

# COLDFACTS

CONNECTING A VITAL INDUSTRY

JANUARY-FEBRUARY 2015

SURVEY **UNCOVERS MEMBERS'** 

"UP-AT-NIGHT" **ISSUES** 

Precedes strategic planning activities that will drive members' business outcomes.

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The European Cold Storage Industry





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### **LEADOFF**

#### YOUR BUSINESS PARTNER FOR THE FUTURE



ELCOME TO 2015. We believe this is a year of exciting promise for both your company and the organization that represents you—the Global Cold Chain Alliance.

The association world is changing. Trade associations are evolving from just providing a set of defined benefits to becoming an extension of each of your companies to help meet *your* business objectives. We call it the new "association norm"—an environment and structure in which GCCA and its core partners can develop new ways to identify key business needs, share information, develop valuable programs and work together to achieve stronger business outcomes for all members.

A few months ago, the IARW Board of Directors met to discuss the results of a Member Impact Survey we commissioned that identified what keeps warehouse company members up at night. It was a way to identify new opportunities for IARW and GCCA to help them meet their business objectives.

Members told us things such as how important it is to present themselves as a total supply chain solution to customers, the challenge and cost of dealing with regulatory issues, the need to stay current with industry innovations, retaining talented employees, and the need to better market the services of third-party logistics providers to frozen and refrigerated food companies.

IARW Board members agreed that IARW member companies have unmatched expertise in providing a wide range of supply chain services in the temperature-controlled marketplace. They also noted that we can do that more efficiently and cost-effectively than food companies can do themselves.

This leads us to a major opportunity to promote our industry more aggressively and better position ourselves as experts in the cold chain. We can provide enhanced awareness of who we are and what value we can provide.

This also speaks to the integrated nature of today's supply chain services and the ability that GCCA has to address all key service areas through its core partners—IARW, IRTA, IACSC, and WFLO.

I encourage you to read the article, "Major Survey Gauges Impact of Association Services," on page 10 of this issue to learn more about the findings of this critical IARW member survey and the opportunities it identified not only for the future growth of IARW but also for WFLO, IRTA, IACSC and GCCA as a whole.

I also want to hear from as many of you as possible about your own views on how GCCA can become more relevant to your business needs. So please email me at crosenbusch@gcca.org and let's continue this dialogue. Thanks and I look forward to a great year together!

COD

COREY ROSENBUSCH
GCCA President and CEO

#### 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 International Association for Cold Storage Construction (IACSC), which provides a forum for innovative ideas, promotes standards of practice, and sponsors professional education programs for the cold storage construction industry.

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# GCCA AND IIAR CREATE

# Organizations jointly respond to regulatory proposals suggested by EPA.

#### By Lowell Randel

n July 24, 2014, the Environmental Protection Agency (EPA) published a Request for Information (RFI) regarding the agency's Risk Management Program (RMP) regulations. The RFI was generated as a part of the Obama Administration's efforts to implement Executive Order 13650—Improving Chemical Facility Safety and Security.

The Executive Order came in response to the 2013 accident in West, Texas, where a fertilizer plant exploded causing numerous fatalities. The order directs the Occupational Safety and Health Administration (OSHA), the Department of Homeland Security, the EPA and other agencies to examine their regulations and propose ways to improve chemical safety and security.

Through the RFI, EPA requested comments on possible revisions to the RMP regulations. The RMP RFI is divided into two sections, one of which is very similar to the OSHA RFI on Process Safety Management issued in December 2013. The second section addresses policies not included in the RFI for PSM.

In response to the RFI, the Global Cold

Chain Alliance (GCCA) and the International Institute of Ammonia Refrigeration (IIAR) developed comments and built a coalition to communicate concerns to the agency. Coalition members co-signing the comments to EPA include: American Frozen Food Institute, American Meat Institute, Global Cold Chain Alliance, International Association of Refrigerated Warehouses, Refrigerating Engineers and Technicians Association and the U.S. Poultry and Egg Association. GCCA will continue working with EPA and its coalition partners as the rulemaking process moves forward.

Below are some of the major proposals suggested by EPA, and a summary of the comments

submitted by the coalition:

Updating the List of Regulated Substances EPA Proposal. Potential changes to threshold quantities for regulated chemicals. Coalition Response: Lowering the ammonia threshold quantity (10,000 lbs.) under the Risk Management program would require smaller independent companies to needlessly increase their operating costs and could inflict financial harm. The Clean Air Act Amendments of 1990, Section 112(r)(1) (General Duty Clause) already requires safe operations of facilities/processes with less than threshold quantities of RMP chemicals through prevention of accidental releases and minimization





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of consequences of releases that do occur. Additional Risk Management **Program Elements** 

EPA Proposal: Adding additional management program elements and metrics to the RMP regulation.

Coalition Response: Specifying management-system metrics is not appropriate under RMP. Requiring facilities to use and share metrics is more prescriptive than a performance-based regulation should mandate. Facilities should be free to choose those management system elements that are applicable to the complexity of their operations and to their industry; they should not be constrained to use management-system elements that were developed under circumstances that may not apply to their operations.

#### **Imposing Additional Safety Requirements** on Contractor Owners and Operators

EPA Proposal: Add new safety requirements for contractors.

Coalition Response: Existing federal regulations (EPA and OSHA) are very clear that the "contract owner or operator" is required to ensure training and understanding, following of safety rules, etc. Modification or additional requirements are not needed or required at this time.

#### Clarifying PHA and Hazard Review Requirements

EPA Proposal: EPA specification of types of failure scenarios and damage mechanisms for PHAs and hazard reviews.

Coalition Response: The implication of such a policy is that EPA would be essentially stating it knows more about the processes and potential failure mechanisms than the experts within each industry. In addition, this would seem to indicate that the scenarios and damage mechanics for all industries are identical. Identification of failure scenarios and damage mechanism is best left to those who have the most experience in each unique process that is being analyzed.

#### **Define and Require Evaluation of Updates** to Applicable Recognized and Generally **Accepted Good Engineering Practices**

EPA Proposal: Better define RAGAGEP and how facilities respond to updates.

Coalition Response: Adding a definition for RAGAGEP could be useful to help owners better understand requirements under the standard. Better defining RAGAGEP may also reduce the misapplication of standards by inspectors and facilitate better understanding and application

by facility owners. However, a definition of RAGAGEP should not take away the ability of a facility to identify which RAGAGEP they are applying to their operations.

#### **Extend Mechanical Integrity Requirements** to Cover Any Safety-Critical Equipment

**EPA Proposal:** Expand coverage of the Mechanical Integrity element to all safetycritical equipment.

Coalition Response: For the ammonia refrigeration industry, covered facilities already must identify components, controls and PM frequency for them in accordance with OEM recommendations. For such a change to be effective, a workable definition of "safety-critical" must be developed. Policy makers should also recognize that the determination of what is safety-critical can be subject to broad interpretation.

#### Require Owners and Operators to Manage **Organizational Changes**

**EPA Proposal:** Expand Management of Change requirements to include organization changes.

Coalition Response: If adopted, it will be important for facilities to have clear guidance on what organizational changes qualify. "Replacements in kind" should be exempted from the management of change requirements. Facility owners should be given a sufficient level of flexibility to design their own programs to meet the requirement.

#### **Require Third-Party Compliance Audits**

EPA Proposal: Require third-party compliance audits.

Coalition Response: Compliance audits are useful tools for evaluating a facility's safety. However, third-party audits should not be limited to hiring outside personnel to perform the audit. Outside consultants can be very useful, but facilities should have the flexibility to utilize internal safety experts from other facilities or corporate headquarters to perform audits.

#### Safer Technology and Alternatives Analysis

**EPA Proposal:** Require inherently safer technology assessments and involve local communities.

Coalition Response: The regulatory burden of requiring costly IST reviews tends to stifle innovation. For those companies that are already looking to improve safety by implementing IST options, a formal IST review would add costs to a process by forcing the company to document the activities it is already performing. Small

operations might not have the manpower or expertise to do this and lack the resources to hire it out cost effectively.

Local communities should not be involved in IST analysis. While local communities have good intentions, they have virtually no expertise in safety and risk management as it applies to a specific industry.

#### Emergency Drills to Test a Source's Emergency Response Program or Plan

**EPA Proposal:** Require routine emergency drills to test emergency response.

Coalition Response: Requirements for tabletop drills and/or functional emergency response exercises in alternating years will likely enhance a facility's awareness and preparedness for emergencies. Including local emergency responders would enhance the effectiveness of coordination requirements already in effect in the Risk Management Program Rules. However, covered facilities should not be penalized if offsite responders are invited, but not able to participate.

#### **Automated Detection and Monitoring for** Releases of Regulated Substances

EPA Proposal: Require automated detection and monitoring of regulated substances.

Coalition Response: RMP should remain performance based, and adding specific requirements for detection and monitoring would be counter to this performance basis. RAGAGEP should be used to determine if/ when detection and monitoring devices should be used. EPA should allow facilities to install these devices based on industry standard and guidelines, not regulatory mandates.

#### **Additional Stationary Source Location** Requirements

**EPA Proposal:** Adding new stationary source location requirements.

Coalition Response: Providing specific requirements is against the performance based nature of the RMP regulation. Introducing siting restrictions, such as distance from the covered process to occupancies, could become a problem in situations where a facility might want to upgrade to a new and safer engine room but the best location is not compliant with siting restrictions. If adopted, this policy may ultimately encourage facilities to keep running older (potentially less safe) facilities rather than construct newer, modern (and potentially

safer) facilities.

## Incident Investigation and Accident History Requirements

**EPA Proposal:** Expand incident and accident history requirements.

Coalition Response: Incident investigation requirements in current regulations are sufficient for determining the cause of accidents. OSHA PSM regulations already provide compliance guidance on the intent of incident investigation and the applicability of incidents that require investigations to include near misses. Facilities should be free to determine the exact technique used provided that the major causes and all contributing factors are identified as part of the incident investigating technique.

#### Worst Case Release Scenario Quantity Requirements for Processes Involving Numerous Small Vessels Stored Together

**EPA Proposal:** Require worse case release scenario quantity requirements for facilities with multiple vessels.

**Coalition Response:** In an ammonia refrigeration system, it is virtually impossible to release the entire ammonia

inventory in any single event. Therefore, to require the entire system inventory for the process to be used for the worst-case scenario would create an unrealistic picture of risk at the facility.

#### Public Disclosure of Information to Promote Regulatory Compliance and Improve Community Understanding of Chemical Risks

**EPA Proposal:** Require public disclosure and increased access to RMP facility information.

Coalition Response: RMP information submitted to EPA is already readily available on-line and there are also requirements for the distribution of Tier II reports to appropriate local authorities. Allowing more information to be disclosed (audits, PHA, etc.) would have the effect of compromising public safety and security by allowing sensitive information to be too readily available. Due to the confidential nature of this information, steps should be taken to avoid disclosure, not increase availability.

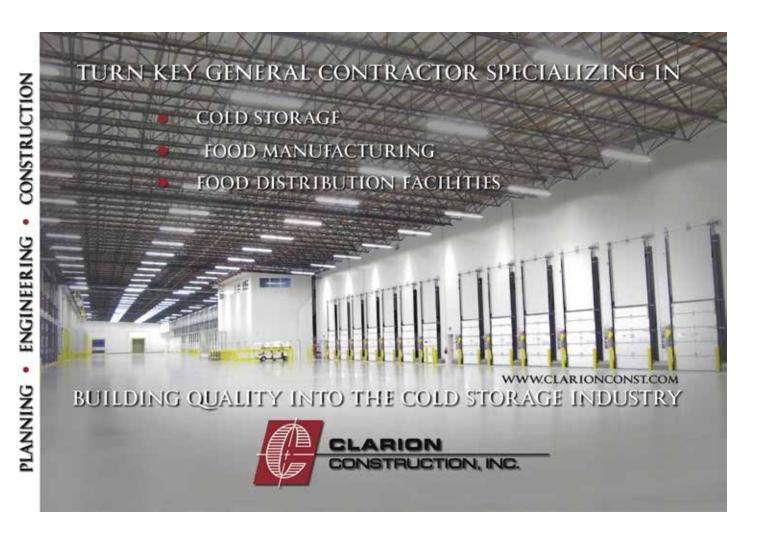
#### The "Safety Case" Regulatory Model

**EPA Proposal:** Replace current RMP program with a "safety case" approach.

Coalition Response: Facilities have invested a lot of time and resources in their PSM and RMP Programs, and in many cases, are justifiably proud of their programs. To suddenly move away from these programs in favor of a method not commonly practiced in the United States, seems highly inappropriate.

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# SURVEY UNCOVERS MEMBERS' "UP-AT-NIGHT" ISSUES

Precedes strategic planning activities that will drive members' business outcomes.

> e developed a strategic plan back in 2008 that served us well, but the world is changing, as is our industry, and we need to stop, take a look, and reflect on what we're doing and where we're going," says Tom Poe, President, Crystal Distribution Services and Chairman of the International Association of Refrigerated Warehouses (IARW).

And that, says Poe, is why the IARW commissioned a survey that would identify the kind of impact the membership is looking for from its trade association. He says this is a far more strategic association membership survey than simply asking the membership whether it thinks the services its association is providing are good, bad or somewhere in between.

"Potomac Core Consulting, the company chosen by GCCA President & CEO Corey Rosenbusch and his team to conduct the survey, utilizes a survey vehicle that identifies what the membership's key 'up-at-night' issues are," explains Poe, "and what impact the association has on those issues."

The "up-at-night" issues identified in the survey included new growth, market position and business development; external challenges such as food safety compliance and cost pressures; operational planning and strategy; and human capital management such as employee recruitment and retention.

Dan Varroney, President and CEO of Potomac Core Consulting, says, "We asked the membership to define what kind of impact they'd like to have from their trade association, and they responded that they wanted to utilize their association as a strategic partner to achieve their business outcomes. They envision the association uniting the value chain (food manufacturers, retailers, distributors, and the entire cold chain) to collaborate in areas that impact everyone in the food supply chain."

Varroney says survey respondents identified their desire to work with other segments of the food supply chain on solutions such



# Top IARW Member "Up-At-Night" Issues **Growth/Market Positioning**

#### **Identify New Business Development Opportunities**

Capturing Additional Revenue from Current Customers

#### **Optimizing Capacity**

Increasing Market Penetration/Market Share

#### Increasing Company Identity/Visibility as a Total Supply Chain Solution

Knowledge of Potential Customer Needs/Strategies and Frequent Customer Interface

Increasing Customer Awareness of Cold Storage Solutions & Innovations

# Top IARW Member "Up-At-Night" Issues Other External Opportunities/Challenges

#### Food Safety Regulations/Compliance/External Influences

Customers' Pressure to Cut Costs

#### Staying on Top of Emerging Technologies/Innovations

Quality Standards (e.g. certification, testing standards, sustainability, etc.)

Customers' Technology/Innovation Challenges

# Top IARW Member "Up-At-Night" Issues Operational Opportunities & Challenges

#### Increase Profitability/Cost Controls

Strategic Business/Operational Planning

#### Cost, Availability, & Load Shedding of Electricity

Staying Current with Industry Innovations & Practices; Benchmarking

#### Workflow/Keeping Capacity Balanced (incl. Seasonal Variances)

Operational/Tactical Planning

#### Customer Service/Engagement/Retention

Regulatory Compliance

as streamlining regulations, elevating the visibility of the cold chain, understanding each other's structures, cost and pricing models, and building a larger community with everyone moving forward together. "This is a new growth-focused, global model," points out Varroney.

After the survey results were collected, the IARW board met to examine the results and identify the top five initiatives that the association can deliver that will have an impact

on members' business outcomes and to rank those ideas in order of priority.

Both Rosenbusch and Varroney asked the board to react to the data in an exercise that lasted two days. Explains Varroney, "They were asked, on the basis of the survey results, what they thought the priorities and strategies of the association should be for the next three years."

What Varroney observed from this strategic exercise is that the board's top priorities matched the members' perspectives in the

survey results. "The reason we engaged the board is because we're trying to assure the association's alignment with member business outcomes."

"My company is very small so it came as somewhat of a surprise to me that everybody had such similar concerns—human capital, compliance, operational issues, identifying new ways the association can help us develop and grow our business," observes Poe. "And these are not just regional concerns—international

### Top IARW Member "Up-At-Night" Issues Staffing & Human Capital Management

#### **Team Development**

Staff Development - Mid-career/Mid-management

#### Family Ownership Challenges/Transitions/Succession

Recruiting Refrigeration Engineers

#### Staff Development - Early Career

Workforce Safety & OSHA Compliance

#### Staff Engagement/Talent Retention

Aging Workforce

members are thinking along the same lines as well."

Poe says he assumed some of the bigger companies would have all these issues under control. "I figured they're big, they must be doing it all right, but it just goes to show they still have the same challenges as us smaller companies."

Poe adds that survey respondents depicted a true cross section of IARW members, represented both regional and international companies of all sizes, and held positions from CEO to warehouse manager.

An important observation from the survey results, reports Varroney, is that the members hold the association in very high regard, believe it is highly respected by others in the food supply chain, and see it as a providing an opportunity to learn from and share with each other.

"They see the IARW as the best resource to stay up to date with what's happening in the industry. Because there is this strong foundation, members are saying they want to leverage the association even further to elevate the value they provide their customers and elevate the industry's recognition," observes Varroney.

He adds that the membership sees opportunities for IARW to help the broader food supply chain see the industry beyond cold storage as strategic components of a supply chain that can store and move product anywhere in the world.

Poe believes that as the vast majority of respondents hold the association in such high regard, determining how to develop that respect into something members can use to grow their business and find new opportunities is a fundamental challenge going forward. "We want our members to be able to say, 'We're part of a great organization that does things right, that's cutting edge, and you should be looking for our IARW brand so we can help you grow and help you to help your customers grow."

Poe says the next step is to put a taskforce in place to work alongside association staff to draft a strategic plan that it will present to the board at the IARW-WFLO Convention & Expo in April 2015. "Then with the basic guidelines in place reflecting where the members want us to go, the taskforce will whittle that down and be ready to take it to the next step, which is to finalize a strategic plan for the association staff to implement in early 2016," says Poe.

"The staff has a track record of doing an excellent job of reviewing and adhering to strategic plans," remarks Poe. "With the previous strategic plan, they frequently reassessed their goals, as indicated by the plan, and whether those goals continued to reflect what the membership had charged them with accomplishing. Then they step back and regroup." Poe adds, "We'll give staff guidance so they can do what they do best and they truly do a great job."

Varroney says the more the association is focused on the members' "up-at-night" issues and their business outcomes, the more successful the industry will become.

"It's a major change to be talking about members' business outcomes and how the association can help drive those outcomes," says Varroney. "This is the new gold standard for forward-thinking associations like GCCA."

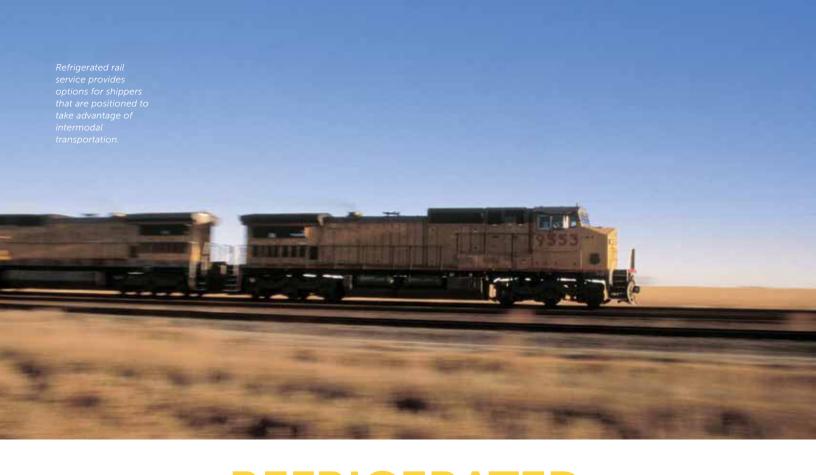
"The membership should feel extremely confident that their concerns are being heard by the board, and a cadre of outstanding staff. Corey and his team are working on the membership's behalf to build a plan that will help amplify the importance of the cold chain while it provides the industry the key resources it needs to accelerate its market presence in the global marketplace," concludes Varroney.

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# REFRIGERATED TRANSPORTATION CAPACITY IS A CONTINUING **CHALLENGE**

New rail alternatives may open up intermodal service options.

By Stephanie Nall



onsumer spending on high-value perishable food products continues to drive up demand for cold chain transportation services in the United States and around the world.

Imports to the United States of perishable fruits and vegetables are increasing along with domestic-grown supplies. One thing that isn't growing as fast as the supply and demand for fresh food: refrigerated transportation capacity.

To meet the demand, shippers need to determine the right transportation mode for their product and their supply chain needs.

One viable option to augment their current refrigerated transportation strategies is refrigerated intermodal service. Both reefer truck and rail systems have faced challenges this year, but trends point to a coming surge in refrigerated intermodal service.

"Refrigerated trucking is getting tight," according to Debbie McDowell, Director of Customer Service and Business Development at Jacksonville-based Seaonus and a member of the International Refrigerated Transportation Association (IRTA) Board of Directors.

This limited trucking capacity is caused mainly by a worsening truck driver shortage in the United States. According to the American Trucking Associations (ATA), nationwide there are about 35,000 unfilled truck driving jobs. The industry needs nearly 100,000 new drivers every year for capacity additions and to replace retirees. But, by 2020, the U.S. government projects that 330,000 additional truckers will be needed,

above and beyond the 100,000 per year.

New hours of service regulations that went into effect in 2013 reduced the amount of time truckers could drive each week, effectively lowering driver compensation-something that exacerbated the driver shortage.

A number of large trucking companies recently began dramatically raising pay for drivers—a move they say is attracting some new drivers. More importantly, they hope the pay increase will help them retain employees in an industry where driver turnover approaches 100 percent. But that pay increase also means an increase in truck rates.

For shippers with access to facilities such as cross-docks, ports, and rail stations, intermodal transportation can provide the flexibility and options needed to maximize service and hold down costs.

Chris Mnichowski, President of CTI Freight Systems Inc., and Chairman of IRTA, notes that the demand for refrigerated transportation is expected to continue climbing, translating into an increased demand for reefer rail shipments, especially intermodal shipments.

#### **Back From the Brink**

A decade ago, refrigerated rail service in the United States appeared to be on the brink of extinction. U.S. railroads scrapped aging and unreliable refrigerated boxcars and didn't buy new ones. One catalyst for extensive scrapping was environmental regulations in California that went into effect in 2009.

In 2007, BNSF reported to its shareholders that it had 4,196 refrigerated boxcars. By 2012, that number had dropped to 994. Most of the scrapped cars were decades-old 50-foot units that the railroad felt were not worth the investment of putting in new refrigeration units to meet California standards.

UP Railway has 5,200 reefers in its fleet, including 225 that were built in the last year. However, thousands of its refrigerated boxcars will "age" out of the fleet in the next several years and the railroad will be forced to retire them. Under rules set by the Association of American Railroads, any cars that reach 50 years of age can no longer be used in service—even if they have been rebuilt.

But while UP says it intends to add more new reefers to the fleet, it is extremely unlikely they will make the \$1 billion investment needed to replace all the thousands of boxcars scheduled to be scrapped. New refrigerated boxcars cost about \$270,000 each.

"At some point in the future, the multiple pressure points now being applied to cold chain transportation may be viewed as a crossroads that spawned a brighter future marked by adequate capacity and a more consistent cost structure."

#### **Intermodal Options**

The prohibitive cost of refrigerated boxcars is a major reason for the surge in the reefer intermodal sector. A new refrigerated intermodal era started in April 2010 when Cold Train began offering service between Quincy, Washington and Chicago on the BNSF using newly designed reefer containers. Before that, refrigerated intermodal had been limited to trailer-on-flatcar service.

Shippers, initially hesitant about putting perishable products on a railroad, warmed up to the idea as rail service proved reliable, with shipments making the trip from central Washington to Chicago in three days.

Cold Train expanded its service several times before shutting down operations last August. Cold Train demonstrated that with good rail service there was a demand for refrigerated rail, but if service became unreliable, demand plummets. The company said

it was closing because, instead of three-day schedules, BNSF was taking six days to haul its containers to Chicago.

Officials at the Port of Quincy aggressively looked for a company to replace Cold Train, but have thrown in the towel because of limits placed on service by BNSF. The port is located on a BNSF mainline that is undergoing construction and is heavily used now because of oil shipments.

Railroad officials said they would serve the inland port only if the port could put together an entire unit train for the railroad to pick up. In addition, the port must provide rail trackage for the unit train to be assembled on port property and not on the mainline track. Commissioner Brian Kuest said that is impossible at this time.

But other reefer intermodal service is growing. Some trucking companies such as J.B. Hunt and C.R. England are increasingly using reefer containers in intermodal service, reducing the highway miles required for each load.

Tiger Cool Express in Overland Park, Kansas, began operations in February 2014, offering reefer intermodal service on express intermodal routes. Mnichowski's company, CTI Freight Systems, has become an agent for Tiger Cool Express.

Because Tiger Cool specializes in produce and other perishables that must speed to market, it places its containers on express intermodal trains. The company has 400 containers in place that move from lane to lane as crops are harvested or there are surges in imports across its intermodal network. "Currently, the rail intermodal market has a lot of unused potential," says Mnichowski. "We are seeing a market shift in intermodal shipping, with special focus on intermodal long-haul moves."

Tiger Cool plans to have 2,000 containers in service within the next year or so, adding equipment as warranted, Mnichowski notes.

#### Reefer Rail Service Growing

Not all new reefer rail service is intermodal. Railex began unit train boxcar service in 2006, offering weekly schedules between Wallula,

Washington and Rotterdam, New York. The 55-car trains use specially designed refrigerated warehouses at each end that allow the trains to run through the facility. Service slowdowns across all U.S. railroads last year have affected Railex, adding a day to what used to be five-day service from origin to destination.

Still, its business is growing. In July, Railex placed in service 50 new 72-foot boxcars. Unlike the 64-foot cars already in its service schedule, these new cars are not owned by UP. Instead, Railex acquired them through a long-term lease from Cryo-Trans. Cryo-Trans has the second largest reefer boxcar fleet in the United States with approximately 1,300 cars, behind only UP.

McKay Transcold is another new entrant in the reefer rail niche. In May 2014, it began offering fixed service between Selma, California and the Chicago area. Currently, McKay runs a 30-car train in each direction weekly. The company uses BNSF boxcars and the trains are operated by the BNSF. Marketing Director Jason Spafford said the service is on track to have 50-car trains in each direction by next spring.

Mnichowski notes that whether it is boxcar or intermodal service, the railroads are interested in operating high-volume service that allows them to move unit trains efficiently without picking up individual cars.

Not only is there less operating costs involved in unit train service, the expensive equipment gets used more frequently for revenue loads, he says.

"They want a high volume of trains and business without having to herd cats," Mnichowski explains. In addition to no longer offering intermodal service at the Port of Quincy, the BNSF has also ended intermodal service out of its Fresno, California, rail yard.

That doesn't necessarily mean the end of reefer intermodal shipments from those regions. Intermodal well cars that hold reefer containers can be added to the back of reefer boxcar unit trains, such as those operated by McKay Transcold and Railex.

McKay's Spafford said that the company has no plans to add intermodal to its unit train mix - at least in the near future. "We're going to concentrate on providing good service with our boxcar fleet."

Railex, however, is expected to announce soon that it will provide intermodal capacity on its trains. Intermodal containers could move from both Wallula and Delano, but would probably leave the train in Chicago.

In whatever form, Mnichowski is con-



Trucking capacity is tightening because of a driver shortage and new hours of service regulations.

fident that reefer intermodal volumes will continue to increase.

#### **Continuing Pressure on Transportation**

Refrigerated transportation is an industry characterized by high volume and low margins, making it challenging to invest in the infrastructure needed to meet rapidly growing demand and retain skilled workers to operate it. New regulations—which almost always drive up costs-are exacerbating the situation.

Meanwhile, customers of third-party logistics operations continue to experience pressure to keep costs low, which then translate to low margins for these 3PLs.

Shipping solutions in trucking, rail, and ocean carriers will continue to evolve to meet these needs, with intermodal service

providing additional options where these transportation services intersect and facilities are in place to handle it.

At some point in the future, the multiple pressure points now being applied to cold chain transportation may be viewed as a crossroads that spawned a brighter future marked by adequate capacity and a more consistent cost structure. The opportunity for growth and change is here, and time will tell.

STEPHANIE NALL is a freelance writer based in Southern California, USA who specializes in transportation issues.

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# **AMMONIA-CHARGE SYSTEM'S** FXAMINFD

Regulatory and safety concerns driving change and innovation in use of ammonia.

#### By Ruth E. Thaler-Carter

he actual size of the ammonia charge in any given facility has come under a large and expansive examination by regulatory authorities, communities, and insurance providers. Over the past decade, a number of public refrigerated warehouse (PRW) owners have recognized the need to take action in reducing the ammonia system charge in their facilities.

This recognition has broadened over the past few years and the PRW community has reached out to engineers, contractors, and equipment suppliers to find new and innovative ways to minimize their ammonia system charges.

"Low Ammonia Charge Refrigeration Systems for Cold Storage," a recent International Association for Cold Storage Construction (IACSC) and the International Association of Refrigerated Warehouses (IARW) white paper, details the issue in depth and provides information about five low ammonia-charge systems that warehouse operations might consider installing in response to such concerns.

"Refrigeration plays an enormous role in the cold storage industry and, while there are a modest number of facilities which do not utilize ammonia as the refrigerant of choice, most of the cold storage facilities in North America rely heavily on ammonia refrigerant," the white paper says.

Key to current concerns about safety is the understanding that "from a pure technical and environmental perspective, the benefits of ammonia as a refrigerant are unparalleled. It is a natural refrigerant with no global warming or ozone depletion potential. Its heat transfer characteristics are among the best substances known to man. It is inexpensive, and its use for more than 100 years has led to a base of experience unlike any other refrigerant in this industry. However, in the hands of untrained or careless individuals or

in poorly maintained facilities, ammonia can be a highly dangerous chemical."

#### **Domestic and International Concerns**

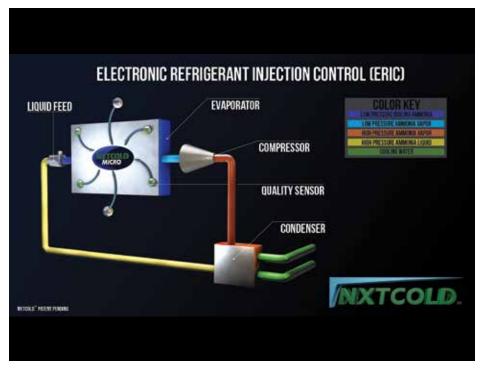
The issue of reducing ammonia charge in refrigeration systems is not limited to the United States—it has various international aspects. "While Europe has taken the lead in fluorocarbons, that is not a major issue in the industrial sector. The U.S. is in a leadership role (on ammonia) to some degree," said Terry Chapp, author of the white paper and National Business Development Manager for Danfoss Refrigeration Industrial. "There is a lot of activity in the United States, with a ripple effect over the pond—Star in the UK has been on this for quite a while."

Other countries are also involved in the ammonia issue and more international activity can be expected, according to Chapp. "I was in Denmark (a few weeks) ago and colleagues there agreed—there are the same regulatory pressures either affecting, or that will affect, the use of ammonia," he said. "The trend toward lower charges will be seen all around the world. That's an opinion, but it's based on facts."

Other industry members agree and see



The low-charge, air-cooled Azanefreezer package, shown here being lifted into position onto a building roof, is one of several low-ammonia charge systems examined in a recent GCCA white paper. These condensing units are typically used for freezer warehouse applications.



The NXTCOLDTM Packaged System is one of five new innovative approaches to low-ammonia charge systems.

Europe as being ahead of the curve. "We've been a contractor and manufacturer in Europe for the past 40 years," said Derek Hamilton, who represents Azane, which the UK's Star Refrigeration, based in Glasgow, Scotland, recently launched as a new U.S. business to manufacture low ammonia-charge packets.

"What we have seen is that the industry is going through a phasing out of various different refrigerants as laws have been passed (to control the use or amounts of potentially dangerous materials)," Hamilton said. "The timeline we're working to in Europe is farther ahead than in the U.S.—refrigerant R22 is now being phased out in the U.S., and will finish in Europe by the end of this year. We have seen the challenges that our customers face when trying to replace or update equipment that uses that gas and have developed products in response. It's one of the main drivers of our new U.S. business."

"Ammonia evolved with absorption for low pressure until systems became more sophisticated," said John Scherer, Manager of Engineering with LA Cold Storage Co. and Chief Technology Officer for NXTCOLD™, which is developing new technology to address ammonia use in refrigeration systems. "We developed technologies where we would pump large amounts of ammonia so we could control systems. Ammonia absorbs 10 times better than other refrigerants, but it's hard to control in small amounts."

Scherer cited the Clean Air Act of the mid-1980s as a catalyst by classifying ammonia as "an acutely hazardous material." Although 95 percent of ammonia occurs naturally, said Scherer, it's still heavily regulated. Anhydrous or dry ammonia is, indeed, potentially dangerous. "The way to control it is to reduce use to the de minimis (lowest possible) amount," he said. He compared the usual amounts versus ideal amounts to a swimming pool versus a tsunami or a campfire versus a forest fire.

Efforts to reduce ammonia use "are all relative to food, water and power sustainability," Scherer said. Because of ammonia's role in cooling systems, "with ammonia, we feed the world." He also noted its importance in fertilizer.

Government pressures and regulatory activity can involve fines and even jail time if companies do not take the necessary actions to safely control ammonia use, Scherer said.

#### Size and Risk Matter

Regardless of who is leading the charge, so to speak, size is a major factor in why U.S. activity may be under greater pressure and making current progress. "There are regulatory pressures in the United States, so we have to respond," Chapp said. "The size of facilities in the United States is so much bigger, so the amount of ammonia is much greater."

While regulation may be driving some of the move toward using less ammonia and developing more efficient or smaller systems, industry pride and independence also play a role. "We would rather deal with the issue on our own terms," Chapp said of the industry perspective. "It's more important that industry address and take responsibility to manage it." OSHA and the EPA are being helpful, he noted.

According to Hamilton, "The industry knows that ammonia is a very efficient refrigerant that saves money, but OSHA is putting pressure on and trying to categorize ammonia in the same category as (some dan-



The inside of the low-charge, air-cooled Azanechiller package. These chiller packages are used to chill a secondary fluid for temperaturecontrolled storage, process cooling or HVAC applications.



The Azanechiller package installed and ready for use.

gerous) chemicals. If you have 10,000 pounds of ammonia in your facility, you have to meet the same regulations as if you have that amount of another chemical. The industry feels this is onerous."

Some states are enacting greater restrictions or stricter guidelines than others or than national levels, Hamilton noted: "In California, there is an even more stringent limit of 500 pounds."

The problem—one encountered by other industries over the years—is that "we want efficiency but at lower amounts," Hamilton

Among the good news is that "we're using the same technology as we have for decades, but are being smarter," Hamilton said. "We're packaging (ammonia) in smaller packets. The discrete packages reduce the amount of ammonia in the pipeline, which ultimately means using less."

Azane is not alone in its development efforts. "A lot of people are taking the idea seriously and starting to develop new products," said Hamilton.

#### Innovation in Technology

In response to internal desires to improve efficiency and reduce dependence on ammonia in cooling systems, the industry is coming up with new approaches. The five systems described in the white paper are Advanced Direct Expansion (DX) using

electronic expansion valves, CO2/NH3 Cascade, pumped CO2 Volatile Brine with NH3 Primary, Star Azanechillers™ and Azanefreezers<sup>TM</sup> and NXTCOLD<sup>TM</sup> Packaged Systems. "The issue is driving innovative approaches and new technologies," Chapp said.

Approaches outlined in the white paper include:

- Advanced Controls—providing precise liquid metering for liquid feed and direct expansion systems.
- · Advanced Heat Transfer Technology—providing dramatically higher heat transfer coefficients, more consistent and reliable latent heat transfer and optimized heat exchanger designs.
- Advanced Manufacturing Technology providing higher pressure components, enhanced tube surfaces, small cost-effective screw compressors.
- · Advanced auxiliary components—providing expansion valves that "mate" perfectly with the advanced control systems, versatile flow control valves, unique liquid distribution techniques, high pressure pumps.
- · Eliminating all but the most essential ammonia charge.
- Maximizing the heat transfer from the ammonia residing within the system to the air or secondary fluid.

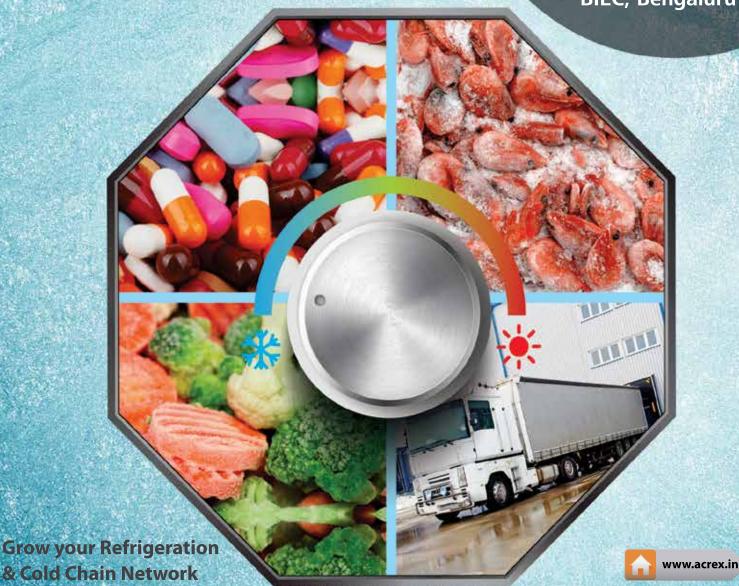
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Advance directive expansion technology, in which Chapp's company and several others are involved, uses pump recirculated systems. Baltimore Air Coil (BAC) already has evaporative condensers available that reduce the ammonia charge, Chapp said. Evapco is coming out with its own system that has a very low charge.

That was certainly behind Star Refrigeration's move with its Azane brand in the United States. "We saw a surge of interest in the technology in 2014, and we can see a lot of momentum building and more confidence as the systems

are installed in the United States," Hamilton recalled. The company also is finding an opportunity to educate owners of warehouse facilities about how the regulations are changing. "We're working to raise awareness of the issue," he said.

"The evolving regulatory changes mean that the refrigeration industry can take a major leadership role in reducing the use of ammonia in its systems and facilities."

Among the options: using HFCs or manmade refrigerants. "These are used extensively in the United States and Europe, but will be phased out because the gases cause global warming and are on the EPA's target or hit list," Hamilton said. "That's an easy way to

reduce the production and emission of greenhouse gases."

The need to come up with alternatives was personal for Scherer and fueled his drive to come up technology that would solve the problem. "I couldn't sleep because I was worried about earthquakes and other potential disasters, so I started working on ways of decreasing the amount of ammonia being used," he said. "It became an obsession."

The result was the NXTCOLD technology, "developed as a way to build a safer future and world," with a prototype that "worked so well, we applied for a patent." What makes it unique, Scherer said, is its electronic refrigerant injection control process, which he compared to fuel injection systems for cars, and the traditional systems being more like carburetors.

With the NXTCOLD technology, exchanges hold more and more ammonia, for 1 pound per ton of refrigeration capacity—enough to freeze one ton of ice in 24 hours—at very low charges. "You can take an entire charge and throw it on the floor with no effect," Scherer said, "The new systems are distributed so there are several smaller facilities instead of one big one."

#### The Bottom Line

As the white paper concludes, the main question faced by owners interested in making a change to a low ammonia charge system is "which one is best?" The answer depends on strategy, business model, the facility, operating constraints, and available funding.

Those involved in developing the white paper see another aspect of the issue and the industry's response to it: The evolving regulatory changes mean that the refrigeration industry can take a major leadership role in reducing the use of ammonia in its systems and facilities. "There is a massive opportunity for the industry, driven by the desire for efficient systems that are safe," said Hamilton.

While ammonia use in cooling systems is indeed a "major problem" that the refrigeration industry is facing, there is "good news - there are solutions - and better news - more are on the way," said Chapp. He warned, though, "it is unwise to sit and wait for things to happen. We have to be proactive. As the bar is raised, it will affect anyone who hasn't take steps to respond."

**RUTH E. THALER-CARTER** is a freelance writer and editor based in Rochester, New York.

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## THE EUROPEAN COLD STORAGE

European companies share many similar issues with American counterparts.

#### By Alexandra Walsh

he European Cold Storage and Logistics Association (ECSLA) is the voice of the European cold storage industry. ECSLA represents, directly and indirectly, the interests of thousands of cold stores with a total capacity of more than 60 million cubic meters of cold storage.

Its membership is comprised of national associations representing cold stores and distribution companies; individual public refrigerated warehouses, cold stores and logistics operators; suppliers of products and services to the industry; and scientists, researchers, universities, and institutions with an interest in the European cold chain.

On behalf of its constituents, ECSLA represents their common interests at EU institutions—in particular the European Commission, the Council, and the European Parliament. It also provides its members with information on legislative and technical developments regarding the cold storage and logistics industry; assists warehouse and logistics

operators with improving their performance and reducing operational costs; and ensures the promotion, and defends the interests, of the cold storage and logistics industry in Europe.

The association serves as a platform for discussion for the European cold storage and logistics sector, and hosts conferences twice a year.

#### The European Regulatory Scene

With more than 80 percent of the legislation affecting the cold storage industry originating from Brussels, ECSLA has its main office in Brussels and a full time lobbyist active around the following four main themes—environment, energy efficiency, food safety, and refrigerated transportation. The presence of ECSLA in Brussels has also contributed to the development of a legislative and economic framework addressing the competitiveness of the industry.

Similar to the United States, one of the most important regulatory issues in Europe is the phase-out of HCFC-22 or R-22 refrigerant, says Derk van Mackelenbergh, Managing Director of Eurofrigo and current ECSLA chairman.

And also similar to the U.S. and its Food Safety Modernization Act, in Europe the EC (European Commission) is adapting "Food & Feed Laws," says van Mackelenbergh, in spite of the already stringent legislation around food production and logistics and some of the highest standards of food safety in the world.

"Generally, we see Brussels continuing to get more power and have more influence on regulatory issues that impact the cold chain, so we need to learn how to play that game," points out Hans Kroes, CEO, Kloosterboer and member of the ECSLA board. "It used to be that in the Netherlands, we looked to the Hague (Dutch seat of government) regarding regulatory matters, but increasingly, we have to look to Brussels."

Kroes adds that as the EU continues to grow more powerful, the European cold chain has to understand how that works and establish a coalition between countries as they learn the lobbying process together.

"I would say our top regulatory issue is how can we, as the European cold store industry, organize and collaborate so we know what is happening in Brussels and can influence those decision-makers and ensure they understand our business," concludes Kroes.

#### **Growing the Market**

"A fact that distinguishes our industry in Europe is that we do not have many organizations operating cross border," points out van

Mackelenbergh. "There are only a few companies operating in multiple countries and these tend to be big producers that are building large-scale dedicated operations. This lowers their supply chain costs and also replaces smaller public warehouses."

Kroes agrees that cross-border commerce generally depends on the size of the company and that big companies are looking to create networks as their clients expand. But he also adds that cold storage in Europe is different from country to country. "For instance, in the German market there a lot of big producers with their own facilities and in the Netherlands, there is a lot of commercial cold storage but also many mom and pop companies that support local farmers and focus on local markets."

It is those bigger companies, says Kroes, that are more likely to support national growers, will venture into other countries, and also look abroad to developing countries.

The greatest growth within the European countries themselves is happening in Poland and Germany says Kroes. "These are mainly dedicated facilities for pan-European producers and the projects are all fully-automated, and financed by U.S. investors. These markets will be considerably impacted for some time as a result of overcapacity."

Kroes says in terms of areas of growth for his own company, "We mainly look at opportunities to make our involvement in the supply chain bigger. In the past, we were only warehouses, now we've turned into a logistics company. Before we were mainly located in harbor areas, now we are looking to take our operations further inland in the EU." He adds, however, that his company does also have interest in eastern European countries, and recently opened an operation in Gdansk, Poland.



A panel discussion at the 2014 ECSLA Spring Meeting included speakers from two continents. The included (left to right) Doug Thomas of Bellingham Cold Storage, ECSLA Chairman Derk van Mackelenbergh of Eurofrigo, Paul Shortt of Castlecool, and GCCA President & CEO Corey Rosenbusch.

#### **European Energy**

"Energy is our daily battle as its cost might represent up to 25 to 30 percent of the general expenditure of a PRW," remarks Manuel Cabrera-Kabana, Director of Ampliacion Muelle Sur and Treasurer of the ECSLA board.

Cabrera explains that although there is an EU Law that promotes and requires a minimum production of renewable energy, again the situation varies by country.

"In Spain, for example, where energy costs are among the highest in Europe, the new law for renewable energies is not attracting investors because of the associated tax burden for usage," says Cabrera.

He says that until a couple of years ago, Spain was the second greatest producer of wind energy production in the world, but with the new law, all investments have been paralyzed and are being diverted to developing countries.

"Also, with solar panels, investments have been diverted mostly to Central and Latin American countries, and the industrial use of solar energy has stopped due to the tax burden imposed," says Cabrera.

As a result, Cabrera points out the PRW industry has reacted differently in each European country, according to the local laws. He says in some countries, through their national associations, PRWs are able to negotiate prices and rebates directly with the energy production or distribution companies. "In Spain where my company is headquartered, our national association, ALDEFE, has established its own commercialization company in order to buy and commercialize energy directly from the grid providing great savings for its members."

"At my company, sustainability is a real thing," says Kroes. "It's very important to not just say you work on sustainability, but to really do it. We have 2000 solar panels on our warehouse roofs and more to follow. We use wind energy and all our new buildings are built to BREAAM standards (European green building standards and certification.)"

Kroes adds that in Europe, they also build fully automated cold storage warehouses that can use up to 40 percent less energy. And, he says, they focus on LED and other low energy lighting systems.

#### **Talent Management**

"In general, recruitment is not our biggest worry," says Kroes. "We have a solid base of very good people working for us who have made a long-term commitment to the company, and we have very low turnover among our warehouse workers." But, Kraus adds that people with higher educations at the managerial level

are a bit harder to recruit. "Our brand visibility is not that strong, so it is hard to compete with the Proctor and Gambles of the world."

Looking down the road, Kroes says there will be a scarcity of young people for the workforce over time. "Because the EU community is aging, people will need to work longer. Therefore we have a challenge to keep our workforce fit and vital."

Kroes also reports a lot of discussion about the impact of cheap labor as drivers from

eastern European countries are competing with domestic drivers. "A lot of our own Dutch drivers will begin to retire soon, and it is difficult to attract young people who want to drive. On the other hand, it has been suggested that in the future, technology, in the form of driverless trucks, may just solve those issues."

"Here in Europe, we have at least two different situations," reflects Cabrera. "In Northern Europe, where logistics education programs have been running for years and the logistics job

sector is far more developed than in southern Europe, we are seeing many foreign students and educated emigrants moving there."

"On the other hand," notes Cabrera, "in southern Europe with its high unemployment levels, students and workers are becoming more interested in the logistics sector, and universities and educational programs are developing logistics studies to a larger extent."

Cabrera says most larger European PRWs provide in-house training for different positions. "At my company, we have specific education programs for a number of positions in collaboration with professional schools, lift truck manufacturers and external employment companies. In our case, and also in collaboration with ALDEFE, we promote training courses, seminars and web education."

Asked what other European cold chain issues are top of mind, van Mackelenbergh replies that the Russian boycott of agricultural products is creating a loss of business, not only for the producers, but also for a number of cold store companies.

**Lightening Round** 

Cabrera selects as his top of mind issue - the World Trade Organization and Free Trade Agreements (FTA) with third countries as well as the trade agreement being negotiated between the U.S. and Europe. "As an example of these trade agreements, Colombia increased its exports to Europe by 10 percent after signing its FTA with the EU and Peru by more than 12 percent, and these countries were preceded by México, Korea, Chile and South. Africa. It is expected that a FTA with the U.S. will increase exports by 28 percent from Europe and 37 percent from the US, increasing the U.S. and European GNPs by 0.4 percent and 0.5 percent respectively.

Kroes has two responses to the top of mind question. "Branding - how the world sees the European cold storage industry is really a thing we have to work on. And cost cutting -I agree that we should constantly be looking at how can we make things more effective, cheaper, and better. But there is a limit and we must ensure we are in a partnership with our clients based on mutual respect - this will help us all provide better service, achieve more, and grow together. " @

**ALEXANDRA WALSH** is Vice President of Association Vision and a contributor to COLD FACTS.

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## **ASSOCIATION NEWS**

#### **NEWS ABOUT GCCA CORE PARTNERS**

GCCA recently joined 375 trade associations and chambers of commerce from 50 states representing a wide range of industries calling for the withdrawal of the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers' proposed rule regarding the definition of "waters of the United States." The flawed proposed rule would dramatically expand the scope of federal authority over water and land uses across the U.S.

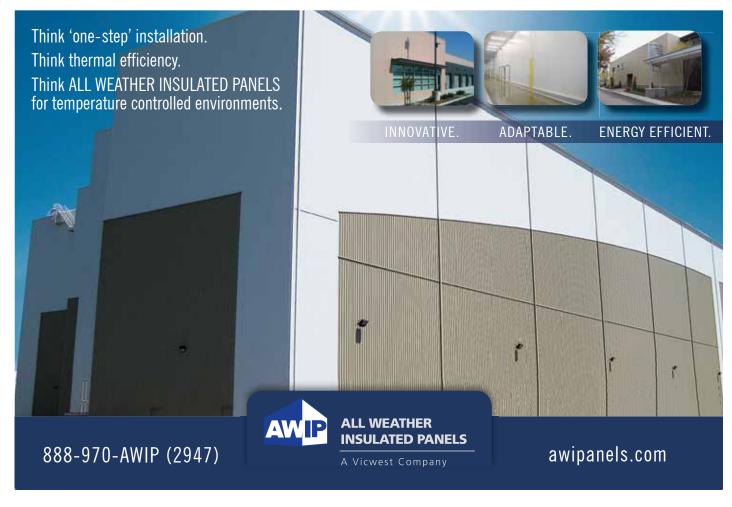
In mid-December, the U.S. Trade and Development Agency hosted a visit of 15 business officials to the United States from a cross section of the refrigerated storage and logistics sectors in China. During their time in the U.S., the delegates participated in a USTDA sponsored Business Briefing that was organized by The Peoples Group and **GCCA**. The Business Briefing provided an opportunity for U.S. companies to interact directly with key decisionmakers from China's cold chain industry.

The IACSC-IARW Construction/Codes Committee created a formal guidance document that designers of cold storage and refrigerated facilities can use to certify buildings under the U.S. Green Building Council LEED rating system. Projects using the guidelines could potentially receive up to 19 points if they are at least 10 percent more efficient than the baseline established in the guide. IACSC and IARW recommend that members notify USGBC if they intend to use the guidelines. The guidelines are available on the GCCA website and are free to members.

Students enrolled in Year 2 courses at this year's WFLO Institute (February 7-11,

2015) will receive training with a new curriculum. The updated curriculum follows new coursework that was rolled out with the Year 1 class in 2014. The content has been developed around six competencies: cold chain management, customer relations, employee safety, food safety, warehouse operations, and career and personal development. Delivered by top industry leaders, courses at the Institute are focused on best practices in refrigerated warehousing and logistics.

IRTA recently held a webinar focused on new industry standards, presented by Buddy Yantz, Quality Assurance Manager for Lakeside Foods, and Corey Rosenbusch, President and CEO for GCCA. The free webinar is available online in an archived format for IRTA members. @



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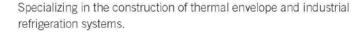
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## MEMBER NEWS

#### NEWS FROM MEMBERS OF GCCA CORE PARTNERS

**AGRO MERCHANTS GROUP** has completed the acquisition of Opticool B.V., located in Rotterdam, The Netherlands. The Company's latest partnership with Opticool will add true commodity expertise to the AGRO Merchants Group portfolio of companies. Opticool specializes in the fruit logistics sector.

AMERICOLD announced that it has opened a new facility in Heyburn, Idaho, USA. The 160,000 sq. ft. temperature-controlled building has capacity for more than 17,000 pallets - 10,000 steel-racked and 7,000 bulk-storage positions.

ARCO DESIGN/BUILD, INC. has been contracted to design and construct Phase II of an MTC Logistics Baltimore, Maryland, USA facility. The warehouse will encompass a 130,000 sq. ft. (5 million cu. Ft.) expansion of temperature-controlled space, including 15,000 pallet positions. ARCO was also responsible for the design and construction of Phase I, which was completed in the fall of 2009.

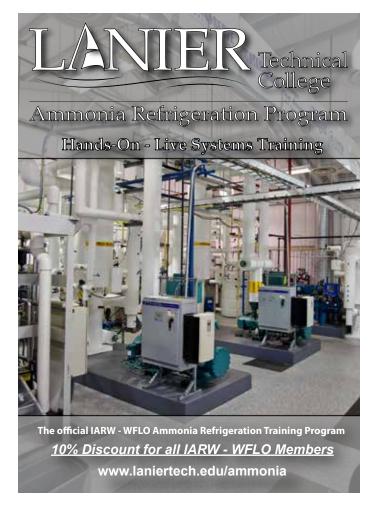
**CLOVERLEAF COLD STORAGE** promoted Dave Junck, a 31-year veteran of the company, to Regional Director - Iowa and Minnesota, USA. He replaced Ron Graham, who is now National Accounts Director. The company also promoted David McCurry to Plant Manager at its Sumter, South Carolina, USA facility.

**DATEX** recently upgraded versions of its popular solutions for cartonization and shipping management to help reduce the impact of the new dimensional weight pricing strategies that will soon be implemented by major carriers. As of January 1, 2015, both UPS and FedEx changed their existing pricing strategies and charge based on the dimensional weight of packages.

#### **GULF STATES COLD STORAGE CO.**

opened a 55,000 sq. ft. expansion to its Savannah, Georgia, USA facility in December 2014. It includes an additional 2 million pounds per week of blast capacity as well as 14 million pounds of bulk storage space. An additional dock with five new dock doors will also be added to accommodate the growing number of cross-docking orders.





**HANSON LOGISTICS** is expanding its Chicago Consolidation Center, adding 16,500,000 cubic feet including 12,000 pallet positions of deep frozen storage capacity. Hanson Transportation Management Services and refrigerated truck fleet operates from the facility and provides inbound shuttle service and nationwide truckload and less-than-truckload service.

#### KINGSPAN INSULATED PANELS NORTH

AMERICA announced that Paul Bertram, Kingspan's Director of Environment and Sustainability, was nominated to be a member of the Green Building Assessment Protocol for Commercial Building's Consensus Body as Vice Chair of the Energy Committee. The Consensus Body is comprised of industry experts representing individuals interested in Green Building standards for both new and pre-existing constructions. The company also introduced the newly designed KS45FRP Partition panel for food processing and washdown environments. Insulated panel systems are ideally suited for thermally controlled environments such as cold food processing and packing facilities.

Eugene Mattioni, a shareholder at MATTIONI, LTD, was appointed by Philadelphia Mayor Michael Nutter to the Navigation Commission for the Delaware River and its Navigable Tributaries.

## **NORTH AMERICAN COLD STORAGE**

broke ground for its new location in Woodburn, Indiana, USA in August 2014. The 96,000 sq. ft. facility will be the tallest cold storage facility in the area. The company will invest \$28.1 million into the new facility over the next several years and add 75 jobs.

#### PREFERRED FREEZER SERVICES is

overseeing the construction of its newest facility in Richland, Washington, USA. The Richland facility is the company's first cold

storage facility in the state of Washington. Upon completion (projected for July, 2015), it will be the largest public refrigerated warehouse in North America and the largest single cold storage facility built at one time in the world. The freezer in the facility will be automated, featuring robotic cranes rather than human-operated equipment.

#### THE RAYMOND CORPORATION is sponsoring Cornell University College of Engineering's first Resistance Racing Electric Motor team, a new project team exploring electric vehicles. Along with a \$1,000 donation to the college's School of Electrical and Computer Engineering, Raymond is offering students the professional knowledge and support of its engineering department regarding electrical

and hardware components for electric vehicles.



This Preferred Freezer Services cold storage facility will be the largest public refrigerated warehouse in North America



Steve Medwin, Director of Systems and Advanced Engineering at The Raymond Corporation, presents the Cornell Resistance Racing team with a \$1,000 check during a recent visit to Raymond.





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## MEMBER NEWS

#### NEWS FROM MEMBERS OF GCCA CORE PARTNERS

#### RAYMOND HANDLING CONCEPTS COR-

**PORATION** held its first-ever online charity auction in recognition of Breast Cancer Awareness Month, which netted \$4,500 for two breast cancer charities.

#### REFRIGERATED WAREHOUSE & TRANSPORT ASSOCIATION OF

**AUSTRALIA LTD.** appointed Russell Sturzaker as Executive Officer of RWTA. Russell replaces David Costelloe.

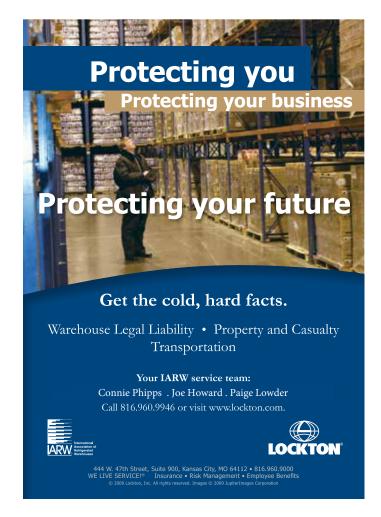
STELLAR has been ranked the No. 1 food and beverage contractor in the nation by Engineering News-Record (ENR), the construction industry's leading trade publication.

#### **SWIRE COLD CHAIN LOGISTICS** (SHANGHAI) COMPANY LIMITED opened

its new cold storage facility at Fengxian in Shanghai, China. SWIRE COLD STORAGE is also opening a state-of-the-art, \$30 million expansion at its Laverton, Australia site, making it the largest temperaturecontrolled facility under one roof in the southern hemisphere.



Swire executives and Chinese officials toast the opening of its new cold storage facility in Shanghai.





### 2015 CALENDAR UPCOMING EVENTS

FEBRUARY 5-8, 2015

2nd WFLO Graduate Institute

Atlanta, Georgia, United States

FEBRUARY 7-11, 2015

51st WFLO Institute

Atlanta, Georgia, United States

FEBRUARY 19, 2015

Webinar: Executive Order and Chemical Facility Safety and Security

www.gcca.org

MARCH 3, 2015

Webinar: OSHA Citation and Litigation

www.gcca.org

MARCH 23-27, 2015

ECSLA Spring Cold Chain Logistics Conference

Rome, Italy

APRIL 25-29, 2015

124th IARW-WFLO Convention & Expo

Orlando, Florida, United States

JUNE 22-24, 2015

**WFLO Institute Latin America** 

Panama City, Panama

JULY 26-28, 2015

**GCCA Assembly of Committees** 

Washington, DC, United States

**TBD OCTOBER 2015** 

GCCA Latin America Cold Chain

Congress: Mexico

Guadalajara, Mexico

NOVEMBER 5-7, 2015

35th IACSC Conference

& Ехро

Las Vegas, Nevada, United States

\*For more details go to www.gcca.org/events



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## **COOL PEOPLE**

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



#### **JEFFREY TUSA Project Manager** Polar Fresh Cold Chain Services

Each year, the Refrigerated Warehouse & Transport Association (RWTA) presents the Frank Vale Award in recognition of exceptional achievement by a young person in the Australian cold chain. The most recent winner is Jeffrey Tusa, Project Manager for Polar Fresh Cold Chain Services in Truganina, Victoria.

#### (COLD FACTS) How did you get your start in the industry?

**JEFFREY TUSA:** My friends worked at Polar Fresh and let me know it was a very enjoyable place to work - I thought I'd give it a go myself. Then I was given a break in 2008 and started off picking cartons as an agency casual and six years later, after holding many various roles, I can confidently say that I am experienced in all warehouse functions and particularly enjoy leading large teams daily.

#### What do you consider your greatest professional strength and to what do you attribute your rise to a management position?

JT: My biggest professional strength would be my determination and drive. This personal value has seen me overcome many hurdles in both my personal and professional life and has helped me and my team achieve things we once thought were not achievable.

We all live our lives at such a fast pace that sometimes we don't get the time to reflect and give ourselves a 'pat on the back' for the tireless amount of work we do daily." - JEFFREY TUSA

#### How would you describe your leadership style?

**JT**: I am a hands-on and approachable leader who shares the ups and downs with the team. I am fair and firm depending on the situation at hand. I find engaging team members one-on-one, out on the floor (while they complete their daily tasks), is the best way to communicate with my team as they feel at home and personally part of a larger plan for success.

#### What professional accomplishment are you most proud of?

**JT:** Being involved in the development of individuals – it's a great feeling when you are involved and see people achieve above and beyond their personal expectation. This is the most rewarding and enjoyable part of management and makes all the difficult discussions and decision-making worth it.

#### What does winning the Frank Vale award mean to you?

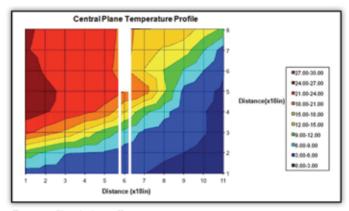
JT: Winning the Frank Vale award to me has personally been something to reflect upon. We all live our lives at such a fast pace that sometimes we don't get the time to reflect and give ourselves a "pat on the back" for the tireless amount of work we do daily. Moving forward, I will ensure the team and I give thought to not only major achievements, but the little things we do daily to make it all happen.

Participating in the Frank Vale award has given me the opportunity to meet and speak to business leaders in our industry and get a broader view on the cold supply chain network on a national level. Apart from the reflective aspect and participating in the RWTA conference – winning the 2014 Frank Vale award has opened more doors for me and I am looking forward to attending the 2015 IARW Convention & Expo in April and sharing my experience with the team when I return.

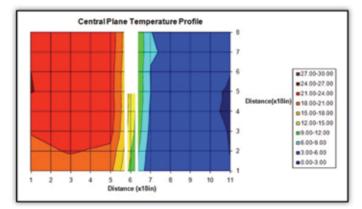
## **JAMISON: INDEPENDENT THIRD-PARTY TEST LAB RESULTS**

# The HCR Door results are in: **80%** efficient in blocking air infiltration





Temp profile: air door off



Temp profile: air door on

HCR pioneered the air door market 37 years ago and now has over 4000 worldwide installations. Until recently there was no authoritative, independent third-party test lab data that documented the efficiency of the unique HCR air door. A three-month evaluation was recently completed, and those



The HCR calorimetric environmental test chamber at CTS Labs in Urbana, IL

results are now available to the marketplace.

Creative Thermal Solutions (CTS) is a leading test lab for products in the HVAC and refrigeration industries. They test products that claim to offer increased energy efficiency, reduced energy consumption, and environmental sustainability. CTS labs recently conducted an extensive thermal performance analysis on HCR air doors. The results verified that the HCR Model AC (Single Air Door) is 80% energy efficient\* when stopping air infiltration and energy transfer between rooms with different temperatures.

#### HCR Air Doors - Remove All Obstacles

HCR demonstrates the greatest energy efficiency for doorways with over 10% DOT (door-open time), and can represent considerable and even dramatic energy savings in the right application. In addition to energy savings, HCR significantly reduces moisture from entering the cold room, and prevents icing and condensation on floors, walls, and products. Reduced frosting of the refrigeration cooling coils will result in fewer defrost cycles.

For more details about the CTS test results, visit www.hcrairdoors.com

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\*For details and the lab performance report visit www.hcrairdoors.com, contact your Jamison or HCR representative, or call 800-326-7700. Request the White Paper on the Evaluation of Horizontal Recirculatory Air Curtain Efficiencies — Cooler to Conditioned Space, D. Rhyner, HCR, Inc.

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