FDA FURLS Helpdesk at 1-800-216-7331 or 240-247-8804 for assistance. The FDA also recently published an updated Guidance for Industry: Questions and Answers Regarding Food Facility Registration, which can assist members with the registration process. Members can find additional information on FSMA regulations in the GCCA FSMA Compliance Guide and by contacting GCCA headquarters. **@** 

**LOWELL RANDEL** is Vice President, Government and Legal Affairs at GCCA.

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#### By Alexandra Walsh

### **COVER STORY**



## UNDERSTANDING YOUR CUSTOMERS' NEEDS

New research will help position member companies as food safety experts and protectors of their customers' brands.

n 2016, GCCA embarked on the execution of a new strategic plan focused on opportunities for GCCA to help members meet their business objectives.

This led to an opportunity to position member companies as food safety experts and protectors of their customers' brands.

But first, they had to thoroughly understand what their customers needed from, and thought of, temperature-controlled logistics companies, what they do well, and where they can improve. GCCA embarked on a three-prong research strategy to learn about the perceptions that food companies have of the cold chain, and how cold chain providers can improve their services and relationships with these partners.

The result was the GCCA Cold Chain Customer Research Report, which provides a holistic view of research conducted over 18 months, beginning with qualitative focus sessions involving 30 food processors and 12 retailers, and culminating with a quantitative survey of more than 200 food companies.

The overarching feedback from food companies indicates they consider several factors when making decisions about the cold chain, but overall the research shows that customers have competing priorities and changing needs as the industry faces investment, innovation, and growth. For cold chain providers, customers' priorities are growing and changing, and the need to be more responsive, agile and customer-centric is a demand the industry must face.

#### Protecting the Brand

Overall, cold chain providers' conversations with their customers tend to be focused on pricing and Key Performance Indicators (KPIs). However, customers' main priority points, when asked to consider all factors, were protecting the brand and good customer service. Providers must incorporate these topics into those conversations to close the gap between customer perceptions and provider realities. Cold chain providers must be able to understand, articulate, and react to their role in protecting the brand.

"Our 3PL providers are stewards of our brand. That's why foundational needs are so important," notes Nicholas Najjar, Senior Manager, Transportation, Land O'Lakes, Inc. "One defect means massive loss of goodwill, not to mention the financial impact. That's why we treat our cold chain providers as partners and discuss both long-term strategies with them, such as what our footprint looks like, and short-term, like how to tackle the upcoming year and inventory strategy."

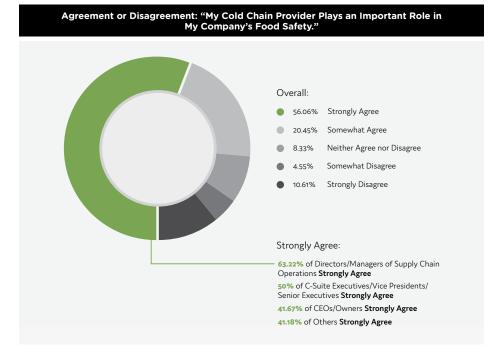
"Protecting your brand is impacted by every stakeholder, from the 3PL to the end user, your customer and your customer's customer," contends Brian Rooney, Director of Supply Chain and Operations at Fresh Avenue. "And almost every aspect of your operation reflects on your brand, from how you pay suppliers, to the safety of product, to service after sale. Everyone is so well connected now, that if you perform poorly or don't get a truck loaded on time, that information travels quickly through your stakeholder chain potentially creating a jaded perception about your company or brand."

#### **Customer Service**

Customer service is key, according to the study. When selecting vendors, food companies and retailers consider location, availability, and customer service. But when ending the relationship, the factor most often cited is customer service.

Additionally, food companies and retailers define customer service broadly. Customer service primarily includes communications, reliability, transparency, flexibility, and innovation. Upon this broader interpretation of customer service, and comparing that to survey results, it is clear that the issue cannot be ignored. It presents itself in every facet of the overall customer experience.

"Metrics and KPIs drive customer collaboration, so we center 100 percent of ours around customer service," Rooney



#### Top Business Trends that will Impact the Company

Rank	Factors	Frequency of Answer Selection
1	Food safety and protecting the brand	122
2	Operations (order accuracy, shorter delivery times, fill rates)	102
3	Regulations and compliance	92
4	Changing market place (consumer eating trends and preferences)	89
5	Quality standards (certifications, testing standards)	84
6	Automation and other technologies	62
7	Human resources (recruiting and retention of talent, working with top manage	ement) 54
8	E-Commerce and non-traditional delivery channels	49
9	Financial (access and cost capital, low margins)	46
10	Sustainability efforts (reducing carbon foot print, "going green")	36

#### Most Important Factors in Selecting a Cold Chain Provider

Rank	Factors Ans	Frequency of Answer Selection	
1	Location	80	
2	Pricing	76	
3	Customer Service	72	
4	Established Relationship	38	
5	Traceable Technology	25	
6	Reputation	17	
7	Regulatory Compliance	16	
8	Compatibility of technology with my company's technology	ology 10	
9	Automation technology	9	
10	Innovative Approaches	7	
11	High performing GM	5	
12	Ability to use data and analytics	5	
13	Energy efficiency & sustainability practices	4	

#### Less than \$10,000,000 to \$50,000,000 to Greater than \$10,000,000 \$50,000,000 \$100,000,000 \$100,000,000 Warehouse Cost per Unit 8 16 12 37 8 48 15 13 Shipping Accuracy On-Time Deliver/On 7 12 45 **Time Shipment** Inventory/Cycle 6 12 8 40 Count Accuracy Out-Bound Turn Times 3 7 5 24 6 3 23 3 In-Bound Turn Times 3 6 3 20 Case Pick Percentage Warehouse Shrinkage 4 7 4 24 (adjustments) Recent Warehouse Audit 6 2 2 25 Score (AIB, BRC, SQF, Silliker, etc.)

**KPIs, Ranked by Annual Revenue** 

#### notes. "Even if we're not performing to the customer's level of expectation, they will feel more comfortable if you demonstrate a commitment to getting to that expectation along with clear dialog as to why. Make no mistake, the pressure is still on to deliver."

Similarly, Najjar says they use KPIs at his company to measure service metrics. "Are we getting perfect order fulfillment and on-time delivery, are we getting at every level of the chain starting with customer and moving on back? That's the chief metric we measure to -other things, like tracing, are ancillary and in support of that goal to the customer."

#### **Quality and Accuracy**

In many cases, cost is not the primary issue in decision-making. Research indicates that when KPIs are ranked in importance, shipping accuracy is first, on-time delivery/ on time shipment are ranked third while warehouse cost per unit comes in second.

Quality and accuracy show up in many answers across the research, including why companies insource and outsource as well as looking ahead to future trends and impacts across the industry.

"Quality and integrity equals food safety and from the cold chain perspective, that's as important as it gets," Najjar points out. "There is no tolerance for defects or errors because what is at stake is your product, your brand, and public safety. This is not a KPI, but a foundational requirement for any provider."

Rooney concurs. "There should always be zero tolerance for anything that would nega-

## Shipping Accuracy 151 Warehouse Cost per Unit 138 On-Time Delivery/ On Time Shippent 127 Inventory/Cycle Count Accuracy 117 Out-bound Turn Times 75 In-bound Turn Times 72 Recent Warehouse Audit Score (AIB, BRC, SQF, Silliker, etc.) 70

**KPIs**, Ranked

Warehouse Shrinkage 65 (adjustments) Case Pick Percentage 56

tively impact food safety, so the bar is set very high, with no room for deviation."

#### KPIs

Key Performance Indicators are important, yet survey respondents and focus group participants indicate a need for more universal standards in KPI reporting as well as a need to work to identify what metrics they need and want. This emphasizes that, in addition to the baseline of industry-wide KPIs, cold chain providers need to work with customers to understand what measurements are most helpful based on their reporting and analytics requirements. It is not one size fits all.

The top four KPIs that respondents base their logistical operations evaluations on are:

#### KPIs, Ranked by Company Function

	Agricultural Production	Food Manufacturing or Processing	Refrigerated and/or Frozen Distribution	Retail
Warehouse Cost per Unit	7	72	12	37
Shipping Accuracy	4	87	41	8
On-Time Deliver/On Time Shipment	6	72	35	7
Inventory/Cycle Count Accuracy	3	70	33	6
Out-Bound Turn Times	2	37	26	4
In-Bound Turn Times	3	35	25	3
Case Pick Percentage	2	27	19	5
Warehouse Shrinkage (adjustments)	4	42	20	2
Recent Warehouse Audit Score (AIB, BRC, SQF, Silliker, etc.)	0	44	14	6

- 1. Shipping accuracy with 75 percent of respondents favoring this metric
- 2. Warehouse cost per unit (68 percent)
- 3. On-time delivery (63 percent)
- 4. Inventory/cycle count accuracy
- (58 percent)

"For our small to mid-size company, the perfect KPI would be cost per unit of activity, inventory shrinkage, and shipping accuracy (on-time delivery and shipment and truck turn times)," Rooney says. "Everybody should look for waste in their operation. Eliminating it is one of the fastest ways to improve performance. At the end of the day, isn't that what we're all worried about?"

"It's also important to establish and maintain dialog between your partners and stakeholders, so we work to establish common terminology and determine frequency, with the goal of driving continuous improvement," Rooney notes. "Work with your partners and stakeholders to establish five or six key metrics and focus on the vital few. Start with a few of your own and mutually decide on one or two that really impact your business."

"We also look for ways to incentivize, rather than just assigning blame and penalizing," acknowledges Rooney. "We do that by monetizing the process – putting dollars behind the figures. What is it really going to cost to get that extra one percent on the scorecard?"

"Last, remember to evolve," Rooney advises. "Select three to four consistent measurements, then rotate. The key is to have a manageable

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list on a consistent and accurate basis, because there are times where less is more."

#### **Other Trends**

Other important trends and considerations emerged as part of GCCA's research.

Food companies are mostly satisfied with their primary cold chain partner. Respondents gave a good report card to their primary cold chain partner, as 74 percent of respondents indicate some level of satisfaction with their provider and only 18 percent indicating they are dissatisfied.

"We are better than generally satisfied with out strategic partners. We have an appetite for transparency, and that is largely there," Najjar says. "That's what creates the level of trust needed for our cold chain partners to be part of our discussions around long-term planning. We need them to help us solve problems that have arisen, from technology trends to future distribution. We need them to help us understand the tipping point in economies of automaCold chain providers must find opportunities to position themselves as an integral part of the customer's food, safety, and brand initiatives.

tion and how e-commerce might change the way we distribute or how the warehouse footprint might need to be different."

For larger companies, the customer research indicates compliance and standards, which one ruled industry conversations, have taken on less importance. For companies both large and small, sustainability ("going green") has evolved into part of the business but is not seen as a major driver of impact, as it was a few years ago.

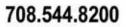
"Today, sustainability is just like food safety, it is what everyone expects," says Rooney. "Without question, you invest what is necessary to ensure best practices in sustainability."

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#### Overall Satisfaction with the Primary Cold Chain Provider

#### Overall:

- 30% Extremely Satisfied
- 43.57% Somewhat Satisfied
- 7.86% Neither Satisfied nor Dissatisfied
- 13.57% Somewhat Dissatisfied
- 5% Extremely Dissatisfied



#### Extremely Satistfied:

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50% of companies Less than \$10,000,000 are Extremely Satisfied



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#### Conclusion

While change is afoot across the industry, it is important to note that most respondents and participants of the survey and roundtables are generally satisfied with their primary cold chain provider. But providers cannot rest easy on this satisfaction, as the details covered in this customer research report indicate that satisfaction comes with demands for customer service first and cost controls close behind.

If you're a cold chain provider, three distinct realties are present in this research.

First, even though 95 percent of conversations at the business table might be around costs, it is customer service that matters most.

Second, nothing is more important to food manufacturers than ensuring the safety of their food. Cold chain providers must find opportunities to position themselves as an integral part of the customers' food, safety, and brand initiatives.

And third, as an industry, it is essential to build cohesiveness and consistency around standardized key performance metrics. Nothing is more important to food manufacturers than ensuring the safety of their food.

After hearing from food companies across the global cold chain, and understanding what drives their businesses, keeps them up at night, and how they see third-party logistics providers adding value, the temperaturecontrolled industry will be able to move forward in being more than just partners to food companies.

And as the temperature-controlled logistics industry continues to evolve from purely storage to an integral part of food companies' brands and operations, IARW member companies must continue to grow as extensions of their customers' core business. @

ALEXANDRA WALSH is a Senior Publishing Consultant with Association Vision and Managing Editor of COLD FACTS.

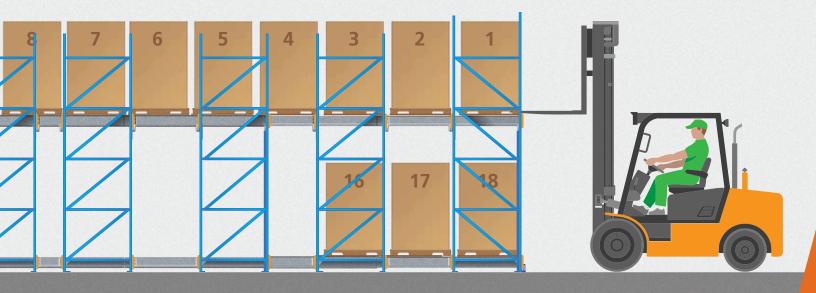
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Rising labor and energy costs contribute to greater interest in fully automated facilities.

#### By Sheryl S. Jackson

wo trends are affecting the refrigerated warehouse industry – consumers' increasing demand for high quality fresh fruits and vegetables and an expanding list of grocery e-commerce sites that provide convenient shopping for consumers.

Meeting consumers' expectations for quick and reliable delivery of fresh foods has created a need for regional PRWs that can provide just-in-time service for grocery stores as well as their consumers. At the same time, PRWs face challenges that include a shortage of skilled labor, shrinking profit margins, and an increased focus on sustainability.

Most cold storage operators are turning to automation to address their challenges. Different levels of automation exist in PRWs, but two new facilities – one in Tacoma, Washington, in the United States, and one in Melbourne, Victoria, in Australia – take automation to the highest level.

Both fully automated facilities are operated by NewCold. The facilities rely on automated storage and retrieval systems to move and store product in the high-bay warehouse. A small number of employees direct equipment using advanced software systems.



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The move toward cold storage warehouses that are fully automated will continue to grow because automation not only addresses labor challenges, but also provides energy efficient building, says Jonas Swarttouw, U.S. Country Manager for NewCold. The energy efficiency comes from a combination of taller buildings that minimize the ceiling and floor footprints – sources of heat – and the ability to reduce use of lighting and conveyors based on activity and to rely on new, lighter-weight, energy-efficient automated technology.

Fully automated, high-bay cold storage facilities have been common in Europe for many years due to the high costs of land, labor, and energy, but interest in the approach is growing in many more countries, says Swarttouw. The Tacoma facility is the first of its kind in the United States, with a second facility under construction in Idaho. The Australian facility is comprised of two warehouses: one cold storage and one chilled storage. In both cases, customers wanted facilities that would provide the maximum distribution capabilities while controlling costs.

The labor benefits of fully automated cold storage facilities differ globally. Operating a 24-hour facility in the United States usually presents unique workforce challenges – finding qualified employees to work at 2 a.m. as a Fully automated may not be the answer for all customers, but it does provide a sustainable, innovative option to address customer needs.

forklift driver, Swarttouw notes. "Although there are fewer people willing to work in cold storage environments, the requirements of our customer in terms of food safety, short order lead times, and high velocities keep increasing. The use of automation to support our people to outperform is our vision for the next generation cold storages."

In Europe, the availability of labor has been one of the drivers to highly automated cold storage applications, says Swarttouw. "In other regions in the world, where labor is more abundant, the use of automation will support companies to better control the quality of their services and make their teams more productive," he says. "In Asia, it is difficult to find people with the level of training required." The key to a successful automated cold storage operation is the software solution, says Swarttouw. He describes three layers to control a warehouse:

- Warehouse Management System

   found in every organization and determines what is in stock, moved in and moved out of the facility, and on what schedule.
- Warehouse Control System controls automated movements of products by the material handling equipment.
- Programmable Logic Controller gathers information from sensors and devices to control overall operations of automated equipment.



Left: The second fully automated high bay cold facility in the States is under construction in Idaho. Right: The facilities rely on automated storage and retrieval systems to move and store product in the high-bay warehouse. (Photos courtesy of NewCold.)



The ability to reduce use of conveyors in fully automated facilities leads to energy efficiencies. (Photo courtesy of NewCold.)

The software used by NewCold in its automated facilities is a proprietary product that they developed. "There are other software packages available, but we made a strategic decision to create our own," explains Swarttouw. "Because automated facilities are a strong focus for us, we wanted to control the software design to meet our specifications and fulfill all requirements of our customers."

"Automated cold storage facilities are not cheap, which can be a barrier for many companies," admits Swarttouw. "Smaller organizations might choose to work with partners who are knowledgeable about automation to reduce the risk."

Swarttouw offers advice for companies who are evaluating the move to constructing fully automated cold storage facilities. "First, conduct an honest assessment of your business and your goals," he says. If moving to fully automated is right for both the customer and the logistics company, there are four phases to the process – each with its own specific set of questions and decisions.

**1. Pre-planning and Customer Interview** Talk to the customer to identify their goals and

#### By the Numbers: A look at recently completed fully automated facilities

#### **Australia**

Melbourne 1 – Cold Storage

- A fully automated 111-ft (34 meter) high cold storage warehouse with 8 double satellite stacker cranes Footprint is 4.3 acres (176 x 100 meter)
- Total storage capacity of 102,816 pallets
- Storage area and loading docks at -23°C
- FEFO handling with a capacity of > 10,000 pallets per day
- > 900 pallets shipment buffer zone so minimal waiting time for trucks before loading
- 19 docks of which two are allocated for automatic truck unloading
- Equipped for container loading and unloading
- Open 24/7

#### Melbourne 2 – Chilled Storage

- A fully automated 111-ft (34 meter) high chilled storage warehouse with 6 double satellite and 4 single satellite stacker cranes
- Footprint is 5.9 acres (170 x 140 meter)
- Total storage capacity of 110,612 pallets

- Storage area and loading docks at different chilled environment (+2°C, +8°C and +11°C)
- FEFO handling with a capacity of > 10,000 pallets per day
- > 1,100 pallets shipment buffer zone so minimal waiting
- time for trucks before loading
- 30 docks
- Container yard capable of storing 700 TEU
- Open 24/7

#### United States

Tacoma, Washington

- A fully automated cold storage warehouse with 8 ASRS
- 140-ft (42.7 meters) tall building covers 3.5 acres
- Total storage capacity of 100,000 industrial US pallets 40"x 48"
- Storage area and loading docks at -5°F
- FEFO handling
- Minimal waiting time for distribution companies before loading
- Open 24/7

use those needs to identify automation technology that is appropriate, suggests Swarttouw. "Make sure you understand the needs enough to determine the impact of automation on needs as well as cost of building the facility – then select the most appropriate technology," he says. "You can automate every aspect of the facility, but does it make economic sense for your company and the customer?"

#### 2. Planning the Construction

"NewCold is not a construction company, we are a logistics service provider who operates the facilities we develop. We do work very closely with the contractors to oversee every aspect of the building," says Swarttouw. A complex network of construction suppliers such as concrete subcontractors and insulated metal panels as well as racking and automation suppliers make up a cold storage building project. "Even if everything is outsourced, it is critical to oversee every step," he says.

There are some companies that build their own automation technology but NewCold purchases it from suppliers. "We do orchestrate everything to make sure all aspects of the building from the original design to the final product meets our customers' and our own needs," says Swarttouw.

#### 3. Implementing the Automated Cold Store

"Assuming that you have a good building with good technology, the next step is to identify how you will start up the operation," says Swarttouw. "Who do you have in-house who can do that?" If no in-house expertise exists, or if no one can be trained for the task, consider outsourcing the role to a consultant or supplier, he suggests.

#### 4. Operating the Facility

One of the most difficult decisions is to determine who will run the facility, says Swarttouw. "Companies that decide to move to fully automated facilities have to accept the fact that the people needed for these facilities may not be the same people already working with the company," he says. "The function is new and requires more technologically oriented people."

In fact, this is one question that must be asked during the self-assessment phase, advises Swarttouw. "Can you take the step to adjust your workforce if current employees won't fill the need for the new direction?" he asks. "This is a cultural question that each company must answer for itself."

Fully automated may not be the answer for all customers, but it does provide a sustainable, innovative option to address customer needs, says Swarttouw. "The decisions that must be made in the design of the facility are more nuanced and require a thorough understanding of customer needs and automated warehouse operation," he says. "There may not be a wave of every PRW developing new fully automated cold storage facilities soon, but as customers look to address the challenges of sustainability and reliability, the return on investment will justify the strategy for more cold storage operators. In our opinion this tipping point is behind us." **@** 

**SHERYL S. JACKSON** is a freelance writer based in Alpharetta, Georgia, who specializes in industry issues and trends.

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## WFLO SNAPSHOT: STRENGTHENING THE COLD CHAIN AROUND THE WORLD

How the World Food Logistics Organization is creating a safe and efficient global cold chain.

By Alexandra Walsh

he World Food Logistics Organization (WFLO), a GCCA Core Partner, continues to work with aid organizations and international development partners to help emerging economies and lower-income countries meet the challenges that arise when growing a global cold chain. Projects in some key areas of the world are described in this article.

#### India

In January 2018, a team of industry experts traveled to India to examine the country's cold chain infrastructure and operational practices and to identify constraints and gaps with a focus on imports of fruit originating in the Pacific Northwest of the United States.

One of those experts was Arne Martinsen, a transportation consultant and a Public Member of the WFLO Board of Governors. "With expertise in transportation, my assignment in assessing India's cold chain was not so much to look at capacity, but rather at capabilities and the road ahead."

He observed that, "Private port, ocean shipping, and transportation stakeholders are entering the cold chain logistics infrastructure with significant investments in railroad wagons and equipment to control the reefer container movements connecting the ports with ICDs (Interior Container Depots) that have essential cold storage facilities. Through these systems, container shipping lines endeavor to offer 'through B/L (Bills of Lading)' from foreign origin ports to cold storages in India's interior and vice versa for export shipments."

"A positive part of the India experience was to meet with companies that are totally on top of how to handle perishables and fruit via their own warehousing and transportation facilities with procedures that are on par with the United States," Martinsen notes.

He underlined, however, that key factors that severely affect the efficiencies in the overall Indian cold chain are the lack of systems and procedures in the broader reefer transport sector. "There is a need for training of both truck drivers and the technicians that handle maintenance and equipment settings," Martinsen says.

The efficiency gap that Martinsen notes is one of the specific areas that will be addressed with an extensive program prepared by the GCCA. The program is part of a follow-up assignment in which GCCA staff will return to India in November 2018, to validate the results of the assessment with key Indian senior level business leaders to gain their support and secure buy-in for next steps.

These include the GCCA/WFLO conducting a series of technical trainings for storage and logistics operators that will address the identified cold chain gaps as well as strategy workshops resulting in the development of a "Best Practices in the Cold Chain" handbook that is unique and actionable for India.



#### Southeast Asia

Martinsen was also a member of the team that traveled to the Philippines and Indonesia in August and November of 2016 to conduct a baseline assessment of the cold chain infrastructure in each country.

The assessment was the first phase of a program funded by the USDA Emerging Markets Program (EMP) that directs the GCCA/WFLO and the Strategic International Alliance of Marketing (SIAM) Professionals to help establish a sustainable platform for intensifying cold chain development in the two countries through a series of capacity building activities.

The Philippines is made up of more than 7,000 islands of which 2,000 are inhabited. Martinsen says his focus was on assessing how imported perishables were distributed from the main port in Manila, out to the provinces and islands.

"To begin with, like any large city in Southeast Asia, Manila is so congested with traffic that it can take hours for the produce to get from the port to cold storage. From there the produce is loaded into small refrigerated trucks that use the ferry systems for onwards transport to the islands," Martinsen explains.

However, Martinsen adds that both countries have many examples of excellent progress towards having a first-rate cold chain.

He points out that on the main island of Java, a free trade zone has been established that is relatively close to the port of Jakarta, the capital and biggest city, and which has a direct double-track rail connection to and from Surabaya, the major port city in East Java.

"We interviewed a freight forwarding company in Surabaya that is doing everything right. They have their own field technicians and a fleet of generators for reefers, and their logistics experts have strong working relationships with both the shipping lines and the railroad."

With the assessment complete, the Cold Chain Association of the Philippines (CCAP) and the WFLO led a study tour of Indonesians and Filipinos to Manila and the island province of Cebu in March 2018, to examine inter-island logistics. Since then, the WFLO has hosted Cold Chain Executive Connections (CCEC) in the Philippines and Indonesia designed around discussion of the assessment results and to promote exchange between Indonesian and Filipino participants. Training events will be held in early 2019.

In 2018, WFLO/GCCA and IESC organized workshops for exporters shipping to Puerto Rico and the U.S. mainland and also offered technical assistance to packing houses throughout the country.



Apples are auctioned off in an Indian wholesale market in front of everyone but fingers are kept hidden beneath a cloth so no one knows the bidding amount.

#### **Dominican Republic**

The Dominican Republic is one of the fastest growing economies in the Caribbean, and the country's agricultural sector has the potential to drive significant economic growth, particularly because of export opportunities through the Central America Free Trade Agreement and other regional trade agreements. Yet a high percentage of the country's products are refused due to food safety concerns caused by pests, illegal pesticide residue, and other contaminants.

In the Dominican Republic, the WFLO/ GCCA supports the International Executive Service Corps (IESC), a not-for-profit economic development organization that implements the Dominican Republic Exporting Quality Program, a four-year program funded by the USDA Foreign Agriculture Service. The program is intended to improve product quality, increase production efficiency and the value of post-harvest products, and enhance marketing and market linkages.

In order to improve the Dominican Republic's cold chain, the WFLO/GCCA



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and IESC have provided technical assistance by conducting a cold chain assessment, facilitating cold chain knowledge-sharing and action planning that has led to cold chain conferences, and ensured participation in, and support of, Cold Chain Working Groups. The Working Groups, which were assembled after the 2016 assessment to plan next steps for the cold chain in the Dominican Republic with support from the program, are divided into three interest areas: port and airport; production and packing houses; and institutional and government agencies.

In 2018, WFLO/GCCA and IESC organized workshops for exporters shipping to Puerto Rico and the U.S. mainland and also offered technical assistance to packing houses throughout the country. Stakeholders in the Dominican Republic's cold chain were invited to attend educational and training sessions at both the Global Cold Chain Expo in Chicago in June and the WFLO Latin American Institute in Mexico City in July.

In addition, 12 individuals traveled to Mexico and then onto Miami to be able to observe an efficient cold chain from one end to the other. The participants represented every sector of the cold chain in the Dominican Republic from private and public sector producers to cargo agents and representatives from shipping lines and airlines.

"The participants were able to observe the whole length of a top-rate cold chain including best practices at one of the largest packing houses in the world, state-of-the-art warehouse construction, and the transportation of perishables in preparation for export to Miami," explains Nilsy Delgado, Asian Vegetables Value Chain and Cold Chain Facilitator, Exporting Quality Program, IESC. "And then at the other end in Miami, they were immersed in the logistics of the cold chain connection."

Delgado adds that an information sharing, follow-up session was held in Santo Domingo in September so all the participants involved in the different international trips could meet and share their experiences and what they are doing with the knowledge they gained.

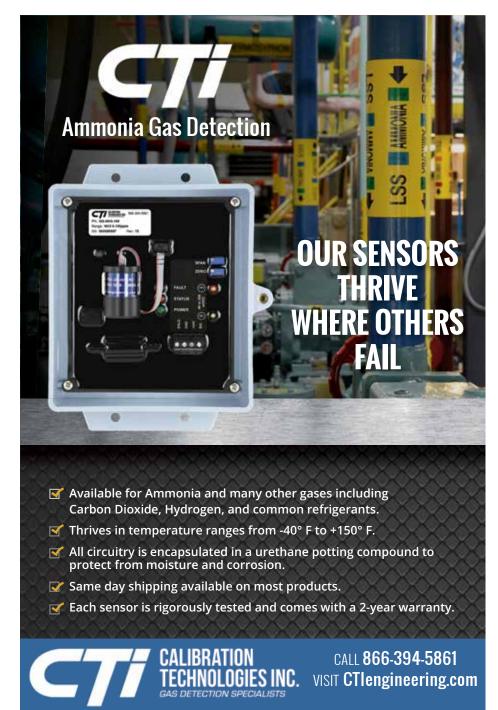
"One participant told us they had already implemented a major change at their packing house based on what they observed in Mexico," Delgado explained. "They now maintain a temperature-controlled environment in the whole facility, not just the designated cold room. This is a huge change because typically in the Dominican Republic, product is packed in normal temperatures and then stored in the cold room." "In my opinion, the stakeholders in the cold chain in the Dominican Republic are very engaged and if I look back at where the cold chain was two years ago when the initial assessment was conducted, we've accomplished a lot of good things, and people are more conscious of the consequences of not having an adequate cold chain," says Delgado.

Delgado says next steps in the fourth and final year of the program include

supporting the Working Groups as they prepare final action recommendations, and providing additional training in perishable cargo handling as well as transportation.

**ALEXANDRA WALSH** is a Senior Publishing Consultant with Association Vision and Managing Editor of COLD FACTS.

EMAIL: awalsh@associationvision.com



## DRUG TESTING RAISES ISSUES FOR COLD CHAIN TRANSPORTATION

Legal marijuana use is on the rise, but what federal, state or local laws apply?

#### By Karen E. Thuermer

ith wider legalization of medical and recreational marijuana, cold chain executives find themselves increasingly focused on the topic, particularly in regard to drug testing.

The issue is complicated, especially given that more and more states and cities are legalizing the use of recreational and/or medical marijuana. Today, 30 states plus the District of Columbia and two cities – San Francisco, California, and Boulder, Colorado – have legalized the use of the substance. Yet each has different laws considering its use and employer testing of its use.

Meanwhile, the federal government has not legalized the drug.

"The topic is especially complicated for companies that have operations in all 50 states, given that there are so many different laws," remarks Kathryn Russo, Principal in the Long Island, New York, office of Jackson Lewis P.C. "It's very challenging to be a multi-state employer in this regard."

While most employers contract with a service provider to conduct drug testing, the issue of drug testing is further complicated when determining at what point testing should be performed and what type of drug test should be used.

"There is pre-employment testing of an applicant, reasonable suspicion testing of current employees who are suspected of using drugs or alcohol at work, random testing, and other types of testing, depending upon the type of industry and employer and how much testing they want to do," Russo points out.

Testing done by the Department of Transportation (DOT), a federal agency, is very specialized. "Given the number of agencies under the DOT, each agency has its own requirements," she says.

On top of that, the rules that apply to DOT employees are different from non-DOT employees. "A non-DOT employee would be covered by state and local laws, which vary," she adds.

Some states, for example, allow an employer to terminate an employee the first time he or she tests positive. Other states do not. Some states may also offer the employer the opportunity for employee/applicant treatment.

"By contrast, the DOT does not enforce disciplinary consequences," Russo says. "Instead, if someone tests positive, DOT says the employer must remove that employee from performing safety sensitive jobs. In the case of a trucking company, it must remove the truck driver from performing driving functions, but the DOT won't tell the company whether or not to terminate that person. Termination is the employer's decision."

#### **Setting Standards**

The setting of standards is equally complicated. According to Russo, any national standards would have to focus on those provided by the DOT or state agencies that have federal regulations.

"These are federal laws that regulate drug and alcohol testing of federal employees," she says. "If the employee is not covered by federal regulations, and the employer must adhere to state and local laws, it's important to realize that each state and local law is different."

One example is randomly testing for drug and alcohol use. "Random testing is not permitted in all states and cities," she warns.

And the issue will not get easier with today's trend toward ruling in favor of medical marijuana users.

"Years ago, we used to be able to tell employers that use of medical marijuana was illegal under federal law," she says. "But now that medical marijuana has become so popular, we are moving in a different direction. The courts are starting to rule against employers."

Case in point: the Americans with Disabilities Act states employers are required to have direct dialogue with applicants who are disabled and might need to use medical marijuana. "The law states that an employer cannot discriminate against someone just because they use medical marijuana, which complicates the issue further for employers," Russo says.

The issue may have broader implications. Russo points to a recent federal case in Connecticut that held it is employment discrimination if an employer does not hire a medical marijuana user.

"You have a lot of employers in this industry who are concerned about statutes where people have the right to use medical marijuana because no one is focusing on the safety issue," she asserts. "The few cases that have been decided so far have not involved applicant employees in dangerous jobs. We need to see what's going to happen when someone in a really dangerous job comes along and wants to use medical marijuana and the employer says no. Then we will have a law suit because there are laws protecting the use of medical marijuana."

#### **Driver Laws**

While the issue regarding drug testing for medical and recreational marijuana use is complicated, when it comes to employers of drivers of commercial motor vehicles (CMV), it becomes more clear-cut.

By definition, CMV drivers are DOTregulated drivers of vehicles weighing 10,001 pounds and above.

"There is an additional category of commercial licensed drivers (CDL drivers) that is subject to DOT drug and alcohol testing requirements," says Prasad Sharma, Partner, Scopelitis, Garvin, Light, Hanson & Feary P.C. "Simplistically, those are drivers of vehicles weighing 26,001 pounds and above and that includes drivers of tractor-trailers."

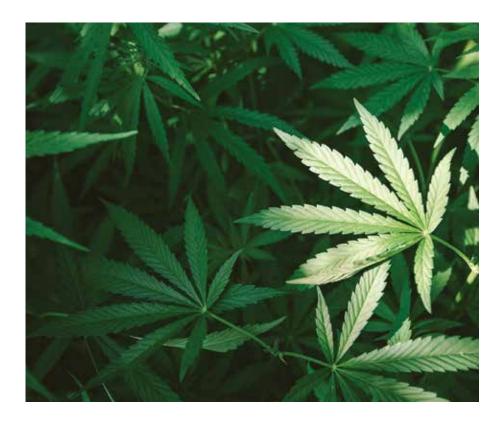
Simply put, the Federal Motor Carrier Safety Regulations are the body of regulations that generally prohibit the use of marijuana. "Specifically, 49 C.F.R. 391.11(b)(4) requires a driver of a CMV to be physically qualified to operate a CMV and 49 C.F.R. 391.41(b)(12) states, as part of those physical qualifications, the driver cannot 'use any drug or substance identified in 21 C.F.R. 1308.11 Schedule I,'" Sharma says. "This refers to Schedule I under the federal Controlled Substances Act and includes marijuana."

Additionally, 49 C.F.R. 392.4 prohibits a CMV driver, while on duty, from possessing or being under the influence of a Schedule I drug (includes marijuana).

"In addition to the general prohibition on use, drivers requiring CDLs are also subject to DOT drug and alcohol testing rules (49 C.F.R. Part 382)," Sharma points out.

This testing requires:

• Pre-employment testing before allowing a driver to drive (requires a verified negative



result from a medical review officer or a consortium/third party administrator)

- Post-accident testing (where accident involves loss of human life, bodily injury with immediate medical treatment away from the scene and driver was issued a citation for traffic violation, or disabling damage to any vehicle requiring a tow away and the driver was issued a citation for traffic violation)
- Random testing (for 2018, 25 percent of the pool of DOT-regulated drivers has to be randomly tested for drugs with testing being unannounced),
- Reasonable suspicion testing (can only be initiated by trained supervisor or company official "based on specific, contemporaneous, articulable observations concerning the appearance, behavior, speech or body odors of the driver")
- Return-to-duty-testing (if a driver has a verified drug test, they must be referred to a substance abuse profession (SAP) and undergo the recommended treatment and then must test negative in order to be returned to driving activity).

It is commonplace for carriers to contract with third party administrators (TPAs) to handle their drug and alcohol testing program and compliance with the procedure mandated by DOT in 49 C.F.R. Part 40. While the law remains fairly clear for truck drivers, Sharma notes that state legalization of recreational or medical use of marijuana can create confusion for drivers. "That confusion can lead to their disqualification – particularly for those believing their state authorizes them to use marijuana," he says.

In addition, the Federal Motor Carrier Safety Administration has finalized a rule that will stand up a centralized database known as the drug and alcohol clearinghouse in January 2020, that requires reporting of failed DOT drug tests to the clearinghouse and require employers to check the clearinghouse before hiring.

For applicants that fail a drug test today, Sharma warns it's possible for them to move on to another company and become a driver once they can pass their pre-employment test. "With the clearinghouse, that initial fail will be reported by the prospective employer and the applicant would ostensibly have to go through the SAP recommended treatment and the return-to-duty process before another carrier could hire him/her," he says. **@** 

**KAREN E. THUERMER** is a freelance writer based in Alexandria, Virginia, who specializes in economic and logistics issues.

EMAIL: kthuermer@aol.com

## FOOD MAX

With approximately 63 million tons of food lost between farm and fork in the United States alone – enough to feed every American for three months – the temperature-controlled warehousing and logistics industry has taken on the responsibility of working toward a solution.

Members of the GCCA are at the forefront of this initiative, working with customers, food banks, and other charities that rescue food that might otherwise go into a landfill. This column is dedicated to case studies that showcase GCCA members' solutions to maximize food resources.

A massive 1.6 billion tons of food produced globally, and 63 million tons of food produced in the United States alone, is wasted every year. The good news is that third party logistics companies can be leaders in mediating this issue. Burris Logistics and Versa Cold have been prioritizing food loss and waste (FLW) reduction to support their communities, reduce waste, and preserve the integrity of the cold chain.

Maurice Grier, General Manager at Burris Logistics, says they encourage their customers to donate, rather than dump, food as long as it is still safe, as donating food helps those in need, and helps their customers save money by avoiding dump charges.

Burris Logistics works closely with two

food banks: Feeding Northeast Florida and Farm Share. In the event that these food banks are at maximum capacity and cannot store more donations, Burris Logistics will store the product for free until more space is available. Grier is also involved with both of these food banks through his church, as his relationships with his customers and with food banks extend beyond the professional sphere, rising from a strong desire to serve the community. Grier and Burris Logistics are happy to save their customers money and provide a solution to FLW while helping feed those in need.

Doug Harrison, President and CEO of Versa Cold, states they strive to reduce FLW by giving their employees the opportunity to contribute to a higher purpose while maintaining the integrity of the cold chain, ensuring that food is safe and of a high quality.

In order to provide a solution to FLW, they upgraded their technology and workforce skill to include a cold chain assurance team of food scientists and food experts, as well as a coordinator who internally manages their relations with food banks. Recently, Versa Cold consulted with Food Banks Canada to learn how to better reduce FLW and to educate customers on food waste to make them aware that Versa Cold will transport and donate the food on their behalf. Harrison expressed that in the future they expect to further provide solutions for FLW, as they ensure the integrity of the cold chain, uphold the values of their company, and enrich their community.

For more information, see how GCCA partnered with the World Wildlife Fund on the study "No Food Left Behind: Underutilized Produce Ripe for Alternative Markets" by visiting worldwildlife.org.

We want to hear from you! Contact Richard Tracy, Vice President of International Programs at rtracy@gcca.org and tell him how your company is providing solutions to food loss and waste. **@** 

## 2018-2019 CALENDAR

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GCCA Latin America Cold Chain Congress Lima, Peru

FEBRUARY 10-13, 2019 55th WFLO Institute East Atlanta, Georgia, United States

MARCH 3-6, 2019 55TH WFLO Institute West Los Angeles, California, United States

#### MARCH 20-22, 2019

**22nd GCCA European Cold Chain Conference** Brussels, Belgium

#### APRIL 7-10, 2019

**128th IARW-WFLO Convention** Santa Ana Pueblo, New Mexico, United States

#### JUNE 10-12, 2019

**2019 Global Cold Chain Expo** Chicago, Illinois, United States

#### JULY 28-31, 2019

GCCA Assembly of Committees Washington, D.C., United States

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### ASSOCIATION NEWS NEWS ABOUT GCCA CORE PARTNERS

The **GCCA** Energy Excellence Recognition Program is designed to recognize warehouse facilities as they improve their energy efficiency and reward those that drive a philosophy of energy conservation, all while helping to make the overall cold chain more sustainable. It allows participants to use interactive tools to track efficiency at each of their facilities, as well as receive progress reports and management resources to create a culture of energy efficiency. Facilities will be able to identify and change energy consumption behaviors, improve energy efficiency, and promote their efforts to current and potential customers.

Using qualitative and quantitative assessment tools, a facility can establish a baseline year with records, and then track performance over time to identify challenges and opportunities for improvement. This allows warehouse operators to track facility performance over time, as well as receive progress reports with recommended next steps and links to useful resources. Top performers will receive recognition (Gold, Silver and Bronze levels) based on their achievements towards energy efficiency.

The program was designed and developed by a task force of IARW warehouse operators over the past two years. Members of the task force were able to become Early Program Adopters and over 61 facilities have already enrolled including Americold Logistics, Congebec Logistics, and Hanson Logistics. A list of those early adopter facilities enrolled in the program is available online.

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Under the Food Safety Modernization Act (FSMA), domestic food facilities and foreign food facilities exporting food to the United States are required to renew their registration with the Food and Drug Administration (FDA) every two years. The 2018 Biennial Registration Renewal period will run from October 1, 2018 through December 31, 2018.

**IARW** members are strongly encouraged to ensure that their accounts with the FDA are up to date with a valid password. Due to security reasons, password resets are required every 90 days. If you need to reset your password, you can call the FDA FURLS Helpdesk at 1-800-216-7331 or 240-247-8804 for assistance. The FDA also recently published updated Guidance for Industry: Questions and Answers Regarding Food Facility Registration, which can assist members with the registration process. Members can find additional information on FSMA regulations in the GCCA FSMA Compliance Guide and by contacting GCCA headquarters.

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The 55th **WFLO** Institutes (East in Atlanta, Georgia, and West in Los Angeles, California) are now accepting registrations. The program focuses on cold chain management, customer service, employee benefits, employee safety, food safety, warehouse operations, and continuous improvement. Thousands of temperature-controlled warehousing and logistics professionals have attended the WFLO Institute over the past 54 years. There is simply no other training in the world like it, with over 40 courses specifically tailored to the cold storage industry. The **IRTA** sponsored Transportation Track at the Institute West is a four-day premier training for professionals managing transportation at a logistics company. This training exposes attendees to all elements of running a transportation business, whether it's asset-based or non-asset-based.

At its November Conference and Expo, IACSC revealed a complete rebranding of the association from the International Association for Cold Storage Construction (IACSC) to the Controlled Environment Builders Association (CEBA). While cold storage facilities remain the core market for most members, an even broader range of facilities that require controlled environments with a thermal envelope are looking for the solutions that CEBA members provide. This includes temperaturecontrolled facilities, humidity-controlled environments, pharmaceutical storage facilities, clean rooms, and more. As CEBA looks to the broader market, it continues to work to elevate the perception of the industry by communicating the need for specialization in the design and building of thermal, controlled environment facilities. To see the new look for CEBA, visit the GCCA website. 🍘

### THE GCCA COLD CHAIN CUSTOMER RESEARCH REPORT IS NOW AVAILABLE!

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**STRENGTHEN** partnerships

**DELIVER** greater value

**EXCEED** customer needs

DOWNLOAD the report at www.gcca.org/customerresearch



### MEMBER NEWS NEWS FROM MEMBERS OF GCCA CORE PARTNERS

**InterChange Group, Inc**. recently began construction on a new cold storage facility in Harrisonburg/Mt. Crawford, Virginia. It is located on Interstate 81, a primary trucking route along the East Coast. Construction began on Phase 1 of the project with the potential to grow in phases to 600,000 sq. ft. and over 80,000 pallet positions in multiple rooms with temperatures ranging from -10°F to up to 34°F. Approximately 16,000 sq. ft. should be operational by the second quarter of 2019.

Viking Cold Solutions released a measurement and verification study on Viking Cold's TES technology at **Dreisbach Enterprises'** 93,000 square foot frozen food distribution center in Richmond, California, showing significant operational and financial benefits for utilities and the cold storage industry. The study demonstrated the ability of Thermal Energy Storage to mitigate the facility's 13-hour peak period by simultaneously reducing peak period energy consumption by up to 43 percent, reducing peak demand within this peak period by up to 29 percent, and maintaining 50 percent more stable temperatures.

**Ramp Systems** hired Doug Bailey as Director of 3PL Sales. Bailey previously worked at HighJump, Accellos, and Provia, accumulating more than 20 years of sales experience serving the logistics industry.

**A M King** completed a new state-of-the-art distribution center and division headquarters for ALDI Inc. in Dinwiddie County, Virginia. The 562,500 sq. ft. facility will serve approximately 70-80 ALDI stores across the Richmond-Petersburg, Hampton Roads, and eastern North Carolina regions and eventually create nearly 200 new jobs. A M King provided fully integrated design-build services that included installation of an ammonia refrigeration system, structural precast building, an 80 mil PVC roof, high-end dock equipment, high-density concrete warehouse flooring, racking for 25,000 pallet positions, a Quell fire suppression sprinkler system in the perishable space, and a 2500 kW generator, which supplies enough power to operate the entire facility during a power outage.

**Tippmann Innovation** recently completed a 205,000 sq. ft. state-of-the-art cold storage facility for Win Chill Cold Storage. The warehouse includes more than 30,000 pallet positions and 1,100 positions of Tippmann Innovation's QF+ IN-Rack Freezing system. The facility is equipped with 16 dock doors and is also served by rail. **②** 

## COLD CHAIN INNOVATIONS

#### VR IMMERSIVE LEARNING FOR FORKLIFT OPERATORS

The Raymond Virtual Reality Simulator provides advanced, supplemental instruction that is designed to improve forklift operator skills, build confidence, help retain employees, and keep them learning. It uses existing Raymond® trucks and plugs into the company's patent-pending sPort (Simulation Port) to create an immersive learning environment for operators. Under the guidance of a certified instructor, operators progress through a series of standardized modules that increase in complexity and assist in providing the user with consistent, quality instruction.

Ginsberg's Foods, one of the largest independently owned and operated foodservice distributors in New York's Hudson Valley and a Raymond customer, was growing rapidly and needed to educate new talent quickly to keep pace with its busy warehouse environment.

To enhance its operator education program, Ginsberg's Foods turned to the Raymond Virtual Reality Simulator. This technology helps employees become more familiar with trucks and their controls prior to operating on the actual floor. Because almost half of all recent new hires at Ginsberg's Foods had never been on a lift truck, they need more education than others to feel comfortable entering a live warehouse environment. "Adding VR to our program, even temporarily, helped make everyone more comfortable," said Mike Card, Warehouse



TIPPMANN INNOVATION

Manager at Ginsberg's Foods.

The Raymond Virtual Reality Simulator also puts everyone on a level playing field, allowing instructors to watch multiple operators at once and give immediate feedback. "After using VR as part of our teaching program, operators were vocal about how consistent they felt the instruction was," Card said.

Cold Chain Innovations, a column brought to you by Tippmann Innovation, features the latest technologies, cutting-edge solutions, and innovative practices that the cold chain industry has to offer. Featured in each issue of COLD FACTS Magazine, the Cold Chain Innovations section gives readers thought-provoking ways to optimize their supply chain and improve operational efficiencies. The information presented in the Cold Chain Innovation section is sourced from GCCA members. To feature your news, press releases or submit your idea for a future Cold Innovation article, contact Laura Poko at lpoko@gcca.org or call 703.373,4300.

### NEW MEMBERS NEW MEMBER COMPANIES OF GCCA CORE PARTNERS



#### IARW-WFLO WAREHOUSE MEMBER

**Confiance Log Armazenagem e Distribuição** São Paulo, Brazil

Icehouse Operating LLC/ Texas Ice House Dallas, Texas, United States

**Red Polar SAS** La Misma, Colombia

**WOW Logistics** Neenah, Wisconsin, United States



WFLO MEMBERS

eProvenance Belmont, Massachusetts, United States

**Rio Valley Frozen Foods** McAllen, Texas, United States

**SK USA** New York, New York, United States



#### IARW ASSOCIATE MEMBERS

**BlueLab & Associates** San Juan Capistrano, California, United States

**ndustrial.io** Raleigh, North Carolina, United States

**Mizuho Bank Ltd.** New York, New York, United States

NORDOCK Inc. Westerville, Ohio, United States



IRTA MEMBERS Icehouse Operating LLC/ Texas Ice House Dallas, Texas, United States

**Red Polar SAS** La Misma, Colombia

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## COOL PEOPLE PROFILING INFLUENTIAL PEOPLE CONNECTED TO THE COLD CHAIN INDUSTRY



### LORNE J. BROWN

Lorne J. Brown is Senior Director of Supply Chain, Acelerada/Bimbo Bakeries USA. With over 25 years of supply chain experience, primarily in the retail grocery, wholesaler, and foodservice sectors, he joined Bimbo Bakeries USA in Fall 2017 to lead the supply chain for a new business unit called Acelerada. Acelerada, which is a Spanish term meaning "move faster" and "impatient," was created to drive new product innovation in the baked goods industry, challenge paradigms, and develop new channels of distribution.

#### CF: How did you get your start in the food supply chain?

LORNE J. BROWN: After seven years working in a variety of logistics management roles for two hardline retailers, I had an opportunity to lead the logistics analytics and planning for the world's largest french fry manufacturer. That was almost 20 years ago. Applying analytics to drive tactical, strategic, and financial supply chain decisions was a relatively new discipline at the time. For a business that expended more than \$120MM annually (6 percent plus of sales) on transportation and warehousing alone, robust analytics provided real-time visibility to performance metrics and introduced predictive indices that ultimately led to better management of resources and expense. During my nine-year tenure at this organization, I expanded my exposure of supply chain beyond logistics

and distribution to include manufacturing supply and capacity planning, finished goods inventory management, forecasting, and network optimization that focused on driving "end-to-end" (raw material to finished good distribution) supply chain efficiency. This was also my introduction to the cold supply chain as everything produced by this manufacturer was frozen from production to distribution. Over the past 10 years, I have worked in the retail and wholesale private label space and recently joined the world's largest baked goods company to lead the supply chain for a new business unit.

CF: As this issue of COLD FACTS is centered on customer service issue, what is your number-one priority in your relationship with your cold chain provider?

LB: When engaging with any food-grade 3PL provider, regardless of temperature requirement, the number one priority is to establish a partnership based on trust and reasonability. Ultimately, the 3PL becomes an extension of my organization so it is critical that we work together to solve challenges and drive value to our customers. Currently, I am working on developing a supply chain for new product launches in the baked goods industry. It is vital that the 3PL providers are aligned with our growth strategy and provide a high level of service managing 10 pallets of inventory as they would managing 10,000 pallets. Some of the most complex demands come from the smallest customers. A relationship based on trust and reasonability means that together we develop an openbook philosophy as it relates to driving efficiencies and managing through operational challenges. Finally, having a team of experts to help work through new opportunities is critical to our success.

#### CF: What do you think is the biggest pressure food companies face today?

**LB:** Beyond financial pressures, which are always top of mind, the biggest pressure on food companies is growing sales. Now,

more than ever, it is becoming increasingly important that food companies understand, and be in touch with, consumer trends. Rapid advancements in technology and social media means today's consumer is learning about, and buying, food products faster and in different ways than ever before. Large scale food manufacturers are typically slow to innovate and react to new market trends. This has opened the door for smaller, nimbler suppliers to enter the marketplace and steal market share. To address this realization, my current employer developed a separate business unit, in which I manage the supply chain, specifically to focus on disruptive innovation and rapid product launches.

#### CF: What has been the greatest change in the baked goods supply chain in the past 10 years?

**LB:** E-retailers expanding to grocery. With the rapid growth of online grocery retailers, both in breadth of reach and depth of product assortment, the baked goods supply chain is having to adapt from a traditional direct-store-delivery model to a demandbased inventory model. This creates a lot of challenges when you are managing products with shelf-life between 10-14 days.

#### CF: I understand you play in a band. What instrument do you play, what's your favorite genre of music, and have you ever invited business colleagues to a gig?

LB: Now we get to the important stuff! I have been playing electric and acoustic guitar for about 10 years, but in the last couple of years, have amped it up a bit and joined our local program for adult "want-abe" musicians to form groups and perform at local bars. We work on three theme-based live performances per year. Although my favorite genre of music is post-punk alternative with a heavy British influence, I play all sorts of music. Some of my favorite artists right now include Arctic Monkeys, Yeah Yeah Yeahs, Kasabian, The Strokes, and The National. And yes, I have invited business colleagues to our gigs! *©* 



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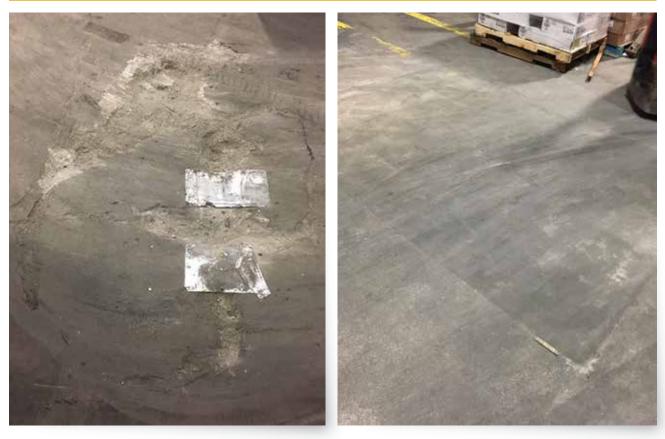
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