

Inland Ports Offer Cold Chain Efficiencies

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Optimizing the
movement of
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About the Cover

The refrigerated cargo capability on barges makes the Port of Virginia's inland Richmond Marine Terminal (RMT) a destination for cold cargo. See the cover article on page 12 describing how inland ports can minimize the congestion and optimize the value of coastal cargo ports. (Photo courtesy of the Virginia Port Authority.)

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LEADOFF

MESSAGES FROM GCCA LEADERS

IT HAS BEEN AN HONOR TO BE YOUR WFLO CHAIRMAN FOR THE PAST YEAR, AND I'VE ENJOYED IT IMMENSELY. I TOOK ON THE ROLE WHEN COVID WAS still wreaking havoc with the best laid plans of the organization. We finally began seeing real progress back to normalcy as evident in our ability to hold the IARW-WFLO Convention in Fall 2021.

While we were not able to host the WFLO Institutes in January 2022, we did run them in June both in Tempe, Arizona, and Atlanta, Georgia. I attended and taught at Tempe, where it was rewarding to see the students again learning from industry experts, getting to know each other and having a bit of fun, too.

Five of those future leaders were at the IARW-WFLO Convention this past October, competing for the Don Schlimme Future Leader Award. They also hosted a focus session on how our industry can best attract and retain young talent, an issue we are all facing. I believe there is a great deal to learn from these young leaders about strategies the industry can undertake to make ourselves more appealing to younger generations of workers.

Another group of experts I want to acknowledge (and urge association members to use as a valuable resource) are the members of the WFLO Scientific Advisory Council. The WFLO SAC is an eminent group of food science, logistics and packaging specialists from around the world, who provide cutting-edge research and advice to all our members whenever needed. SAC is on standby to answer your toughest questions and help you with your biggest challenges.

After a slow start in early 2022 due to ongoing Covid-related restrictions, WFLO project travel has picked up, most recently to Bangladesh, Cambodia, Dominican Republic, Egypt, Republic of Georgia and Thailand. Staff have attended international meetings on the cold chain and its role in reducing food loss and waste – including meetings conducted by the United Nations in New York City this fall.

While such travel does help advance and strengthen our international development, GCCA member involvement has tripled through remote support. Examples of this support include reviewing manuals and resources or providing training and consultations over Zoom.

I alluded to food loss and waste earlier, and the cold chain is a critical part of reducing these problems. To address this important issue, we have launched a new food loss and waste initiative. Partnerships have been formed with Feeding America and the Global Foodbanking Network, and a free membership category has been created for food banks and food redistribution non-profit organizations.

For a number years – certainly as long as I have been on the WFLO Board – the IARW and WFLO have shared the same strategic plan. That worked for a while, but it has become very important to the growth and future direction of the foundation arm of IARW to have its own strategic plan.

Our first step was to put together a task force of members, who along with GCCA staff, conducted a SWOT analysis, brainstormed key areas the foundation should focus on, and imagined what revised mission and vision statements should convey about the organization's role and goals. From there, we started framing out a separate strategic plan for WFLO. This draft plan was presented to the WFLO Board at the IARW-WFLO Convention.

The core tenants of the plan are Discover, Train and Apply.

By focusing on these areas, the WFLO will stay true to the work it does and needs to do. It also ensures that all of you have the tools, resources and staff to provide the world with the highest quality and safest, temperature-controlled products. To more accurately describe who we are, what we do, and our relationship with the larger GCCA, the WFLO has adopted a new name effective with the new year. WFLO will be known as the Global Cold Chain Foundation.

As I transition to Immediate Past Chairman of the Foundation at the end of this year, I do so knowing that WFLO weathered a global pandemic, bounced back strong and has developed a new strategic plan that ensures a bright future. Those are just three of the many reasons why the past year is forever a highlight of my five-decade cold storage career. ☺



DANIEL KAPLAN
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.

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EPA PROPOSES CHANGES TO THE RMP

GCCA participates in Agency hearing to air industry questions and concerns.

By Lowell Randel

The U.S. Environmental Protection Agency (EPA) announced August 18, 2022, that it is proposing revisions to the Risk Management Program (RMP) rule to further protect vulnerable communities from chemical accidents, especially those located near facilities with high accident rates.

According to the EPA, the proposed “Safer Communities by Chemical Accident Prevention Rule,” is intended to strengthen the existing program. It includes new safeguards that have not been addressed in prior RMP rules such as enhanced employee participation and transparency for communities on safety decisions.

The EPA published its first RMP regulation in 1996. At the end of the Obama Administration in January 2017, the RMP Amendments Final Rule issued new requirements for prevention, response and public disclosure of information. However, key provisions were paused and most never went into effect. Instead, in 2019, the RMP Reconsideration Final Rule rescinded or modified some of the measures in the 2017 rule.

The Biden Administration’s proposal would bring back many of the policies rescinded during the Trump Administration as well as add some new elements to the RMP regulation. The EPA currently regulates approximately 12,000 facilities under the RMP program. In the cold chain industry, facilities with over 10,000 pounds of ammonia are subject to RMP.

The EPA is proposing to strengthen RMP regulations that will require some facilities to do more to prevent chemical accidents. In particular, it pertains to the types of facilities that have the most frequent or severe accidents. Changes made to the RMP rule in 2019 were identified as an action for review under President Biden’s Executive Order 13990, “Pro-

tecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis.”

Summary of Proposed Changes to the RMP Rule

- **Natural hazards and power loss:**

1. Adding amplifying regulatory text to emphasize that natural hazards (including those that result from climate change) and loss of power are among the hazards that must be addressed in Program 2 hazard reviews and Program 3 process hazard analyses.
2. Requiring a justification in the Risk Management Plan when hazard evaluation recommendations are not adopted.

- **Facility siting:**

1. Emphasizing that facility siting should be addressed in hazard reviews and explicitly define the facility siting requirement for Program 2 hazard reviews and Program 3 process hazard analyses.
2. Requiring a justification in the Risk Management Plan when facility siting hazard recommendations are not adopted.



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- **Safer technologies and alternatives analysis (STAA):**

1. Requiring a STAA and practicability of inherently safer technologies and designs considered for:
 - a. RMP-regulated processes classified under North American Industrial Classification System (NAICS) code 324-Petroleum Manufacturing and 325-Chemical Manufacturing within one mile of another RMP-regulated facility that also has a process classified under NAICS code 324 or 325 and
 - b. RMP-regulated hydrofluoric acid alkylation processes classified under NAICS 324.
2. Requiring a justification in the Risk Management Plan when STAA recommendations are not adopted. Increased access to this information promotes transparency and gives more opportunities for the public to be involved.

- **Root cause analysis:**

1. Requiring a formal root cause analysis incident investigation when facilities have had an RMP-reportable accident.

- **Third-party compliance audits:**

1. Requiring the next scheduled compliance audit be a third-party audit when an RMP-regulated facility experiences:
 - a. Two RMP-reportable accidents within five years
 - b. One RMP-reportable accident within five years by a facility with a Program 3 process classified under NAICS code 324 or 325 within one mile of another RMP regulated facility that also has a process classified under NAICS code 324 or 325 or
 - c. When the agency requires a third-party audit due to conditions at the stationary source that could lead to an accidental release of a regulated substance.
2. Requiring a justification in the Risk Management Plan when third-party compliance audit recommendations are not adopted.

GCCA testimony highlighted industry questions and concerns with proposed provisions related to third party audits, information sharing, emergency response and new sections related to natural hazards and power loss.

- **Employee participation:**

1. Requiring employee participation in resolving process hazard analyses, compliance audit and incident investigation recommendations and findings.
2. Outlining stop work procedures in Program 3 employee participation plans.
3. Requiring Program 2 and Program 3 employee participation plans to include opportunities for employees to anonymously report RMP-reportable accidents or other related RMP non-compliance issues.

- **Community notification of RMP accidents:**

1. Requiring non-responding RMP facilities to develop procedures for informing the public about accidental releases.
2. Requiring release notification data be provided to local responders.
3. Ensuring a community notification system is in place for notification of RMP-reportable accidents.

- **Emergency Response Exercises:**

1. Requiring a 10-year frequency for field exercises unless local responders indicate that frequency is infeasible.
2. Requiring mandatory scope and reporting requirements for emergency response exercises.

- **Enhanced Information Availability:**

New requirements for the facility to provide chemical hazard information upon request to residents living within six miles of the facility, in the language requested. Under the current regulation, facilities are not required to provide this information. EPA is proposing the following compliance dates for regulated facilities:

- New STAA, incident investigation root cause analysis, third-party compliance audit, employee participation, emergency response public notification, exercise evaluation reports, and information availability provisions, three years after the effective date of the final rule.
- Revised emergency response field exercise frequency provision by March 15, 2027, or within 10 years of the date of an emergency response field exercise conducted between March 15, 2017, and the date of publication of the proposed rule in the Federal Register.
- Updates and resubmission of risk management plans with new and revised data elements, four years after the effective date of the final rule.

GCCA has been actively engaged with EPA and industry partners on this and previous RMP rulemakings.

The EPA held a series of stakeholder hearings at the end of September to receive stakeholder input on the proposed rule. GCCA participated in the hearing on September 26 and provided oral testimony. GCCA testimony highlighted industry questions and concerns with proposed provisions related to third party audits, information sharing, emergency response and new sections related to natural hazards and power loss.

GCCA will also be submitting detailed written comments and continue working with industry partners to communicate concerns with proposed changes to the RMP regulation. 📧

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INLAND PORTS OFFER COLD CHAIN EFFICIENCIES

Optimizing the movement of goods leaving coastal ports.

With ever increasing pressure on supply chains to improve cost structure and better optimize processes, a major focus has been on improving efficiencies. This includes the use of inland ports.

Left: A partnership among the Port of Long Beach, the Utah Inland Port Authority and Union Pacific will allow cargo to be rapidly evacuated from Long Beach terminals for distribution in the intermountain west. (Photo courtesy of Utah Inland Port Authority.)



ColdPoint Logistics at Logistics Park Kansas City. (Photo courtesy of LPKC.)

“Among the advantages inland ports offer are the potential for lower priced real estate, wage rates, energy and operating costs,” says Brian Beattie, President, North America West, Lineage Logistics. “They can also be considered a greener alternative due to quicker movement of containers away from congested seaports and more efficient storage capabilities.”

In addition, Beattie notes inland ports deliver benefits for both import and export goods.

“Many seaports and port warehousing locations have been at capacity for a number of years,” he says. “Inland port locations are providing an alternative to handle and store goods that were imported or are getting ready for export.”

A Variety of Systems

While primarily used for break bulk and nonperishables container freight, demand for inland ports has been increasing.

Some inland ports like the Port of Virginia’s Richmond Marine Terminal (RMT) in Richmond, Virginia, are physical places involved in the transloading of cargo from one transport mode to another. Others operate as statewide systems.

RMT operates on 80 acres within a secure terminal and has a 1,570-foot-long wharf available for berthing and handling containers, including those that are temperature controlled. What makes this port unique is its barge service to and from the Port of Virginia in Norfolk, which offers two portable 40-plug central power units used in transporting refrigerated goods.

“We move a fair amount of cold cargo for Lidl, which has a distribution center outside of Richmond,” says Joe Harris, spokesman for the Virginia Port Authority. “Richmond has always been a collection point for pushing cargo a couple of miles inland to destination.”

Lidl is a large regional grocer based in Germany.

The expanded refrigerated cargo capability on barges is part of the port’s larger strategic growth plan to make the port a destination for cold cargo. “There is not a lot of barge service in the United States, and ours is the oldest and most successful,” Harris notes. “Lidl has experience moving containers by barge in Europe so it was comfortable with us. It was a selling point for us.”

The Utah Inland Port Authority (UIPA) operates as a statewide system throughout the U.S. state of Utah. It provides what it calls

“smart, sustainable and equitable logistics solutions that use a statewide, multimodal approach to increase utilization and expand commerce access throughout the state.” UIPA leverages expertise, facilities and infrastructure, and capital investment to improve logistics within the statewide system.

Of note, is the agreement UIPA signed with the Port of Long Beach in California to improve cargo flows between Southern California and Utah, Colorado, Nevada and Idaho. The agreement calls for the Port of Long Beach to invest \$1 billion in rail improvements over the next 10 years, and UIPA to strengthen its ability to transfer cargo for further distribution.

“Working directly with the Port of Long Beach creates a synergy and stability that opens opportunities for Utah businesses to move goods more efficiently,” says Jack Hedge, Executive Director, UIPA.

The Union Pacific (UP) Railroad is playing a part in the initiative. “UP’s direct rail service between the Port of Long Beach and Salt Lake City will allow cargo to be rapidly evacuated from terminals in Long Beach for further distribution throughout the region,” Hedge says. Much of that cargo currently moves by truck, he noted, and only 10% by rail.



The expanded refrigerated cargo capability on barges is part of a larger strategic growth plan to make the Port of Virginia's Richmond Marine Terminal (RMT) a destination for cold cargo. (Photo courtesy of the Virginia Port Authority.)

Meanwhile, other seaports are embarking on inland ports that have been highly successful overall, but not yet successful in attracting chilled or frozen goods movement.

Among these are the inland ports operated by the Georgia Port Authority (GPA). Edward Fulford, GPA spokesman, acknowledged that there has been some interest in moving refrigerated cargo to and from GPA's Appalachian Regional Port. "However, the support infrastructure is not there at present," he says. "The containers would have to be powered by clip-on generators. While boxes are in transit via rail, no technicians are available to check the generators to ensure they are fueled and working properly. Obviously, an issue with a generator could put cargo at risk. For that reason, refrigerated containers moving via the Port of Savannah are transported overland by truck."

Inland Advantages

One of the biggest advantages to inland ports in the United States is that they offer shippers and their logistics operators planned alternatives for goods coming in or out of the country.

"If customers make decisions to increase capacity over and above our port capability, we can offer different locations to handle and

"Many seaports and port warehousing locations have been at capacity for a number of years. Inland port locations are providing an alternative to handle and store goods that were imported or are getting ready for export."

BRIAN BEATTIE, Lineage Logistics

store their goods," explains Beattie. "We also provide transportation data analytics to help shippers determine if these alternative locations will reduce trans spend."

Beattie further explains that inland ports help Lineage Logistics support its customers' import and export logistics strategies as well as their domestic distribution efforts. He notes that the cities of Chicago, Atlanta and Dallas are among the most vital inland ports Lineage serves. "They are critical distribution hubs for our customers," he says. "These are the most important locations for producers and retailer/food service."

Particularly critical is the fact these locations are both truck and rail served, despite

the fact over the road is still a larger percentage for Lineage's refrigerated business. "Transportation flow is important to ensure over the road carriers are accessible and rail is available ... at competitive pricing," he says.

Location Location Location

The Chicago metropolitan area, known locally as Chicagoland, is an example of an inland port where Lineage is very active.

"Customers use Chicagoland for both import and export goods, with containers both loaded and unloaded at our facilities there, and that includes domestic distribution," Beattie says. "The containers then move via rail and over the road between those facili-



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This Lineage facility in Atlanta, Georgia, is involved in inland transloading. (Photo courtesy of Lineage Logistics.)

ties and warehouses and other distribution points for our shipper customers.”

Chicagoland’s long history as a logistics hub is due to the fact the Port of Chicago consists of several major port facilities within the city of Chicago and is multimodal. The port also links inland canal and river systems in the Midwestern United States to the Great Lakes region, which gives access to global shipping in the St. Lawrence Seaway and ultimately the Atlantic Ocean and Gulf of Mexico by way of the Mississippi River. As a multimodal terminal, Chicago Port and Rail LLC can handle loading or off-loading of cargo from barges, vessels, trucks and rail cars.

Similarly, Dallas, Texas, offers inland port advantages. The International Inland Port of Dallas (IIPOD) operates as an intermodal and logistics district that encompasses 7,500 acres over five municipalities.

IIPOD offers direct access to three major interstate highways with all major North American markets accessible within 48 hours by truck. It also provides access to the Union Pacific Dallas Intermodal Terminal in southern Dallas County, which provides intermodal access to the Ports of Los Angeles

and Long Beach. And finally, the port connects to Foreign Trade Zone 39 that provides trade zone sites in the IIPOD area that may allow businesses to delay, reduce or eliminate customs duties on some import categories.

Other locations in the United States have also exploded as inland logistics centers. One is Logistics Park Kansas City (LPKC), a 3,000-acre, master-planned distribution and warehouse development in Edgerton, Kansas, just southwest of downtown Kansas City. LPKC is home to ColdPoint Logistics, which has expanded three times, currently operates a 650,000-square-foot cold storage facility at LPKC and has direct rail access to its facility. LPKC is served by BNSF Railway, which connects the market to the Ports of Los Angeles and Long Beach. Shipments can reach 85% of the U.S. population by truck in two days or less from LPKC. It also has capacity for 17 million square feet of industrial buildings.

“Without the rail, a facility like Logistics Park Kansas City doesn’t exist,” says James Oltman, President, LPKC. “Containers can arrive in Edgerton approximately two days after leaving coastal ports, making ship-

ping through an inland port one of the most efficient ways to move goods. Services offered by the ports themselves are limited and are left to the partnerships that are formed within the cold storage industry.

In addition, co-locating at a facility like LPKC significantly reduces transportation.

“When you can calculate your drayage in feet instead of miles and multiply that by thousands of containers a year, the savings is significant,” Oltman says.

But there are also downsides to utilizing inland ports for refrigerated distribution/warehouse needs.

“It is important that there is a steady flow of containers, trucks and rail cars into and out of the port to ensure no disruptions in the supply chain,” says Beattie. “Some inland ports don’t have the modal units required to support the volume of goods shipped.”

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

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EVAPCO is focused on the innovation and manufacturing of industrial refrigeration equipment and systems designed for use with the leading two natural refrigerants in the world – NH₃ and CO₂. Synthetic refrigerants dominated the commercial market for decades, but the passing of the American Innovation and Manufacturing Act (AIM Act) in early 2021 has solidified the phasedown of production and consumption of HFCs. Many states, and now the federal government (specifically the EPA), started this initiative, and are now executing it, because of the harmful effects HFCs have on the environment.

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CEBA BUILT BY THE BEST AWARD

SEVEN WONDERS

A look at the 2022 CEBA
Built by the Best Award contenders.

By Keith Loria

The Built by the Best award, created by the Controlled Environment Building Association (CEBA), a core partner of the Global Cold Chain Alliance (GCCA), has been honoring the top innovative construction designs in controlled environment buildings across the globe for the past six years.

In 2022, the competition saw hundreds of admirable entries from CEBA association members, with seven projects chosen as finalists for this year's Built by the Best award.

Many of the seven Built by the Best Award finalists presented a case study on their projects during the 42nd CEBA Conference & Expo, November 7-10, in Amelia Island, Florida.

Following is a look at the seven companies and their projects that will be vying for the top prize. The winner to be announced in the months ahead.

Mission Produce Ripening, Processing, Packaging and Distribution Facility

A M King



(Photo courtesy of AM King.)

A M King was chosen by Mission Produce Inc. to design and build its first-ever hybrid facility in Laredo, Texas, to process a record number of avocados and incorporate additional product lines with different temperature requirements.

This unique hybrid ripening, processing, packaging and distribution facility will serve as the company's flagship building for its North American operations importing avocados from Mexico. The facility also needed to effortlessly switch from processing avocados to a variety of other fruits, and have the ability to expand in the future.

The completed 274,000-square-foot facility sits on 33 acres and while it is one of the most innovative of its type in North America, there were plenty of challenges the A M King teams faced along the way.

For one, the original site chosen was declared unusable, so a new one had to be found and vetted quickly in order to remain on schedule. Add to that pandemic-related shutdowns, the need for COVID-19 safety protocols, time differences between the East and West Coasts, permitting impacts, travel restrictions, language barriers, and limited skilled labor in the Laredo market, and A M King had its work cut out.

Still, thanks to a focused management process, the design and construction teams overcame each of these challenges with aplomb. They delivered North America's largest avocado-focused facility in accordance with the original project budget and 45 days ahead of schedule.

Confederation Freezers Facility Alteration and Expansion

Coldbox



(Photo courtesy of Coldbox)

Confederation Freezers saw demand for its business increase substantially. As a result, it needed additional space within its existing site to accommodate growing customer needs.

The company hired Coldbox to expand and alter the facility by 109,000 square feet to make it more practical.

One challenge was Confederation Freezers needed to maintain full operation and service during construction. As a solution, Coldbox took a progressive design-build approach to ensure that construction could happen while Confederation Freezers' workers were not interrupted.

This involved demolishing the old facility around the engine room and maintaining that space until the new engine room would become operational.

Thanks to the innovative design, Confederation Freezers now has a semi-automated high-density racking system with pallet runner making it the most profit-efficient addition possible.

With the finished facility, Coldbox was able to increase Confederation Freezers' storage capacity by 50%, which helped the company meet demand.

Ben E. Keith Foods Distribution Facility

ESI Group



(Photo courtesy of ESI Group.)

Ben E. Keith Foods was seeking to expand with a new food distribution facility that could house future expansion capacity totaling 1 million square feet. ESI Group was hired for the job.

Situated on 116 acres, the location was ideal as it was close to Highway 84. It had been outfitted with a new water supply tank provided by Coffee County for fire protection and domestic water was supplied by the City of Enterprise.

However, when constructing temperature-controlled environments, mother nature often plays a big role, and the job had some complexities that ESI Group needed to deal with. For instance, nature tries to equalize differences between high and low vapor pressures in freezers, so when building a cold storage room, the company needed to condense a large amount of vapor from the air with evaporators and dispense it down the hub drains.

The project experienced 118 weather-related delays, faced the challenge of limited local workforce availability and needed to be completed during the pandemic.

Still, ESI Group was able to wrap up the project on-schedule.

For the new facility, the cold side of the distribution warehouse is comprised of 28 refrigerated dock doors and approximately 61,000 square feet of humidity-controlled cold dock space for the efficient shipping and receiving of food products. Refrigerated areas range from +55 degrees in the dry produce rooms down to -20 degrees in the freezer.



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Arctic Cold Lemon Processing and Storage Facility

Fisher Construction Group



(Photo courtesy of Fisher Construction Group.)

Arctic Cold was looking for a design-build team that could create a facility that would meet the needs of fruit processors. It would also need to provide storage Arctic Cold's tenant, citrus grower Ventura Pacific.

Fisher Construction Group was brought in for the job. The \$90 million project required a 575,000-square-foot building on a 32-acre site. The facility would need the capability to process up to 50,000 crates of lemons, package fruit, and then store various products in either the variable

temperature coolers or freezer for distribution.

Ventura Pacific was operating an outdated processing facility and storing product in several locations so it required a more efficient processing space and onsite cold storage that could house 100% of its product. This would allow the company to eliminate truck trips and complex inventory management, and deliver more local citrus to market.

The schedule was challenging because the tenant needed space to start installing equipment by July 2021. By utilizing a transparent collaborative approach, the project was finished on time and under budget.

The completed Arctic Cold facility is a steel-frame construction with IMP walls offering energy efficiencies as well as benefits for food safety. The new freezer storage allows multiple local produce growers and processors to store their product in one central location as opposed to multiple smaller freezers in separate locations. This allows them to have better inventory control of their product and react to customer needs more efficiently. It also significantly reduces trucking needs.

Americold Logistics Brownfield Automated Freezer Facility

Griffco Design/Build



(Photo courtesy of Griffco Design/Build.)

Griffco Design/Build was hired to complete Phase 1 of Americold Logistics' Gateway project. It involved the demolition of a 440,000-square-foot existing cold storage building and the construction of a new, 200,000-square foot

automated building.

The parameters for the new facility included a 150-foot, -10-degree ASRS, -10 degree low-bay freezer; 35-degree truck and rail dock; and a two-story office building. The ASRS included

41,000 pallet positions, while the low-bay freezer included 6,000.

The Griffco team found that the soil conditions of the site were not capable of supporting the weight of the 150-foot freezer and was forced to make significant ground improvements, including a combination of geo piers and rigid inclusions. From there, an ASRS mat slab was installed that included a 12-inch stone load transfer platform, six-inch concrete mud-slab, and six inches of 100 psi extruded floor insulation.

Because the majority of the work was executed during the pandemic, the Griffco team collaborated with Americold to implement strong COVID-19 safety protocols on site. The pandemic also created supply chain challenges due as racking materials were delayed in the port and erectors from Bosnia were halted by travel restrictions.

Despite these challenges – and others – the Griffco team delivered the Americold Gateway project on time and within budget.

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Cold Summit Development Greenfield Cold Storage Facility

Primus Builders Inc.



(Photo courtesy of Primus Builders, Inc.)

In December 2020, Cold Summit Development came up with the idea to launch Cold Summit Dallas, the first multitenant, speculative cold storage project in the United States.

The goals were clear – to deliver an exceptional, forward-thinking, flexible and energy

efficient cold storage facility to the market. Primus Builders Inc. quickly became the clear choice as the design-build partner to make the project a reality.

Plans were in motion for the 344,000-square-foot greenfield cold storage facility, which

needed convertible freezers (-20F to 55F), truck docks, office space and maintenance areas. As the facility needed to be a multitenant complex with four individual tenant areas, a lot of planning was required to ensure each section had enough to make it attractive to tenants.

Primus faced several challenges during the design and construction of the project. Not the least of which was the site spanned two municipalities – the City of Lancaster and the City of Dallas – and that created issues with permits and Authorities Having Jurisdiction requirements.

Weather also played a factor as Texas experienced the biggest ice storm in its history during the building process, which forced Primus to shut the project down for two weeks. The deep freeze also made it difficult to receive building materials.

Still, thanks to the diligence and communication, the project was completed on time and within budget.

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Kroger Ocado Fulfillment Center Ryan Companies U.S. Inc.



(Photo courtesy Ryan Companies US, Inc.)

Ryan Companies U.S. Inc. was chosen by The Kroger Co. to evaluate its distribution network, and the design-build firm offered schematic designs and estimates for several projects.

That led to Kroger hiring Ryan Companies to

build a new fulfillment center – Kroger Ocado. The FC 04 facility included spaces for distribution, including four levels of mezzanines, office and maintenance and three temperature zones in the warehouse.

Approximately 50% of the warehouse space is refrigerated to 34 degree F plus there is a -10-degree F freezer space, and temperature-controlled space at grocery store ambient temperature.

The 419,317-square-foot Kroger Ocado Fulfillment Center is one of the first of its kind in the United States. It offers seamless, efficient and comprehensive fulfillment with direct-to-consumer grocery service using a heavily automated facility featuring hundreds of advanced robots managed by air-traffic control systems.

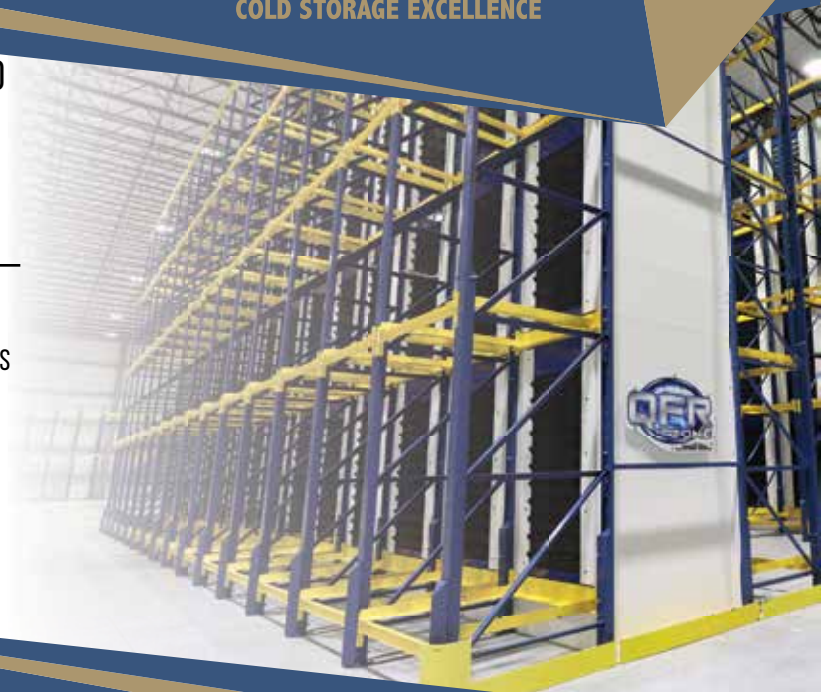
That created some challenges, as the design team needed to work meticulously to create a design that met the requirements of the robotics placed in the warehouse.

And even when four months of record rainfall threatened the project at inception, the Ryan Companies was able to deliver the project on time and on budget, thanks to a successful plan of stabilizing the soil with cement dust and keeping open communication with subcontractors.

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WFLO INSTITUTE – TRANSFERRING EXPERT KNOWLEDGE

Developed by industry experts to advance expertise and best practices in temperature-controlled logistics, the Institute is back in-person!

This year marks the 59th anniversary of the very first WFLO Institute held in Norman, Oklahoma – the home of The University of Oklahoma. This three-year, industry-specific program for professionals engaged in temperature-controlled logistics offers more than 40 classes taught by leading experts in the industry. The curriculum takes students through cold chain management, customer service, employee safety, food safety, warehouse operations, transportation operations and professional development.

By 2009, the WFLO Institute had outgrown Norman and moved to a new home at the Georgia Tech Hotel & Conference Center in Atlanta, Georgia. This new facility allowed for more students to participate in the Institute and offered a connection to Georgia Tech's renowned Logistics and Supply Chain pro-

gram. In recent years, WFLO has provided opportunities for Georgia Tech students to participate in the Institute as way to generate broader interest in a career in the Cold Chain.

In 2014, due to interest from members in the region, WFLO launched the first Latin America Institute, which was held in Costa

Rica. The WFLO Latin America Institute now takes place each year in Mexico City. And while the 2020 Year 1 and Year 2 program had to be postponed to 2021, WFLO was able to run the Year 3 program virtually and graduate 12 individuals from the program.

Over the years the growth of the program continued. By 2017, the Institute had grown so much that the WFLO Board decided to hold two Institutes in the United States to allow for a valuable onsite experience while accommodating more participation. This was the beginning of the East and West Institutes. The WFLO Institute East is continuing on at Georgia Tech. The West Coast Institute is now held at the Tempe Mission Palms Hotel and Conference Center adjacent to the campus of Arizona State University, where the top ranked W. P. Carey School of Business is located. The East and West Institutes now host well over 500 students in total each year.



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In 2019, the first ever WFLO Institute was held in Melbourne, Australia, with over 35 students participating in Year 1 courses. WFLO planned to hold Year 1 and Year 2 of the Institute in Melbourne in 2020, however the program had to be canceled due to COVID-19. The Institute anticipates offering Year 1 and 2 courses in Melbourne in May 2023.

The WFLO Institute classroom experience continues to grow with these four global locations and more planned for the future. It is the world's best cold chain logistics training program to develop your company's most important asset – talent.

WFLO Institute East and West

Keynote Presentation

"#NoMatterWhat," the keynote presentation for the East and West WFLO Institutes this year, will be conducted by Sterling Hawkins, CEO and Founder of the Sterling Hawkins Group, Founder of the #NoMatterWhat movement, and author of the best seller "Hunting Discomfort."

The Sterling Hawkins Group is a research, training and development company focused on human and organizational growth. Hawkins has been featured in publications like Inc., Fast Company, The New York Times and Forbes. Based in Colorado, Sterling is a proud uncle of three and a passionate adventurer that can often be found skydiving, climbing mountains, shark diving or even trekking the Sahara. Maybe you'll even join him for the next adventure – and discover the breakthrough results you're looking for. He'll have you back #NoMatterWhat.

Sterling Hawkins is out to break the status quo. He believes that we can all unlock incredible potential within ourselves, and he's on a mission to support people, businesses, and communities to realize that potential, regardless of the circumstances.

Year 1 Courses

- Ammonia Safety
- Business Communications
- Conflict Resolution
- Customer Service Essentials
- Emergency Response Planning
- Emotional Intelligence
- Food Safety: HACCP, FSMA, STF
- Forklift Safety
- Fundamentals of Food Storage & Preservation
- Leadership Development
- Risk Management: Warehouse Exposures
- Supply Chain Basics
- Transportation & Warehousing
- Warehouse Operation Essentials Job Safety Analysis
- Accessing Your Resources
- Finance 101

Year 2 Courses

- Customer Recall Simulation
- Budget and Financial Controls
- International Business & the Cold Chain
- Introduction to Warehouse Law
- Managing Human Performance
- Technology & Information Systems
- Refrigeration & Energy
- FSMA & Sanitation Auditing
- Behavioral Interviewing
- Effective Presentations
- Employee Training for Safety
- Feedback & Coaching
- GFSI-Food Safety

Year 3 Courses

- Analyzing Refrigeration Systems
- Best Practices for Food Tempering, Chilling & Freezing
- Business Development
- Business Planning & Financial Decision Making
- Case Studies in Warehouse Law
- Change Management
- Crisis Management
- Employment Practices & Liabilities
- Preparing for OSHA Inspections
- Regulations and Your Job
- Navigating Port Disruptions
- Trends and Technologies in Warehouse Management
- Transportation & Warehouse Security

Transportation Track – West Only

Year 1

- Carrier Relationships
- Transportation Basics I
- Transportation Basics II
- Transportation Safety
- Risk Management: Transportation Exposures

Year 2

- Sanitary Transportation of Food
- Cold Carrier Certification – Practical Application
- Dataflow And Freight Documentation

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WFLO Institute West

Tempe, Arizona, United States
January 8-10, 2023

WFLO Institute East

Atlanta, Georgia United States
January 29-31, 2023

WFLO Institute Australia

Melbourne, Australia
May 2023

WFLO Institute Latin America

Mexico City, Mexico
July 2023

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COLD CHAIN DEVELOPMENT

NEWS ABOUT WFLO INTERNATIONAL PROJECTS

This column features news about key projects of the World Food Logistics Organization (WFLO), a GCCA Core Partner, and its work with members, aid organizations and international development partners to help emerging economies and lower-income countries meet the challenges that arise when growing a safe and efficient global cold chain.

ACTIVE PROJECTS

Bangladesh Trade Facilitation (BTF) Project, 2020–2025

Partnered with Venture37 and LixCap

In September 2022, GCCA's Adam Thocher and Madison Jaco met with a number of Bangladesh associations, private companies and government ministries to understand interest in association membership and identify optimal partners for implementing cold chain trainings and capacity development in the country. In Year 3 of the project, WFLO has planned several industry strengthening and training exercises for public and private cold chain entities to improve existing cold storage facilities and systems, update policy and standard operating procedures, and build capacity.

Cambodia Market Systems Program, 2022–2023

Partnered with LixCap and Khmer Cold Chain Company (KCCC)

WFLO is advising on the construction and startup of the Khmer Cold Chain Company facility at the LM17 port on the Mekong River in Phnom Penh, Cambodia. Team Leader and International Cold Storage Design Build Expert Richard Dowdell and IARW Chairman Manuel Cabrera-Kabana are reviewing facility specifications and offering guidance on best practices. The team is also recommending a variety of GCCA training to support the new facility's technical operations.

Dominican Republic TraSa Project, 2021–2025

Partnered with International Executive Service Corps (IESC)

In September 2022, WFLO offered a four-module virtual course on food storage, food safety, HACCP and sanitary transport to logistics cluster, maritime, air and land transport companies in the Dominican Republic. Each session was attended by more than 100 participants in the sector. In November, a study tour took place in Veracruz, Mexico, where attendees met with cold storage warehouse operations and port authorities to discuss best



Top: GCCA's Adam Thocher and Madison Jaco (center) pictured with Nabeel Khan of Venture 37 (right) met with members of the Bangladesh Fruit, Vegetable, and Allied Product Exporters Association during a recent trip.

Right: After their trip to Bangladesh, Thocher and Jaco met with the GCCA India office representatives as well as members in New Delhi and Agra, India.

practices in maintaining the cold chain from port to consumer. The study tour was greatly supported by GCCA members in the area.

Egypt Cold Chain Feasibility Study, 2022

Partnered with LixCap and local consultancies

In September and October, teams of WFLO technical experts, LixCap staff, and project sponsors traveled to Egypt to meet with stakeholders to identify opportunities and challenges to developing the local cold chain. The teams also visited potential sites to identify prime locations for establishing the hub and spoke facilities for the project.

Egypt Rural Agribusiness Strengthening (ERAS) Project, 2019–2024

Partnered with Abt Associates Inc.

WFLO Scientific Advisory Council Member Dr. Elhadi Yahia, whose expertise is tropical climate fruit and produce, returned to Egypt in September to provide specialized training on mango postharvest handling to farmers in the country's delta region. Based on his success with mango and pomegranate farmers,



Lado Kirvalidze of the USAID APG project in Georgia on a site visit to a cold store at the wholesale market. There has been significant investment in cold stores to improve the cold chain in Georgia. Traditionally, fruits and vegetables at the wholesale market are not handled in a proper cold chain, so to have cold store at the market is a step in the right direction.

Dr. Elhadi has been asked to return for additional work in 2023.

Georgia Agriculture Project, 2018–2023 *Partnered with Cultivating New Frontiers in Agriculture*

WFLO continues to plan the regional Cold Chain Seminar that will take place in Tbilisi at the end of November 2022. Participants are traveling from Baku, Azerbaijan, to attend. The United States Agency for International Development would like to replicate this event in Baku in 2023.

Ghana Cold Chain Network, 2022–2023

Partnered with LixCap, Sory @ Law, West African Coastal and Marine Engineering Services (WACAMS), and Maverick Research and Consultant

The project has identified locations for development, recommendations for design-build with respect to country context and environmental impact, and financing opportunities. The team continues to meet with potential investors and U.S.-based cold chain equipment suppliers to actualize the proposed facility. In October, members of the project attended the IARW-WFLO Convention in San Diego, California, to engage with GCCA members.

North African Cold Chain Skills Gap Analysis and Trainings, 2021–2022

Partnered with USA Poultry and Egg Export Council (USAPEEC)

A number of GCCA members have donated their time to review sections of existing



GCCA/WFLO guides and manuals for applicability to the North African market and poultry products. These materials will be translated into French and Arabic and distributed to stakeholders in the market. Additional training and consultations are anticipated to take place in February 2023. 🌐

In Egypt, members of the WFLO team as well as representatives from the International Finance Corporation (IFC) and GCCA member company Mirasco met with various public and private organizations to better understand the opportunities for cold chain development in the country.



HIGH-BAY WAREHOUSE FOR DEEP FREEZE INTRALOGISTICS AT ITS BEST

In Burley, Idaho, NewCold celebrated the grand opening of one of the largest frozen storage facilities of its kind. This impressive project includes a high bay warehouse with 90,000 pallet positions supplied by SSI SCHAEFER.

The demand for deep-freeze products continues to grow. As volumes increase, requirements placed upon deep-freeze logistics are getting more complex. SSI SCHAEFER offers flexible, modular, and scalable solutions that optimize storage, picking processes, and profitability within cold storage facilities.

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NEWS FROM THE UNITED KINGDOM

In April 2022, the GCCA and the United Kingdom's Cold Chain Federation announced a partnership agreement signalling a renewed commitment to building knowledge, networking opportunities and insights across borders.

Here, Cold Chain Federation Chief Executive Shane Brennan continues his new series for COLD FACTS exploring hot topics for our industry in the United Kingdom and beyond.



Cold Chain Live 2022

Cold Chain Federation Chief Executive Shane Brennan reflects on a successful and productive conference at a time of change in UK national leadership.

In September we welcomed 300 cold chain colleagues and partners to the definitive event for the U.K. cold chain. This was the first ever Cold Chain Live held in person and the conference, exhibition and dinner were resounding successes. We are proud that the event not only delivered new perspectives from expert speakers but also created the crucial industry-led forum that the U.K. cold chain needs for discussing common issues, sharing knowledge, exchanging ideas and establishing new relationships.

On a personal note, it was good to be together with colleagues and friends when the news broke about the death of Her Majesty Queen Elizabeth II as the conference came to a close.

We were delighted to welcome a delegation from the Global Cold Chain Alliance to our Cold Chain Live conference to meet with U.K. operators and provide their insights into the global viewpoint. The formal partnership established earlier this year between the Cold Chain Federation and GCCA opens a world of opportunities for businesses to collaborate. We look forward to continuing to develop this relationship.

There were some great insights on customer perspectives delivered from the Cold Chain Live main stage. Exploring how and why U.K. grocery shopping behavior is changing, Chief Executive Officer of the Institute of Grocery Distribution (IGD) Susan Barrett shared key points from the IGD's latest Shopper Research Data.



The data showed that while consumer confidence had been high as we came out of the pandemic, on shelf availability of products over the last 12 months has been at approximately 65%. Prior to the pandemic it would have sat consistently at over 90%.

We learned that in light of our national cost of living crisis, 90% of U.K. grocery shoppers are changing their behavior. Barrett posed an important question for our industry over whether the current low-stock, just-in-time approach still works, or whether holding more stock, closer to shoppers, could increase

durability and improve service. Her view was that although this would mean financial implications, everyone loses if products are out of stock.

Cold Chain Live 2022 was an important gathering for the U.K. cold chain. It was a major milestone in our Cold Chain Federation's evolution into a future-facing, productive and proactive asset for our industry. I'm already looking forward to building on this year's event at Cold Chain Live! 2023 in Liverpool.

The discussions at Cold Chain Live 2022 were all set in the context of Liz Truss replacing Boris Johnson as our prime minister. We do not expect any major shifts in direction on the critical issue of Net Zero. However, the new prime minister and her Cabinet have already made a number of significant interventions aiming to cushion the immediate impacts of soaring energy prices alongside bold policy changes in pursuit of national economic growth.

The Cold Chain Federation will continue to represent U.K. cold storage and temperature-controlled distribution operators in discussions with government. And, as existing policies are altered and new ones are introduced, we will continue to highlight to our members the new opportunities – and any potential pitfalls – as they arise. ☎



A panel discussion at Cold Chain Live 22. (Photo courtesy of Cold Chain Federation.)

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COOL SOLUTIONS

SCIENTIFIC ANSWERS TO COLD CHAIN CHALLENGES

This section highlights a cold chain question and answer submitted through the GCCA Inquiry Service to the team of experts on the WFLO Scientific Advisory Council (SAC), the roster of SAC members and abstracts on cool solutions written by SAC members. Submit your cold chain questions to the Scientific Advisory Council at www.gcca.org/inquiry.

To get instant advice from a private, online community of over 4,000 cold chain professionals, simply post your inquiry in the GCCA Online Community. All GCCA Members and their employees can access the GCCA Online Community at community.gcca.org/home.

Q: I want to explore the option of marketing blast freezing services to the dried herbs and spices industry as a treatment method to eliminate the risk of insect eggs hatching. The most common method used to control pest infestation in South Africa is irradiation treatment. Irradiation not only reduces the microbial load but also eliminates the pests. Although irradiation of spices is widely accepted globally and is proven not to cause harm to the consumer, there are certain markets where restrictions exist, largely driven by consumer fear. Is blast freezing something I could and should consider?

A: In general, freezing and holding at a low enough temperature for a long enough time will kill insects, their larvae and their eggs. Dry herbs and spices are very different than dealing with fresh herbs and spices. For dry products, including dry herbs and spices, the most used technique is irradiation at high doses, which is very effective and comes at a relatively cheap application cost. This treatment is accepted by most countries, has no negative effects on human health nor significant effects on product composition.

However, it is true that some customers do not prefer this treatment. I am sure that freezing would be very effective in controlling insects, although not as effective and not as cheap of an application cost as irradiation. It could be effective as an alternative for irradiations for customers that reject irradiation.

In the GCCA Commodity Storage Manual, there is a short section on Insect Control: Insect Infestation & Destruction Temperatures, which may be of further interest.

Answer provided by Dr. Subramaniam Sathivel, Louisiana State University, Frozen Food Quality Expert; Dr. Elhadi Yahia, Universidad Autónoma de Querétaro, Mexico, Postharvest Technology, Tropical Fruit & Produce Expert; and Dr. Michael Jahncke, Virginia Seafood Agricultural Research & Extension Center, Chairman of the Scientific Advisory Council.

Submit your burning cold chain questions to the Scientific Advisory Council at www.gcca.org/inquiry or at inquiry@gcca.org

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COOL SOLUTIONS: ABSTRACT

SCIENTIFIC ANSWERS TO COLD CHAIN CHALLENGES



DR. JEFFREY BRECHT
University of Florida,
Cool-Climate Fruit & Produce Expert

MAP is a dynamic packaging system that relies on the natural interplay between the respiration of the fruit and the permeability of the packaging film to create a reduced oxygen/elevated carbon dioxide environment that slows ripening and quality deterioration. Ethylene, produced by many fruits, coordinates the ripening process. Removing (scrubbing) ethylene from the package atmosphere further slows ripening.

At their lab at the University of Florida, the team determined the optimum oxygen and carbon dioxide concentrations for storage of the major export mango varieties. Then the team worked with BreatheWay™ MAP and It's Fresh! ethylene control filters to optimize packaging in four-week storage experiments. These experiments simulated the longest ocean voyages for South American mangos destined for U.S. markets.

Having successfully completed the laboratory experiments, the team is organizing test shipments in concert with scientists at the Brazilian Agricultural Research Corporation (Embrapa), Brazilian mango exporters, and U.S. importers. The team is using carton and pallet scale MAP systems to demonstrate the feasibility of this technology for improving the quality of mangos shipped very long distances to satisfy the expectations of U.S. consumers. ☺

Mango fruit demand and consumption are increasing in U.S. markets due to desirable flavor and health benefits. To satisfy high-end distant markets, mango producers, suppliers, and retailers work together to maintain year-round supply.

However, when the fruit are harvested green (unripe) and transported below the chilling threshold temperature in an attempt to ship longer distances, such as from South America to the United States, the result can be poor flavor in the marketplace. In the worst-case scenario, perception of subpar mango quality can remain fresh in a consumer's memory, which hinders future mango purchases.

To overcome this, Dr. Jeffrey Brecht, Dr. Faisal Shahzad and Mr. Moshe Doron targeted shipping tree-ripe mangos in modified atmosphere packaging (MAP) with ethylene scrubbers to supplement MAP effects in inhibiting over ripening of fruit during extended transport.



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The WFLO Scientific Advisory Council is an eminent group of food scientists, logistics, and packaging experts from around the world. The council provides cutting-edge research and advice to members of the Global Cold Chain Alliance and its Core Partners.



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Joseph Sebranek, Iowa State University, Meat Products Expert

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**Have a burning cold chain question?
Submit an inquiry to the Scientific Advisory Council
at www.gcca.org/inquiry**

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NEW MEMBER COMPANIES OF GCCA CORE PARTNERS

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GCCA STANDS WITH YOU. THE TIME TO ACT IS NOW.

Never before has our industry faced such uncertainty and vulnerability from America's policy makers, both in the White House and in both chambers of Congress. **The current Administration and Congress present new challenges and opportunities that we will need to face as an industry, together.**

The Biden Administration and Democratic controlled Congress could implement burdensome regulations and increase oversight over our industry in a number of ways. This includes:



OSHA COVID-19 STANDARDS

- Enacting a national emergency temporary standard for industry
- Sets the stage for permanent regulation on infectious disease control in the workplace



CLIMATE CHANGE

- Pursuing aggressive policies to address climate change, through both executive action and legislation
- Rejoining the Paris Climate Agreement, eliminating greenhouse gas emissions, and implementing the Green New Deal



TAXES

- Rolling back the Trump tax cuts
- Increasing the corporate tax rate from 21% to 28%, phasing out deductions for pass-through entities
- Raising the top marginal income-tax rate from 37% to 39.6%
- Less money in the pockets of businesses means less jobs available for hardworking employees



LABOR

- Strengthening worker organizing, collective bargaining and unions through executive action and legislation such as the PRO Act
- Labor initiatives, like 'micro-unit' organizations and joint employer policies could quickly be reinstated



ADDITIONAL REGULATIONS

- Revisiting EPA's Risk Management Program (RMP) regulation and making additional requirements
- Changes to Process Safety Management

A Democrat controlled White House and Congress will only mean more rules, regulations and burdensome policies.

THERE IS SOMETHING YOU CAN DO.

To learn more about how you can contribute contact Lowell Randel (lrandel@gcca.org) or visit advocacy.gcca.org.
Visit ADVOCACY.GCCA.ORG for more information.



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ASSOCIATION NEWS

NEWS ABOUT GCCA CORE PARTNERS

GCCA is proud to announce the recipient of the 2022 Don Schlimme Future Leader Award is Kulsoom Khan, Energy Efficiency Manager, Congebec Inc. The award was presented by Manuel Cabrera Kabana, IARW Chairman and Adam Thocher, GCCA, Senior Vice President, Global Programs & Insights, Executive Director, World Food Logistics Organization at the 131st Annual IARW-WFLO Convention in San Diego, California, where over 500 temperature-controlled logistics executive leaders gathered for the number one event for warehousing, logistics, transportation and design-build/construction industry to come together.

Kulsoom competed against finalists Clifton Alt, Operations Manager, InterChange Group; Judina Arends, Operations Manager, Bradner Cold Storage; India Grayson, Warehouse Lead, Agile Cold Storage; and Brian Magnus, General Manager, Midwest Logistics, United States Cold Storage.

As part of the selection process, each finalist was interviewed by a panel of judges made up of industry leaders. The 2022 judges were Paul Henningsen, Lineage Logistics; Angie Schmidt, Mattingly Cold Storage; Michael Fischer, RLS Logistics; and Bryan Hedge, RLS Complete. Each candidate also delivered an on-stage presentation to the panel of judges and convention attendees.



WFLO'S Executive Director Adam Thocher and Vice President of International Projects Amanda Brondy attended the Champions 12.3 Meeting on Reducing Food Loss and Waste: A Vital Solution to the Food Crisis held in conjunction with the United Nation's Food Systems Summit on September 23, 2022. Champions 12.3 is a coalition of executives from governments, businesses, international organizations, research institutions, farmer groups and civil society dedicated to inspiring ambition, mobilizing action, and accelerating progress toward achieving Sustainable Development Goal Target 12.3 by 2030, which aims to halve global per capita food waste. Champions 12.3 announced it will host a new assembly to convene national governments and businesses to dramatically expand global action toward halving food loss and waste by 2030.

At this meeting, GCCA announced a strategic partnership with both the Global Foodbanking Network and Feeding America to provide better, more structured support to reduce food loss and waste and improve food security. As a starting point, GCCA is offering a free membership accessible to food banks and food banking networks and all other entities working to redistribute and maximize food. This membership will establish a platform for these groups to seek assistance when it comes to perishable products. This could include access to refrigerated storage space, energy efficiency/reduction consultations, mentorship or refrigerated transportation access.



The 42nd **CEBA** Conference and Expo, held November 7-10, 2022, at the Omni Amelia Island, saw record attendance with more than

350 controlled environment facility construction, logistics and supply chain operations professionals in attendance. The expo was also the largest to date with 45-plus companies showcasing cutting-edge products, services and technology. Participants heard from keynote Dr. Anirban Basu of the Sage Policy Group about economic trends and potential impact on the industry. There were also four presentations from the CEBA Built by the Best Award finalists. Ideas were shared in both the Construction Café sessions and the Peer to Peer discussions. In addition, two breakouts covered Sustainability and Regulations as well as the CEBA Value Proposition – How to Engage and Drive Value from Membership. Attendees also had many networking opportunities to continue to build existing relations and as well as new ones. The dates and location for the 2023 event will be announced soon. 📍



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2023 GCCA Education, Training & Networking Events

Make 2023 the year to get back together to expand your knowledge and grow your organization to improve the cold chain industry.

JANUARY

59TH WFLO INSTITUTE WEST

8–10 JANUARY 2023

Tempe, Arizona, United States | Tempe Mission Palms Hotel at Arizona State University

This event, designed for employees with clear management potential and executives new to the industry, features more than 40 classes in warehouse management and transportation management taught by leading experts in the industry.

Large Company Audience: Warehouse managers, operations managers, warehouse supervisors, shift leads, workers with high potential for management, customer service managers, business development managers, transportation managers, executives new to the industry.

Small to Medium Company Audience: Warehouse managers, operations managers, workers with high potential for management.

59TH WFLO INSTITUTE EAST

29–31 JANUARY 2023

Atlanta, Georgia, United States | Georgia Tech Hotel & Conference Center

This event, designed for employees with clear management potential and executives new to the industry, features more than 40 classes in warehouse management and transportation management taught by leading experts in the industry.

Large Company Audience: Warehouse managers, operations managers, warehouse supervisors, shift leads, workers with high potential for management, customer service managers, business development managers, transportation managers, executives new to the industry.

Small to Medium Company Audience: Warehouse managers, operations managers, workers with high potential for management.



MARCH

26TH GCCA EUROPEAN COLD CHAIN CONFERENCE & EXPO

20–22 MARCH 2023

Barcelona, Spain | InterContinental Barcelona

Here, delegates gain a better understanding of market trends, industry challenges, business solutions, and technological innovations. The conference also provides ample networking opportunities, enabling attendees to meet and connect with professionals from throughout Europe and around the world.

Audience: Executives and managers from temperature-controlled, third-party logistics companies.



MAY

WFLO INSTITUTE AUSTRALIA

TBD MAY 2023

Melbourne, Australia

This event, designed for employees with clear management potential and executives new to the industry, features more than 40 classes in warehouse management and transportation management taught by leading experts in the industry.

Large Company Audience: Warehouse managers, operations managers, warehouse supervisors, shift leads, workers with high potential for management, customer service managers, business development managers, transportation managers, executives new to the industry.

Small to Medium Company Audience: Warehouse managers, operations managers, workers with high potential for management.



JUNE

GCCA COLD CHAIN POLICY FORUM

19–21 JUNE 2023

Washington, DC | The Watergate Hotel

The GCCA Global Policy Forum is the premier policy event for businesses engaged in temperature-controlled logistics. Featuring education sessions and keynote presentations focused on rules and regulations that impact the cold chain, the Global Policy Forum is a must attend policy event for multiple regions across the world.

Large Company Audience: Executives with compliance and regulatory responsibility, members of safety and government affairs committees.

Small to Medium Company Audience: Owners, CEOs, executives with compliance and regulatory responsibility, members of safety and government affairs committees.



JULY

WFLO INSTITUTE LATIN AMERICA

17–19 JULY 2023

Mexico City, Mexico | Hilton Mexico City Reforma

This event, designed for employees with clear management potential and executives new to the industry, features extensive classes in warehouse management and transportation management taught by leading experts in the industry.

Large Company Audience: Warehouse managers, operations managers, warehouse supervisors, shift leads, workers with high potential for management, customer service managers, business development managers, transportation managers, executives new to the industry.

Small to Medium Company Audience: Warehouse managers, operations managers, workers with high potential for management.



AUGUST

GCCA SOUTH AFRICAN COLD CHAIN CONFERENCE

2–4 AUGUST 2023

Cape Town, South Africa

This event is South Africa's one and only venue bringing together cold store operators, controlled-environment builders, equipment suppliers and service providers to discuss opportunities and innovations of this essential sector. The conference provides leadership experience, knowledge, and exclusive networking with decision makers from across South Africa and beyond, in a relaxed yet professional atmosphere.

Audience: Executives and managers from temperature-controlled, third-party logistics companies.



SEPTEMBER

132ND GCCA CONVENTION

24–27 SEPTEMBER 2023

Scottsdale, AZ | The Westin Kierland Resort & Spa

This annual gathering for IARW and WFLO features education, networking and business development opportunities for third-party logistics companies and warehouse operators.

Large Company Audience: Owners, CEOs, presidents, executive leadership teams.

Small to Medium Company Audience: Owners, presidents, senior executives.



OCTOBER

GCCA BRAZILIAN COLD CHAIN CONGRESS

TBD OCTOBER 2023

Sao Paulo, Brazil

This educational event focuses exclusively on the temperature-controlled logistics industry and features opportunities and solutions for business development.

Audience: High-level executives in temperature-controlled warehousing or logistics.



NOVEMBER

43RD CEBA CONFERENCE & EXPO

TBD NOVEMBER 2023

Location to Be Announced Soon

This annual meeting of CEBA members offers education, business development opportunities and networking for company executives managing the building of new cold storage facilities and cold storage builders.

Large Company Audience: Chief engineers, regional facility managers, regional facility maintenance leads, construction engineer managers.

Small to Medium Company Audience: Owners/CEOs who are building or expanding facilities, chief engineers.



GCCA LATIN AMERICAN COLD CHAIN CONGRESS

TBD NOVEMBER 2023

Mexico City, Mexico

This meeting enables GCCA members and leaders in the temperature controlled industry to interact, learn about industry trends and expand their knowledge. The Congress also serves as a discussion forum for issues of interest to multi-regional cold chain industry leaders.

Audience: Senior executives in temperature-controlled warehousing or logistics.

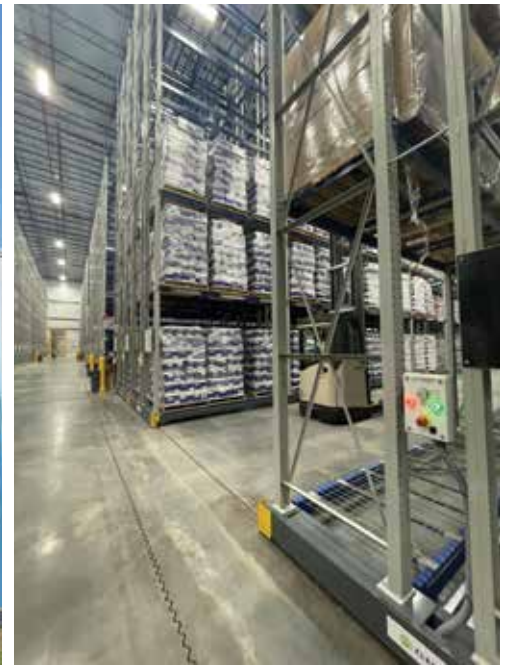


MEMBER NEWS

NEWS FROM MEMBERS OF GCCA CORE PARTNERS



(Photo courtesy of AWIP.)



(Photo courtesy of FlexCold.)

ALL WEATHER INSULATED PANELS (AWIP) debuted its new continuous line production facility in East Stroudsburg, Pennsylvania, United States, with an open house and tree-planting event. The newly renovated state-of-the-art facility is AWIP's first on the U.S. East Coast.



EMERGENT COLD LATIN AMERICA has acquired Bajo Cero Frigoríficos, representing the company's entry into Mexico. Emergent Cold LatAm now operates 23 cold storage facilities, with another four facilities under construction, across 10 countries.



EMERGENT COLD LATIN AMERICA announced the construction of a new temperature-controlled facility located in Talcahuano, Chile.



FLEXCOLD has opened its first facility. Located in Jacksonville, Florida, United States, three miles from the state's largest container port, the facility spans more than 150,000 square feet and offers 25,000 pallet positions. It contains two convertible rooms for refrigerated or frozen products; a freezer room below zero; and a blast freeze room. USDA and FDA inspections are provided on-site as well.



KINGSPAN Insulated Panels North America announces two new Building Information Modeling (BIM) tools to streamline the design process for architects, engineers, contractors and project teams. BIM Bundle and BIM Configure allow access to entire product lines, giving designers the data they need to model building design and performance.



LINEAGE LOGISTICS launches Lineage Fresh to expand its fresh produce offering in the United States. The new service builds on the company's acquisitions of Sun Valley Cold Storage and Kloosterboer Group and the construction of a new refrigerated storage facility in Savannah, Georgia, set to open in early 2023. The new value-added services and specialized capabilities of Lineage Fresh include repack and bagging services, reconditioning, restacking, restyling, container plugs, multitemperature zones for produce, cold treatment, fumigation, container drayage and the integration of customs bonded facilities.



LINEAGE LOGISTICS appointed Lynn Wentworth to its Board of Directors. Additionally, Lineage also appointed Natalie Matsler as Chief Legal Officer and Corporate Secretary. In this role, she will oversee Lineage's global legal, safety and compliance, food optimization and corporate compliance functions.



MEMBER NEWS

NEWS FROM MEMBERS OF GCCA CORE PARTNERS

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PLM FLEET, a fleet management company exclusive to the cold supply chain, celebrated its 50th anniversary. The company is dedicated to the leasing, renting, and ColdLink® telematics of over 13,000 refrigerated trailers, and has 32 locations nationwide.



The **RAYMOND CORPORATION** introduces the Raymond® High Capacity Orderpicker. The new orderpicker features an elevated height of 456 inches, which allows for increased rack storage access to 11% more pick slots. The increased elevated height enables operators to optimize storage capacity for more usable space and improved SKU count without increasing a facility's overall footprint. 🌀



(Photo courtesy of PLM Fleet.)



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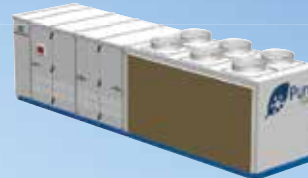
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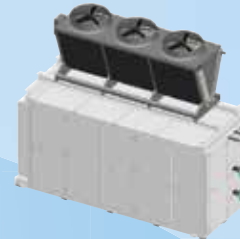
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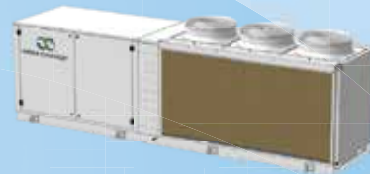
Aquilon **Transcritical CO₂ Industrial Chillers**

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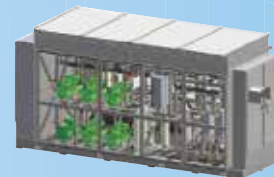
Aquilon **Transcritical CO₂ Condensing Units**

- 10 to 85 Tons at -40 to +40F SST



Aquilon **Transcritical CO₂ Industrial Racks**

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