

DELIVERING ON CUSTOMER SATISFACTION AND FOOD SAFETY



3PLs have a strong track record in satisfying food processor demands and ensuring food safety. But customers still demand high performance and low prices, and the FDA has proposed new sanitary transportation of food rules that has the industry buzzing. Learn the latest on these critical issues.

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Fits and Starts Define
Philippine Cold Chain



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Deliveries and pickups from warehouse and customer docks are critical steps in the cold chain. Maintaining temperature integrity and adhering to best practices for loading and unloading is essential in ensuring customer satisfaction. (Photo courtesy of MTC Logistics)



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LEADOFF

WFLO ADVANCING THE GLOBAL COLD CHAIN



OF ALL THE ACTIVITIES AND programs offered by GCCA each year, some of the most exciting and meaningful are the global business development and education initiatives run by WFLO. During this past year WFLO has been extremely active. Several of its key accomplishments include:

New WFLO Institute Programs – The popular WFLO Institute is growing geographically and in content. This year WFLO launched a Latin America Institute in Panama City, Panama, which was well-received in this region where the cold chain is growing rapidly. In the United States, it rolled out a new Year 1 Curriculum and will introduce new Year 2 and Year 3 Curricula during the next two years, reflecting the evolving cold chain industry and the new skills and best practices needed. WFLO also launched the new Graduate Institute, designed for graduates of the three-year WFLO Institute who are ready to become future leaders.

Cold Chain Assessment, Training and Advisory Services for Bolivia, Ecuador and Peru – WFLO was awarded a grant by the US Department of Agriculture (USDA) Emerging Markets Program to work on this project. WFLO will conduct a market assessment of the food and rural business systems with an emphasis on the cold chain infrastructure.

Postharvest Capacity Evaluation Grant in Ethiopia, Uganda and Tanzania – WFLO was awarded a grant by USAID and the Save the Children Federation, Inc. to evaluate postharvest capacity building activities in these nations.

Postharvest Technologies Evaluation in Ghana, Guatemala, Honduras, Tanzania, and Thailand – WFLO completed a 3-month evaluation of various postharvest technologies in various climates for the USAID-funded Horticultural Innovation Lab.

Reverse Trade Mission for Chinese Delegates – WFLO, in collaboration with The People's Group, was awarded a grant to conduct a reverse trade mission for delegates from China involved in the cold chain sector. WFLO will host the delegation at the upcoming IACSC conference in November 2014.

Cold Chain Assessment in the Philippines – WFLO conducted several site visits as part of a cold chain assessment for the Caraga region funded by the USDA Philippines Cold Chain Project in July. GCCA President and CEO Corey Rosenbusch and several GCCA members also presented at the annual conference held by the Cold Chain Association of the Philippines.

Cold Chain Assessment in Bolivia, Ecuador, and Peru – In July and August a team of experts conducted high-level cold chain infrastructure assessments as part of a USDA-funded grant program awarded to WFLO.

Education Courses in Georgia – A team of experts presented two five-day short programs on postharvest, refrigeration, and design best practices in the Republic of Georgia (formerly part of the Soviet Union).

WFLO is busy doing important work around the globe to advance cold chain technologies and capacity, especially in developing nations. We will continue to advance these programs to further build in the worldwide cold chain business. ☺

FRANK PLANT
WFLO Chairman

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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smooth retrofit



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Eric Merrell

Vice President of Operations
Alliance Industrial Refrigeration Services



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GCCA has pointed out to FDA that very rarely do 3PLs take ownership of the food product being stored, handled or transported. The proposed FSMA rule does not seem to adequately recognize this situation and how responsibility flows through each step of the supply chain. (Photo courtesy of MTC Logistics.)



GCCA COMMENTS ON SANITARY TRANSPORTATION OF FOOD RULE

Asks for clarification on responsibility for product, temperature, sanitation and other issues.

By Lowell Randel

The U.S. Food and Drug Administration (FDA) is continuing its efforts to implement the Food Safety Modernization Act (FSMA). One of the major FSMA regulations that will impact the cold chain industry is the Sanitary Transportation of Human and Animal Food (STF).

The STF proposed rule, published in January 2014, lays out a framework of requirements for “shippers,” “carriers,” and “receivers” of food. Many GCCA members will fit at least one (if not two or three) of these categories that would be established by the rule.

The goal of the STF proposed rule is to prevent practices that create food safety risks, such as failure to properly refrigerate food,

inadequate cleaning of vehicles between loads, and failure to properly protect food during transportation.

According to the FDA, the proposed regulations would help maintain the safety of both human and animal food during transportation by establishing criteria, conditions and practices, training, and record keeping, for the sanitary transportation of food. The proposed

rule addresses the sanitary transportation of both human and animal food traveling via motor or rail vehicle by establishing criteria for the safe transportation of food.

Given the potential reach of the regulation into the cold chain industry, GCCA carefully reviewed the proposed rule and submitted formal comments to FDA in July 2014. Below is a summary of GCCA’s comments to FDA.

Clarification of Responsibility

GCCA commented to FDA the need to clarify responsibility through the supply chain and that the agency should better recognize the unique role the third party logistics industry plays in the food supply chain.

One of the unique aspects of the third party logistics industry is that GCCA members very

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rarely take ownership of the food product being stored, handled or transported. The proposed rule does not seem to adequately recognize this situation and how responsibility flows through each step of the supply chain. This is particularly important when determining whom the “shipper” will be for purposes of the rule.

Public refrigerated warehouses work at the direction of their customers who own the product to prepare shipments and work with carriers. Given the new responsibilities proposed for shippers, there should be additional clarity regarding the role of third party providers and under what circumstances they will and will not be considered shippers for purposes of the rule.

It is GCCA's position that responsibility should fall on the party that owns the product during a given process to maintain food safety and security. It is common industry practice for owners of the product to direct third party logistics providers with the conditions and requirements for shipments. This should be clarified under the rule.

Third parties providing services to arrange for shipments by carriers who do not own the product should not be considered “shippers” for purposes of the rule unless that is expressly stated in the contractual arrangement between the owner of the product and the third party provider. The decision to use a hired carrier or warehouse should not legally absolve an owner of product from the responsibility to protect the product.

Accepting and Rejecting Loads

GCCA requested that the rule provide clarity to receivers regarding the regulatory implications of accepting and rejecting loads. Warehouses receiving food shipments from carriers are currently getting conflicting signals from FDA regarding how to handle loads presented for acceptance that may have issues with sanitation and temperature integrity.

In practice, GCCA members report that FDA inspectors are indicating to warehouses that they should accept potentially questionable loads because of the fear that the product may enter the food chain through other avenues. This appears counter to the spirit of the proposed regulation and could put warehouses in a compromised position. FDA should be clear on its position of accepting and rejecting loads so warehouses can better understand their regulatory requirements.

Responsibility for Temperature Recorders

The STF proposed rule specifies that ship-

pers be required to dictate the temperature requirements to carriers. This can represent a large financial burden. Temperature recording should be kept with the owner of the product and maintained at their own expense.

Truck Washing and Sanitizing

FDA puts a great deal of emphasis on truck washing and sanitizing in the proposed rule. GCCA's comments suggest that each consignee should be responsible to ensure that a particular railcar, trailer or container is reasonably clean of dirt, debris and foul odors before releasing that car back to the carrier.

Likewise, it ought to be the responsibility of the shipper to ensure that a container meets their particular standards before loading. The carrier has the responsibility for providing a container in good mechanical condition that is reasonably clean of dirt, debris and foul odors. Any “sanitizing” required for a particular food/beverage or commodity ought to be the responsibility of the shipper.

Container cleaning and “sanitizing” also raises the issue of local, state and federal water use and water drainage/run-off issues. In many jurisdictions, carriers are prohibited from washing their trucks because of local regulations designed to protect from water runoff and water quality issues. This places carriers in the position of having to choose which regulation to follow. The proposed rule should provide clarity on preemption of state and local regulations that may restrict or prohibit truck washing.

Furthermore, facilities to clean or sanitize containers are not readily available in many locations across the country. Such facilities are not widespread enough to be efficient and would be extremely cost prohibitive. Any such costs would have to be passed onto the freight bill payer, which ultimately will fall to the consumer. GCCA estimates that such regulatory measures will increase the costs of transporting food products by approximately 15 percent, which is not adequately represented in the agency's cost benefit analysis.

Recognition of LTL Issues

The STF proposed rule does not seem to recognize the prevalence of less-than-truckload (LTL) shipments and the unique issues they present with these regulations.

GCCA members estimate that approximately 15-20 percent of all shipments are LTL, where the product of multiple shippers is placed in the same truck. In addition, even with loads that are comprised of a single shipper's product, often there are multiple stops

and deliveries made from a single “shipment.” This creates potential challenges for shippers and carriers.

In the case of multiple pick-ups, shippers can take precautions to ensure that the trailer begins in an appropriate sanitary condition, but cannot ensure the actions of other shippers that may add to the load. Carriers have the added challenge of being responsible for tracking multiple shipper requirements through multiple stops. Without recognizing the challenges of LTL shipments, the proposed rule can make operations impractical for both shippers and carriers.

Challenges with Enforcement

Given the complexity of the food supply chain and the proposed rules, GCCA also expressed concerns about how the agency plans to enforce the proposed rule.

Appropriate training will be critical for inspectors to understand the complexities of the supply chain, including the unique aspects of third party logistics. Training will also be critical should FDA rely on other agencies to enforce the rule. GCCA stands ready to assist the agency in providing inspectors the information needed to appropriately understand the third party logistics industry. In addition to training, it is imperative that the agency take steps to ensure that enforcement has a minimal impact on international trade. This is of particular concern to rail carriers operating between the United States, Canada and Mexico.

In addition to addressing the points raised above, GCCA requested that the rule be reopened or repropose to give the public an opportunity to comment on any significant changes made to the proposed rule prior finalization. Interaction and continued communication will ensure FDA has everything it needs to make an informed decision when finalizing the rule.

The STF proposed rule has been the subject of two GCCA webinars this year and was discussed extensively at the recent 2014 Assembly of Committees in Washington, DC. GCCA will continue to keep members informed on regulatory developments and actively engage with FDA as the FSMA rulemaking process moves forward. It is also discussed further in the article, “FSMA: More Questions Than Answers,” on page 18 of this issue of *COLD FACTS*. 📧

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PIONEERING INSULATED METAL PANEL TECHNOLOGY

WHY CUSTOMER QA MANAGERS MATTER

Buddy Yantz, QA Manager for Lakeside Foods, talks about why 3PLs are important to his company and what's important for a good relationship.

Did you ever wonder what truly goes through the mind of a quality assurance (QA) inspector when your load arrives? What nuance or seemingly slight irregularity tips the scale in favor of rejecting your load? While you might not think small changes in temperature would cause a QA inspector to reject a load, temperature abuse is one of the top reasons for load rejection and claims, according to Buddy Yantz, Quality Assurance Manager for Lakeside Foods. Yantz shared his views on why QA departments are strictly enforcing these receiving practices and provided insight into other trends in an interview with *COLD FACTS*.

CF: (COLD FACTS) Why do you use 3PLs?

BUDDY YANTZ: Third party logistics folks are better at logistics than we are. Our core competencies are planting, harvesting and processing vegetables—not logistics. That's what we do. The rest of it—not so much. That doesn't mean we can't do it, we just aren't great at it. We drop and miss trucks and it can get ugly in a hurry.

We get a better freight rate from a logistics company than if we do it ourselves and you also have access to more trucks and manage those trucks better than we do. In the middle of a pack, when we experience peak demand,

that is critical. If all our go-to wells run dry, we are in trouble. Going with 3PLs ensures we experience less 4 p.m. twist and shout from our warehouse and corporate managers. And if you're better at billing than us, we're willing to pay for it.

We also require third party audits of all our 3PLs. And I can't emphasize enough the importance of getting product to its destination on time so regulators don't ask awkward questions. Our 3PL partners also have to be able to separate allergens—the number one reason for food recalls. When asked about a 3PL's allergen control program, I don't want to get a deer in the headlights look.

CF: Why are third party audits important?

BY: Because they are a good indicator of the state of the warehouse and, frankly, to cover our own behinds. We do our own visits as well as rely on third party audits because the more the merrier. Things don't go south at a company in just six months so if we visit and we see a trend and then the trend is confirmed by a third party audit, it lets us know our risk is increasing and we have an issue to watch.

CF: What value added services do you look for in a 3PL and what can 3PLs do to improve their performance?

BY: Honestly, do what you say you'll do when you say you are going to do it. That is actually what we are paying you for. We also look to our 3PL to track trends and regulation changes and keep us informed. We hire you for your expertise so know your business and then summarize and let us know what we need to.

Our 3PL partner must also have a HACCP (Hazard Analysis and Critical Control Points) Plan—in other words a systematic preventive approach to food safety with the number one emphasis on risk analysis and hazard analysis. The number two emphasis should be on pre-requirements like pest control, sanitation, personal hygiene, training, receiving storage and shipping (documentation!), and best



Some food processors look to 3PLs to write good dock-to-dock standard operating procedures. (Photo courtesy of MTC Logistics.)

practices in the condition and design of your facility or truck.

In addition, you can help us manage what we already do. You can lobby for free readers and tags for all! And you can help us write good dock-to-dock standard operating procedures.

I also look for a positive attitude from all involved and a facilities manager who is trained and knowledgeable. I check out how clean the trucks and warehouse are and how the load or warehouse is loaded or stacked.

And last but not least is performance—do what you say you're going to do.

CF: What does it take for you to reject a load?

BY: Temperature abuse, no records, no washing of trailers or no pest control at a warehouse are all red flags and make us want to reject you. If I open a door to a trailer and want to close it back up again—I will. If I do a trailer inspection and it's filthy or has a funky smell—ease on down the road.

If I can't conceive of how I am going to explain what I see or smell to my boss or the FDA, then there is no way I'm letting you onto the dock. I have 40 logs. If I don't have any rejected trucks they think I am not keeping

track of things. They have taken the decision out of my hands—if something is just a little off, I have to reject your load.

Increasing pressure from customers and regulators are pushing me to be more demanding in my inspections. But rather than a case of "us vs. them," we're eager to work with 3PL providers to improve sanitation, food safety, and temperature integrity.

CF: Where do you see future rate pressures going, and what services are so meaningful to you that you'd be willing to pay for them?

BY: I want more work for less money and let me abuse you just like everybody else—did I say that? You can't get away from price. A leading food retail trade group gave us an industry leader award—do you think anyone is willing to pay one penny more for a case of green beans? Not on your life. So we do what we have to do to give us an edge, not because we think are going to close the sale. Those days are gone.

There is hope, though, regarding rates. We just had an experience with a low cost warehouse leader and we got burned because sometimes you do get what you pay for and

low cost is not always a good thing or a guarantee of great performance or even average performance. So our moment of enlightenment—the lowest cost PRW may not always be the best way to go.

The pressures—and therefore the services that are most important to us—are drivers, trucks, getting everything specified in contracts, billing, logistics, timeliness, FSMA and Sanitary Transport and all that that may mean in the future with regard to meeting verification requirements. I think that's a good start.

CF: What requests are you getting from customers that you believe will have an impact on 3PLs now or in the future?

BY: We want the best service at the lowest cost and verification of cold chain supply along the way.

CF: Does your company have any of its own warehousing/cold storage/distribution center space?

BY: Yes, a couple of cold and frozen warehouses.



Reefer units are among the issues keeping Buddy Yantz up at night since they are so critical to the temperature integrity of food products. (Photo courtesy of MTC Logistics.)

CF: Does your company have any future plans to build and what would be the most important factor in considering whether to build your own space vs. working with a third party?

BY: We are basically full-up at our own warehouses and housing, and I don't think we have plans to build any of our own because the frozen market has been tight for the last five or so years, although that might be changing. If you can do it for pennies more than we can, great—we'll pay. If it were dollars more, which right now it isn't, then we would look at building more of our own facilities. But right now cold warehouse space is not at a premium price.

Again, we get back to core competencies. Managing a cold storage warehouse is not one of our core competencies—planting, harvesting, processing vegetables is—so we look to you as third party suppliers.

CF: When thinking about the cold chain, what's keeps you up at night?

BY: Labeling requirements and ready to eat vs. not ready to eat. Compressed air standards. Warehouse filter specs and environmental

sampling. Sanitation. Last load.

Reefer units—we don't know much about them but we are going to need to.

We are going to need to lean on smart truckers to know what we should be putting in contracts when and if the sanitary transport regulations take effect and we get stuck having to keep the records. Right now, if you ask me, I don't know that we know what a good trucking firm's HACCP plan would really look like if we had to peak behind the curtain.

Foodborne illness outbreaks come from the interface between the environment and food and I have a map of the United States that shows the proximity of cattle to produce-growing regions. So we create laws to stop outbreaks and Congress has created FSMA to provide the right to risk free food because Congress has lost its common sense and believes there is no excuse for another food outbreak ever again. Which leads to pressure on the food industry and supply-storage chain. I have FDA on one side and USDA on the other and MDA (Minnesota Department of Agriculture) behind me. None of them have a sense of humor and I have to deal with whatever their interpretation of the law is.

We are the second largest private label company and ship products everywhere. I know it seems like we want something for nothing just like everyone else. I know our company is not as big as the largest companies you might partner with, and I can't tell you what to do, but we are a \$750 million company and if one food safety outbreak—which can cost a company about \$25-30 million—gets pinned on us, we will go out of business. And that's why I have to care about your business as much as I do mine.

CF: The final question comes from Buddy Yantz! What does it matter what Buddy thinks—do QA managers really influence corporate?

BY: The answer is—absolutely. ☺

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

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THE FRESH OPPORTUNITY

Tom Stenzel of the United Fresh Produce Association, invites 3PLs to partner with produce growers.

By Alexandra Walsh

Tom Stenzel, President and CEO of the United Fresh Produce Association, has a message for you.

“While business in the frozen foods sector is flat to declining, we’re seeing a boom in fresh foods across multiple retail channels,” Stenzel says. “Today’s growth opportunities are in fresh, refrigerated foods, with sales continuing to expand in traditional grocery stores and also pharmacies, convenience stores, farm markets and wherever consumers shop.”

United Fresh is the pre-eminent trade association for the produce industry in shaping legislative and regulatory policies, providing scientific and technical leadership in food safety and nutrition, and developing educational programs for its members. Founded 110 years ago, United Fresh represents the interests of companies from small family businesses to the largest international corporations throughout the global fresh produce supply chain—and those companies are doing very well.

United Fresh’s *FreshFacts® on Retail* report, which examines overall retail trends in produce for the past year, shows that during 2013, the produce department averaged more than \$47,000 per week per store, which was up 4.8 percent over the previous year.

The report also measures retail price and sales trends for the top 10 fruit and vegetable commodities, as well as value-added, organic and other produce categories.

Highlights of the 2013 report include:

- During 2013, all of the top 10 fruits posted volume increases.
- Fruits’ average weekly dollar sales increased 4.5 percent versus 2012.
- All of the top 10 vegetables posted increases in weekly dollar sales.
- Among value-added fruit categories, value-added fruit and fresh-cut fruit both posted increases in weekly dollar sales.
- Snacking value-added vegetables posted an increase of 15 percent in weekly dollar sales.
- Avocados posted the highest growth in the fruit category, with dollar sales increasing 11.7 percent and volume increasing 10.3 percent.
- Packaged salad and tomatoes, the two top-selling vegetable categories in 2013, increased dollar sales 6.7 percent and 3.4 percent.

In addition, recent trends in organic produce show that even with increases in retail prices, volume sales continue to grow in all organic fruit and vegetable categories. The growing demand for organic produce



“There are new opportunities for GCCA members in temperature controlled produce, from import/export cooling facilities to forward distribution and cross-docking arrangements.”



(Above) A tremendous amount of imported fruits and vegetables enter the United States through ports, especially in winter, creating a need for more refrigerated warehouse facilities at these ports. (Right) During 2013, all of the top 10 fruits posted volume increases, according to the FreshFacts® on Retail report.

resulted in dollar and volume increases, roughly 20 percent for both organic fruits and vegetables overall.

The Invitation

“I encourage GCCA member companies to reach out to produce partners to share their expertise to help deliver the very highest quality produce to consumers, 100 percent of the time. That’s how we’ll continue to grow our business together,” says Stenzel. He emphasizes there are new opportunities for GCCA members in temperature controlled produce, from import/export cooling facilities to forward distribution and cross-docking arrangements.

Why does Stenzel care to share these fresh opportunities? Because at the end of the day, he believes, “it’s all about what can we do to get the freshest and highest quality produce to consumers.”

“We believe cold chain management is a critical function to sell more produce.” He explains that the whole movement towards locally grown produce simply means making

available to consumers the highest quality produce as quickly as possible, and in top condition, after harvest.

“Maintaining the cold chain is absolutely essential and is our critical window to improving produce quality. Who has the expertise to maintain and enhance the cold chain for fresh produce? If our members can do that—great. If GCCA members, including third party transportation services, have that expertise to maintain the cold chain—that’s also great and you have a ready customer in produce growers.”

Growers

How important is cooling to fresh produce? If a piece of fruit is 10 degrees too warm for an hour, it’s an issue because that piece of fruit could lose several days of shelf life, Stenzel reports.

Because the most important thing after harvesting a crop is to get it refrigerated, there are always cooling warehouses near crop fields, says Stenzel. He adds that while there is still a huge volume of fruit and vegetable

production coming from traditional growing areas like California, the increase in the locally grown movement means growth in produce production is coming from everywhere, including around urban centers.

“Those tend to be smaller farms that are producing locally grown produce and while their logistics needs are the same as the larger farms, they might not have cooling facilities,” Stenzel points out. “Currently smaller farms might have to go to a wholesaler for their refrigeration needs. If 3PLs can fill that need on a regional basis, an aggregation service with shared warehouse space could be very attractive to a grower.”

Imports

Another need in the produce supply chain that could be met by 3PLs is refrigerated warehouse space at ports and borders, according to Stenzel.

“There is a tremendous amount of imported fruits and vegetables entering the country, especially through the ports in winter,” reports Stenzel. “And there is a lot of

competition and investment to have enough refrigerated warehouse space to be the port selected to offload that produce.”

The U.S./Mexican border is the point of entry for more produce than any other land border and another area that 3PLs could look to for future growth, according to Stenzel.

“Mexican trucks still have to stop shortly after crossing the border and everything is offloaded, goes into cold storage and then is reloaded,” says Stenzel. “There already exists a tremendous amount of warehouse space run by growers or wholesalers in towns like Nogales, AZ and McAllen, TX, but more will likely be needed.”

Wholesale

Stenzel also points to opportunities to serve today’s produce wholesalers. Thousands of produce wholesalers have warehouses and storage facilities and sooner or later these wholesalers will have to decide whether they’re going to invest capital to improve and update existing facilities, build new state-of-the-art storage facilities or turn their storage needs over to a third party, and that, points out Stenzel, is another growth opportunity for 3PLs.



Produce sales are expanding in grocery stores, pharmacies, convenience stores, farm markets and other retail outlets.

“A produce wholesaler’s expertise might better be focused on buying and selling, rather than designing cold storage facilities. If they can partner with a 3PL for their warehouse needs, that’s one thing they don’t have to

be expert at,” says Stenzel. “It’s an attractive proposition if the wholesaler can have their own sales expert in the warehouse managing the flow of produce in and out of the facility, talking to the customers, and designating where the product is going to ship.”

Another increasing phenomenon in the produce industry, Stenzel notes, is the cross-docking and forward distribution function. “A grower in California may have 10 truckloads of leafy greens that will take four to five days to reach customers on the East Coast. So, instead of shipping directly, they’re shipping to various forward distribution centers closer to the market.” Stenzel explains the forward distribution center is basically a holding facility and the grower or wholesaler is just renting the facility and holding the produce as a value added service to its retail customer. “Some of our traditional produce wholesalers are starting to take on the role of third parties and offering this service to other growers. It puts them in competition with traditional public refrigerated warehouses. That’s probably a good thing—there’s lots of room for competition.”

FSMA

“Our producers already have lots of refrigerated space and maybe that’s why 3PLs haven’t been that interested in competing for this business,” Stenzel said. “But with the implementation of the Food Safety Modernization Act, having the expertise to be FSMA compliant is hugely important to United Fresh members,” points out Stenzel.

With regard to the rules regulating facilities,



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If GCCA members offer expertise in quality control, cold chain management, regulatory assurance, strong traceability and state-of-the-art facilities, UFPA members would have to question whether to tie up capital in building or updating their own facilities when they could partner with an expert.”

— TOM STENZEL

deal with facilities,” says Stenzel. “If 3PLs can take the hassle of FSMA compliance off our members’ hands, there will be a significant opportunity for 3PLs to partner with our industry.”

In summary, Stenzel says that if GCCA members offer expertise in quality control, cold chain management, regulatory assurance, strong traceability and state-of-the-art facilities, UFPA members would have to question whether to tie up capital in building or updating their own facilities when they could partner with an expert. ☺

Stenzel said the FSMA proposals deal with all operations the same whether it is a processor of fresh-cut produce or a warehouse that merely is a transfer station for fresh produce.

The initial proposals require all facilities, regardless of purpose and level of risk, to put the same action plan in place. Stenzel said this will be extremely burdensome on the industry.

On the food-safety issue, Stenzel has implored all members to get their own facilities in order. Stenzel revealed that produce

industry recalls have become commonplace. He said the industry has to improve its recall systems, which too often result in after-the-fact pulling of product from shelves that is not contaminated. By the time most recalls are initiated, the offending product has already moved through the system. The only result is a consumer that shies away from the recalled commodity.

“Growers have enough challenges dealing with FSMA on the farm without having to

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

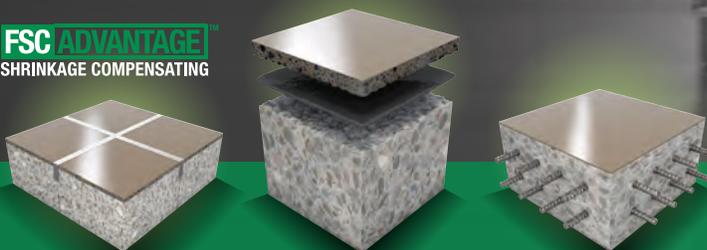
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FSMA: MORE QUESTIONS THAN ANSWERS

Cold chain transportation executives weigh in on concerns about the Food Safety Modernization Act.

By Stephanie Nall

Companies that carry, store and handle food might have to make significant and costly changes to the way they operate under new rules proposed by the U.S. Food and Drug Administration (FDA) to carry out congressional mandates made in the Food Safety Modernization Act (FSMA), signed into law in January 2011.

“The biggest problem right now is that no one really knows what the changes are or how we go about implementing the new rules,” according to Leonard (Bud) Rodowick, Strategic Relations—Food Safety and OEMs for Thermo King and a member of the International Refrigerated Transportation Association (IRTA) Board of Directors.

Rodowick says he has a number of concerns about the FDA’s proposed rules for the “Sanitary Transportation of Food,” published on January 31, 2014 as a component of the FSMA, but says the top three are really unanswered questions.

“It’s all very nebulous,” he said. “After reading the rules all the way through, I was staggered. The definition of shipper is so ambiguous and the definition of a shipper’s

responsibility is also very vague.”

Other major questions include what carriers and shippers will be covered by the rules and the FDA definition of what constitutes safety versus quality of food.

Rodowick isn’t alone in criticizing the rules. The FDA received 155 responses, including one filed by the the Global Cold Chain Alliance (GCCA), during a public comment period that ended July 30, 2014 on rules that cover domestic transportation by truck or rail.

Among the problems pointed out to the agency:

- The rules hand new responsibility and liability for following the rules and ensuring food safety to shippers.

A number of companies and organizations commenting on the rules said it

wasn’t clear if the FDA was referring to shippers, receivers, brokers, or third-party logistics partners such as warehouses.

- The FDA broadened the meaning of safety to include quality.
- Confusion over rules that exempt shippers or carriers that have revenue of less than \$500,000 per year. Large grocery chains often buy produce from small growers or use a trucking company with only a few trucks. If the end receivers have revenue over the exemption threshold, do the rules apply throughout the supply chain?
- The proposed rules exempt smaller companies, leaving a significant portion of food carriers not subject to these food safety requirements.
- The rules mandate driver training without specifying what training should include.
- Equipment cleaning standards that are unclear and potentially at odds with federal, state and local environmental regulations.
- The FDA dramatically understated the potential cost of the proposed regulations. “It appears that the FDA got into the food



Trucking companies and others involved in shipping, storing and handling food have many questions and concerns about the FDA proposed rules for the sanitary transportation of food. (Photo courtesy of MTC Logistics.)

quality business instead of staying in the food safety arena,” according to Dr. Patrick Brecht, an industry forensic consultant and a member of the World Food Logistics Organization (WFLO) Scientific Advisory Council, part of GCCA. A strict interpretation of the proposed rules would require receivers to reject loads of food if the cargo strayed outside recommended temperature or other condition guidelines given by shippers, he said.

“Some shippers are very concerned about quality,” Brecht said. “For example, a seafood shipper—or the company buying high-value seafood—might set very tight temperature ranges of only two or three degrees. What happens if a computer download shows that at some point the load of seafood might have been four or five degrees outside a range but does not pose a risk to the safety of the food?”

Brecht says the proposed rules require a receiver to reject the cargo as adulterated. The proposed rules would also prohibit the resale of any rejected loads as salvage cargo. “There is a very big difference between food safety and the shelf life of a food. It is possible for a gro-

cery chain to reject a load because there isn’t enough shelf life left for its business model or because produce doesn’t look ‘pretty.’”

Brecht points out that in current practice, those rejected commodities could be resold to another buyer at a lower price.

“The definition of shipper is so ambiguous and the definition of a shipper’s responsibility is also very vague.”

— LEONARD (BUD) RODOWICK

Increased cargo claims and insurance premiums will result if the FDA doesn’t change the rules, according to T.J. England, Vice President and General Counsel at C.R. England.

As the rules are written now, “food would be considered adulterated simply based on the failure of a carrier or other party to conform to requirements of the proposed rule, such as mandatory precooling and maintaining temperature within specific shipper guidelines, regardless as to whether the food is actually damaged or unsafe,” he said in comments he wrote for the company and submitted to the FDA.

Mandated training for drivers and other employees also is causing concern.

“I came back from a meeting and told the president of my company that we’re going to have to train the drivers,” according to Jim Gray, Marketing Manager of K & J Trucking and Vice Chairman of the IRTA Board. “But it is so nebulous. I just really don’t know what we’ll have to include in the training.”

Fellow IRTA Board member Matt Luckas, Vice President of Supply Chain Services at Hanson Logistics, echoes the frustration over uncertainty. “Do we train them on the requirements of our customers?,” Luckas asked. “The rules simply say we need to have

documented training in place.”

Not knowing exactly which customers are covered by the rules is another complication, he said. “If some customers are exempt from the rules and others aren’t, do we have to have multiple processes in place?” Another concern is that Hanson Logistics might be covered not only under the carrier regulations, but also might be considered a shipper during warehousing activities.

“My concerns with all of this revolves around not knowing,” Luckas said. “Virtually none of this is defined and in the transport world things are usually defined very clearly.”

Cleaning equipment is another area of huge uncertainty, Brecht said. “The proposed rules said equipment must be designed to be adequately cleanable. Well, how clean is clean? Does the FDA mean visibly clean, microbiologically clean, steam cleaned or just rinsed out?”



The thing I’m championing the most is that we should be brokering some honest dialogue with carriers, equipment manufacturers and shippers. We should all be in a room and talk to each other.”

— BUD RODOWICK, THERMO KING

No matter what standard is used for cleaning, doing so after each load brings possible conflicts with environmental laws, according to comments submitted by the GCCA.

“Container cleaning and ‘sanitizing’ also raises the issue of local, state and federal water use and water drainage/run-off issues,” according to the GCCA comment submission. “In many jurisdictions, carriers are prohibited

from washing their trucks because of local regulations designed to protect from water runoff and water quality issues. This places carriers in the position of having to choose which regulation to follow.”

IRTA Chairman Chris Mnichowski, President of CTI Freight Systems Inc., says implementation of the rules will result in other choices being made.

FDA SIGNALS WILLINGNESS TO CHANGE

The Global Cold Chain Alliance (GCCA) and some of its member companies weren’t alone in urging the Food and Drug Administration to make substantial changes to proposed rules for safely transporting food. Of the 155 comments submitted by a variety of transportation, food and consumer organizations and companies, virtually all pointed out changes that need to be made before the rules go into effect as part of the Food Safety Modernization Act (FSMA).

The FDA would not comment on the record about possible changes but has given several signals that the agency will make revisions to the proposed rule-making. In public hearings held during the spring around the country, FDA officials acknowledged the need for at least some tweaking of the rules.

In mid-September, the FDA released revised rules on four separate parts of FSMA – produce safety, preventive controls for human food, preventive controls for animal food, and the foreign

supplier verification program. Although there is no guarantee that the transportation portion also will be revisited, the revised rules are an indication the agency is open to change.

Agency officials did caution the industry and consumer groups not to expect an extended period of time in which to comment on the rules beyond the initial 75 days. A federal appeals court has set strict deadlines for when the FSMA regulations must be in place and threatened agency officials with contempt citations if the mandates are not met.

The implementation deadlines set by the court range between August 30, 2015 and March 31, 2016, when the final rule will be published.

“If revised rules come out on sanitary transportation, we need to be able to comment quickly,” said IRTA Board Member Leonard “Bud” Rodowick. “That’s one of the reasons carriers, warehouse companies and their customers should be in a room together talking about all this now.”

The agency also indicated it might step back from proposals to impose user fees to implement and enforce the new law. The agency estimates it will need a budget increase of \$450-\$600 million to fully implement the law.

But instead of requesting that amount in additional funding from Congress, the FDA has instead asked Congress for the authority to collect \$255 million from food and transportation companies to impose new or higher user fees for items such as facilities registration and inspection fees and on import inspections.

After user fees were rejected for a fifth straight year, a group of members of the U.S. House of Representatives wrote to the FDA and asked that user fees not be included in next year’s budget request and that the agency instead ask for a straight budget increase.

The agency “got the message on fees,” according to Michael Taylor, the FDA Deputy Commissioner for Foods and Veterinary Medicine.

“In this industry we all want to move food in a safe and efficient manner,” Mnichowski said. “But as a trucker I’m very rarely allowed on a dock when a truck trailer is loaded anymore. Not having the driver on the dock is more efficient and safe, but it is not logical for me to accept responsibility and liability for things I have no control over. I’m not willing to take certain risks, so I will make sure I have a side contract that clearly leaves this to the shipper or receiver.”

C. R. England told the FDA that its cost estimates are way too low.

“The first year cost estimate of \$149.1 million (to the industry as a whole) appears to be largely underestimated when the requirements are considered,” the company said in comments submitted to the FDA.

The comments submitted by the carrier said the costs will include training, recordkeeping, new recording equipment, higher fuel and equipment costs to meet precooling requirements, higher insurance costs, higher cargo claims, and the cost of cleaning equipment.

T.J. England said taken as a whole the rules create costly and burdensome regulations primarily for semi-tractor trailer trucks, which is



Container cleaning and sanitizing required under the proposed rules may conflict with local, state and federal water use and water drainage/run-off issues. (Photo courtesy of MTC Logistics.)

the segment of the food delivery supply chain that actually appears to be getting it right without any regulation whatsoever.

Corey Rosenbusch, President and CEO of GCCA, pointed out to the FDA that although

the rules are labeled as transportation-related, they will also affect refrigerated warehouse companies as well.

“One of the unique aspects of the third party logistics industry is the fact that our members very rarely take ownership of the food product that is being stored, handled or transported,” he said. “The proposed rule does not seem to adequately recognize this situation and how responsibility flows through each step of the supply chain. This is particularly important when determining who the ‘shipper’ will be for purposes of the rule.”

“The clock is going to strike 12 very soon and we aren’t going to be ready,” Rodowick said. “The thing I’m championing the most is that we should be brokering some honest dialogue with carriers, equipment manufacturers and shippers. We should all be in a room and talk to each other.”

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ENERGY MODELING RECOMMENDATIONS OPEN Door to LEED Certification

Guidance increases access to energy credits for cold storage facility owners.

By Sheryl Jackson

More than 54,000 projects representing more than 10.1 billion square feet of construction space participate in the Leadership in Energy and Environmental Design (LEED) green building certification system. The reasons for participation in this voluntary program vary, but the benefits include long-term energy cost savings as well as demonstration of values and a commitment to sustainability and the environment.

While there are cold storage warehouse owners who are interested in LEED certification, there are barriers that have made it

difficult because the guidelines that apply to manufacturing and warehouses do not take the unique factors of cold storage facilities into

account, says Jake Stefan LEED AP Building Design + Construction, Vice President of ARCO Design/Build in Atlanta, GA. “For example, one pre-requisite to improve air quality within the work environment is to have outside air circulated into occupied air space,” he says. “This does not work when the occupied space is a freezer.”

The most significant category for certification—energy—requires a building owner to demonstrate how much more efficient the new building is compared to a baseline energy model created for the project. Because the U.S. Green Building Council (USGBC) guidelines used to create the model are based



Visit www.gcca.org/resources/white-papers-reports/energy-modeling-guideline/ to download *Energy Modeling Guidelines for Cold Storage Facilities*

on warehouses with dry storage, refrigerated warehouses must project energy efficiency on the non-refrigerated areas of the warehouse only, Stefan explains. No matter how great the energy-use improvements are throughout the building, if savings are calculated only on the non-refrigerated portion of the building, it is difficult to reach the savings threshold required to capture energy credits, he adds.

Because energy credits represent almost 20 percent of the points that can be earned toward LEED certification, members of the IACSC-IARW Construction/Codes Committee developed recommendations for energy model engineers to use and interpret as the minimum baseline building for a refrigerated warehouse—to include all areas of the building. “These recommended guidelines provide a reference point that we’ve never had before,” explains Stefan.

Not only will the modeling guidelines make energy points more accessible to cold storage facility owners, but the clarity of the guidelines have the potential to reduce the cost of pursuing LEED certification, says Marcus Wilcox, PE, Chief Executive Officer of Cascade Energy. “Without clear guidelines for

refrigerated warehouses, the baseline system design and measures to improve efficiency were not clear. This made energy modeling more complex,” he says. “This complexity adds time and cost to the project.”

The USGBC is reviewing the recommended guidelines. At this time, they have unofficially allowed them to be used as a reference document, says Stefan. “With this, they have specially requested that when the project is registered as a building for which LEED certification will be pursued, we must indicate that we will use the *Energy Modeling Guideline for Cold Storage and Refrigerated Warehouse Facilities* to produce our baseline model.” Indicating an alternate model guideline at the time of registration helps to ensure the USGBC reviewers reference the appropriate document throughout the process.

Why Pursue LEED Certification?

With a significant portion of the LEED guidelines focused on energy efficiency, the financial benefit of implementing recommended strategies is obvious. In fact, many owners pursue energy efficiency even when LEED is not part of the picture. There can be, however, a number of other benefits including market differentiation, improvement of work environment, and recognition as a responsible corporate citizen.

Although a cold storage facility owner may not significantly increase market share just by achieving LEED certification, it might prove beneficial as more food industry companies



Solar tubes placed on the rooftop collect sunlight and transfer it to fixtures that look like fluorescent lights in office spaces below and are more energy efficient than skylights. (Photo courtesy of ARCO Design/Build Inc.)

adopt “healthy living” and “green” values, says Stefan. “Companies like Whole Foods and Sprouts include environmentally sound business practices in their business model, so warehouse owners that adopt those values begin to set a foundation for those relationships,” he explains.

Other benefits of LEED certification can include tax incentives, municipal grants, and expedited permit reviews or fee waivers, depending on local or state government programs.

Because the initial investment in LEED construction practices is higher than traditional design, owners generally seek LEED certification “because they believe it is the right thing to do,” says Stefan. Over time, the return on investment (ROI) of energy savings strategy is positive, but seeking LEED certification for a refrigerated warehouse does require a commitment, he adds.

“On energy efficiency LEED upgrades there is a clear, measurable monetary savings,” points out Wilcox. For that reason, cold storage facility owners are more likely to agree to those measures.

“The challenge is gaining approval for measures that address employee and community quality of life because you can’t plug those numbers in a spreadsheet and see the ROI,” says Wilcox. For example, installing a bicycle rack and a shower employees can use after biking to work, earn credits toward certification, even though it is difficult to tie a direct economic benefit to the business, he says.

Other construction strategies such as recycling building materials, harvesting rainwater

LEED: A FEW FACTS

Leadership in Energy and Environmental Design (LEED) guides the design, construction, operations and maintenance of more than 50,000 projects worldwide, comprising 9.3 billion square feet of commercial and institutional construction space, and more than 117,000 additional residential units.

LEED certification is based on points earned in the rating system developed by the U.S. Green Building Council. Buildings earn points through the use of design and construction strategies that

increase performance, reduce waste and improve quality of life. Credits are grouped into six major categories: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, and Innovation in Design and Regionalization. Within these groupings, point values are assigned to specific strategies—the greater the number of points, the more likely the building will qualify for LEED certification. For more information about LEED certification, go to www.usgbc.org/leed.



Atrium-style windows above the low roof of a perimeter office allow natural light into the work environment, which along with painting the roof structure to match the sky, creates a more comfortable work environment by using LEED concepts. (Photo courtesy of ARCO Design/Build Inc.)

for landscape irrigation, use of permeable materials for parking areas and other storm water management strategies are additional ways to gain LEED credit points. “Overall, the construction of a LEED-certified building is not that complicated,” says Stefan. “The documentation of building practices and educating owners is the more complicated part of the process so it is important

for the team to include someone familiar with LEED certification.”

Future of LEED in Cold Storage

Although the energy model guidelines developed by IARW and IACSC will make it easier for refrigerated warehouses to earn LEED credits, Wilcox does not anticipate a rush of owners registering LEED projects. “The

majority of cold storage facilities still insist on a tangible and justifiable return on investment,” he explains. “The key is to balance smart financial investment with practical and visionary stewardship regarding the community and environment.”

LEED certification is a voluntary program but as more efficient energy, water management and environmental protection strategies are developed, tested and implemented, the cold storage industry should not be surprised to see some of the guidelines incorporated into building codes, says Stefan. “Codes are already stricter on energy efficiency and as we improve efficiencies ourselves, we raise the bar on ourselves,” he says. “Whether an owner pursues LEED certification or not, the industry is being dragged along toward a greener, more efficient environmental consciousness.”

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FITS AND STARTS DEFINE PHILIPPINE COLD CHAIN

Plentiful produce but rural logistics and market problems abound.

By Karen E. Thuermer

The Philippines is best known as a tropical archipelago encompassing 7,107 islands in the Pacific Ocean. The nation has a long history tied to the cold chain and the import and export of food.

For almost 400 years, when the Philippines was ruled by Spain up until the late 1800s, the Galeon trade brought imported goods from Mexico and Acapulco. Those ships sailed away with the famous abaca hemp, or Manila rope, and other commodities to other Spanish colonies.

“It was said that our national hero, Jose Rizal, enjoyed his sherbet and ice cream when in Manila as there was already an ice trade in the 1850s between the Philippines and the United States,” says Jojo G. Castro, a local refrigeration consultant hired by GCCA. “We already had ice plants built prior to the arrival of the Americans, and, in fact, an ice plant named Insular Ice

and Cold Storage Plant was built in Central Manila to cater to the American soldiers to help them endure the heat of the tropical Philippines.”

Mangos, Coconuts and More

Today, multinational companies account for nearly 100 percent of all fresh fruit and vegetable exports from the Philippines. According to the Cold Chain Association of the Philippines (CCAP), the country produces approximately 500,000 metric tons of bananas principally for export, and some



This meat slaughter house currently conforms to regulations.

150,000 metric tons of onions mainly for local consumption.

UN Food and Agriculture Organization (FAO) statistics peg the Philippines as the world's top pineapple producer and the second-largest producer of coconuts and bananas in 2010. It was also ninth in terms of global mango exports, capturing 3.6 percent of the global share.

The Philippines also exports significant quantities of fresh and processed tropical fruit products as well as coconut oil. In fact, the Philippines is the largest producer of coconut worldwide after Indonesia, although exports have fallen over the last decade.

"All of these products require cold chain support," says Anthony S. Dizon, CCAP President.

To increase the country's mango exports, the Philippine Department of Agriculture is planning to open up new markets in Europe and North America to take advantage of the projected increase in global demand. Hong Kong and Japan are currently the main destinations for Philippine fresh mangoes, accounting for 86 percent of exports. Other existing markets are the US, Singapore, Germany, Malaysia, New Zealand and Canada. South Korea, the Netherlands and the Middle East are counted among emerging markets for the fruit.

Philippine mangoes are considered to be among the world's finest and are the third most important fruit export for the country

based on export volume and value, following banana and pineapple.

"The mangoes are awesome," says Patrick Buenbrazo, Project Manager for Coldbox Builders based in Vaughan, Ontario. "Because of the lack of cold storage facilities, however, the mangoes are not contained properly to ship them to different nations," Buenbrazo says. "Refrigerated trailers are needed to keep them fresh."

In June 2014, Buenbrazo, along with Coldbox Builders President Marko Dzeletovich, P.Eng., former Richmond Cold Storage Executive Patrick Hughes and GCCA President and CEO Corey Rosenbusch, traveled to the Philippines on behalf of the World Food Logistics Organization (WFLO), to conduct a cold chain assessment of the Caraga Region of Mindanao. The assessment was funded by the USDA-financed Philippines Cold Chain Project (PCCP). One of the key objectives of the PCCP is to attract both foreign and local members of the private sector to partner with local and federal government agencies, as well as industry associations and cooperatives to invest in handling, storage and processing infrastructures and transport facilities for agri-fishery products utilizing the cold chain technology.

Poultry, Beef and Fish

The Philippines also produce large quantities of poultry, beef and fish with only a fraction being imported. Dizon stresses, however, that

approximately 50 percent of locally produced meat and poultry products are delivered to the consumer without passing through the cold chain.

"This phenomenon is largely an offshoot of the prevailing market culture of shopping for fresh produce from the wet market," he says.

Additionally, the fisheries industry accounts for some 400,000 metric tons of food supply volume. The sector is critical since nearly 70 percent of the Philippines' 110 million citizens live in coastal areas.

"In 2008, our country posted a total fish output of 4.4 million metric tons, the eighth largest in the world according to the FAO, which is why the fishery sector contributed 1.9 percent at current prices to our Gross Domestic Product (GDP)," Castro says.

More than 25 percent of the total export output was done through commercial fishing. "Still, a lot of our compatriots catch their fish using nets or tackles," Castro adds.

According to the Philippines Bureau of Fisheries and Aquatic Resources (BFAR), the fishing industry currently faces a number of challenges – one being unsustainable management. "This leads to greater poverty, more resource use conflicts over the dwindling resources, and lower contributions to the national economy," Castro states.

Directly contributing to this problem are



Bananas improperly stored because there is no cold chain at the port.

depleted fishery resources, degraded fishery habitats, intensified competition for resources, unrealized potential for aquaculture and commercial fishing grounds, uncompetitive products, and post-harvest losses.

“These causes are directly traceable to the institutional constraint of inadequate fishery management systems and structures caused by the limited management capability of local government units (LGUs), non-government agencies (NGAs) and local communities; inadequate and inconsistent fisheries policies; and weak institutional partnership,” Castro explains. “Based on these challenges, problems and causes, it is imperative that institutional constraints are given priority and immediately addressed to help attain sustainable development in the fisheries sector.”

Cold Chain Needs

Pat Hughes, consultant at Patrick Hughes Ltd and WFLO International Cold Storage Operations Specialist, found that the current state of the Philippines’ export cold chain to be “nascent and struggling to catch up.”

“The national government has recently begun making changes to cold chain regulations, however the infrastructure needed to support the cold chain industry is still lagging,” he observes. “As a result, tactical uses of the supply chain, such as specific businesses or particular products, have developed local cold chains for their own use.”

Fresh and safe food is critical to this country. The Philippines is home to 100 million people and is the seventh most populated nation in Asia and the twelfth most populated in the world.

While the Philippines may be regarded as a newly industrialized country that is transitioning from an agricultural economy to one based more on services and manufacturing, an adequate cold chain is critical to feed such a large population and sustain its export/import potential.

Rosenbusch sees the nation as challenged largely because of its archipelago of islands.

“This creates a logistical nightmare when you’re trying to move food product,” he says.

Rosenbusch, like the others, was part of a group that conducted the cold chain

assessment in the Caraga region of the Philippines. That region is regarded as one of the most impoverished in the country, but has a significant fisheries industry and the potential to grow high value fruits and vegetables and get that product to market – particularly to Manila where many of the consumers are.

“The infrastructure there is very not sophisticated,” Rosenbusch recalls. “In many cases, it’s dated, utilizes energy inefficiently, and does not take proper food safety into consideration.”

In fact, a report generated from the tour states that out of the three government-managed slaughter houses visited, none could provide evidence of Sanitation Standard Operating Procedures (SSOP). Sensory evidence suggested, “cleaning processors were not in place.”

Conversely, two private slaughterhouses visited indicated very high standards that actually exceeded Philippines’ national standards. Consequently, the group concluded that the management of these private companies was more interested in providing higher

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quality products to a market segment serving much more discerning customers.

“Also, though the government has begun making changes to regulations concerning proper meat and perishable product handling, a significant amount of regulatory change must take place if the Philippines wish to compete with other ASEAN countries,” Hughes suggests. “A commitment to educating children in schools through various food safety programs, as well as a commitment to regulating food safety laws will continue to be an important issue and need further support if the Philippines is to become successful at managing and maintaining its perishable food supplies.”

Logistics and Market Challenges

Hughes points out that while some locations are still struggling from last year’s Typhoon Haiyan, larger regional urban transportation hubs such as Leyte, Manila, and Davao City have developed port and road infrastructure, including seaports and airports. “In these areas the cold chain is fairly robust and is similar in design to what most Westerners expect,” he says. “This infrastructure dwindles rapidly in rural areas, however.”

The Philippines is home to many seaport facilities, and trucks cover the whole archipelago with good roads – even to Mindana, the second largest and southernmost major island in the Philippines. Cebu, Davao and General Santos are equipped with international category ports both for imports and exports.

During the tour, Hughes found electricity limited, roads damaged, and a significant lack in seaports in the outlying areas. Consequently, most of the products brought into these areas come by air travel, and small, limited trucks that are generally not refrigerated.

Power outages present further challenges. “Power is not sufficient,” Buenbrazo states. “There are brownouts, and the availability of power is lacking.”

One example is the Port of Nasipit where a coal-powered station exists on the other side of the channel. “There’s ample agricultural land around the port, so there’s the ability to grow mangos, bananas, watermelons,” he adds. Adding to its challenges, the port’s entrance is in the middle of town and often blocked.

The most utilized means of cold chain transport in the Philippines are either via refrigerated (reefer) containers, which are loaded on inter-island vessels that are



A port facility ideally suited for upgrade to cold chain usage.

equipped with plug-in facilities, or by ferry where reefer vans hop from island to island on roll-on roll-off (ro-ro) vessels to deliver smaller volume cargo to specific destinations. “This is the case specifically for those islands not serviced by commercial shipping vessels,” Dizon explains.

But cold chain service is non-existent on the local railroad, and rail service is limited to Luzon, which is the largest island and includes the main ports in Manila, Subic and Batangas.

“Unfortunately, our railroads were not given priority by the succeeding government,” Castro comments.

Consequently, the cold chain industry in the Philippines, which currently has a holding capacity of approximately 300,000 metric tons, is at a delicate equilibrium between capacity and demand.

“At this point, there is good potential for the industry to grow, given that consumption levels are currently low (approximately 20 kilos per capita for chicken, less than 10 kilos per capita for beef) and that economic development will enhance purchasing power,” comments Dizon. Furthermore, as consumer preference shifts from fresh to frozen, this represents a sizable market volume that would require cold chain support.

“Admittedly, there are areas in the country that are still beset with the lack of cold chain infrastructure due either to unavailability of

economies of scale or to other factors such as insufficient power supply,” Dizon says.

Sorting is also an overall issue. “Farmers are not sorting their harvest into quality classes,” Dzeletovich remarks. “If they had facilities or good post harvest techniques for separating and storing good product for when there is greater demand, they could get a better price.”

Today, however, most product does not go through the cold chain, but travels to a traditional wet market. “So you are looking at increased losses—typical of what you see in emerging or developing economies,” Rosenbusch says.

Compounding the problem is a market culture that prefers fresh over frozen, particularly in rural areas where most households do not have refrigerators. “There is also the perception that products that pass through the cold chain are more expensive,” Dixon adds. Consequently, about 50 percent of fresh/perishable food is delivered to consumers without the benefit of the cold chain.

In visiting markets, Dzeletovich found that that most people do not trust cold meat and believe warm meat is fresh meat. “They believe that cold meat is old or near spoilage,” he says. To ensure freshness, shoppers feel and smell the meat. “They poke, squeeze and touch it,” remarks Buenbrazo. “If they don’t want it, they put it back. We saw that even in supermarkets.”

Yet overall, shoppers in the larger cities, such as Manila, maintain that cold meat is good. “Their mentality is similar to ours,” Dzeletovich says.

Another problem is ice, which is used very sparingly to cool fresh fish. Only a few chunks are used. To say the least, anyone selling ice in rural areas has a corner on the market. But Dzeletovich recalls going to one facility where the ice making equipment was “left to go to hell.”

“People are desperate for ice,” Dzeletovich says. “But they need higher standards and quality ice. Because it’s so hot, windows and doors are open at most buildings. This practice does not keep animals out of facilities like dogs, birds, and rodents.”

Evolutionary Changes

But evolutionary changes are in the winds brought on by the mushrooming of mall chains that bring together the retail outlets, quick service restaurants and department stores under one roof. “This has developed a shift in consumer preference, largely influenced by the air conditioned comfort and convenience afforded by these consolidated shopping centers,” Dizon says.

Metro Manila, Cebu, and Davao have many supermarkets, specialty cold stores and department stores vying for consumer attention. “These include the SM Group,

Robinsons, Puregold, Metro, and Gaisano,” Castro says. “Transport and storage is already advanced as these major supermarkets have their own cold stores.”

Rosenbusch maintains that food safety or cold chain standards will increase opportunity and add value. “The Philippine government is starting to develop its own policies for food safety,” he says. “What is fascinating, however, is they are trying to create two separate standards: one for domestic product, such as slaughter for local market, and one for commercially manufactured or imported product that might be going to high-end restaurants.”

Those in the industry, particularly the CCAP, argue that this is a double standard. But political forces are having a dramatic impact because local small-scale meat producers do not meet the same standards for the wet market and do not want the cost of that compliance.

On other hand, people say that shoppers at traditional markets should have the same rights to safe food as others that do not shop there. This is creating a dynamic battle that is going to take shape in the coming years.

“The Philippine government is cognizant of the importance of the cold chain as a valuable component of the thrust towards food sufficiency and food safety, as well as the development of the agribusiness sector,”

Dizon remarks. Specific incentives are available for investors in cold chain infrastructure as support for food production.

There are also good opportunities for the Philippine food processing industry emanating from the natural demand for Filipino food in various parts of the world with sizable Filipino communities. Additionally, the forthcoming ASEAN Economic Community represents a huge consumption market for Philippine food products assuming they are competitive in quality and price.

Most importantly, inherent market characteristics may provide opportunities for partnership between Philippine and U.S. companies. “Classic examples would be contrasting preferences in chicken consumption, such as dark meat vs. white meat, and preferences for products like meat offal and fish heads,” Dizon says. “Ostensibly, these could serve as starting points for prospective investment interest on the part of GCCA members in the Philippines.”

The Public-Private Partnership Center of the Philippines has come up with terms of reference for the engagement of transaction advisors for the establishment of cold chain systems covering strategic areas in the Philippines. “This is the beginning of long overdue attention by our Department of Agriculture on the perennial problem of cold chain facilities all over the archipelago,” Castro says.

Regional cold chain routes have been identified as follows: The Benguet-Manila Route, the Cagayan-Manila Route, the Visayas Inter-Island Connection and the Mindanao-Cebu-Manila Route. There are 32 target sites to develop project components for consolidation/trading centers; pre-cooling and packing stations for fruits and vegetables; fishery cold chain centers; ice plant and cold storage buildings; onion cold storage with a total estimated budget cost of P1.125 billion (approximately US\$25.57 million).

“Of course, everything begins with a plan and getting experts will ultimately benefit our marginal farmers and fishermen, but how long can they wait?” Castro asks. “Still it is the right step at this time. When the structured development of a plan for a cold chain project is done, the government will invite investors to come in and participate.”

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

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Watermelons being handled in less than ideal conditions.

MEMBER NEWS

NEWS FROM MEMBERS OF GCCA CORE PARTNERS

A M KING held its 13th Annual “24 Hours of Booty” charity cycling event. A group consisting of A M King employees and friends of the company joined hundreds of other cyclists to split up almost 400 miles, raising thousands of dollars for cancer research and survivorship. The company also hired Zach Brown, a veteran of the design and construction industry, as a Business Development Manager.



BALTIMORE AIRCOIL COMPANY announced a price increase of up to 3 percent for all open and closed circuit cooling towers and accessories manufactured in North America.



BELLINGHAM COLD STORAGE will increase its Whatcom County freezer space this winter by 6,250 pallet positions at its Orchard Drive campus.



BITZER is building a new corporate headquarters in Sindelfingen, Germany. In its 80th year, the company is sticking with its roots and building a new headquarters close to its current head office just outside of Stuttgart, Germany.

INTERSTATE WAREHOUSING recently achieved a level 2 Safe Quality Foods (SQF) certification at its Chicago area warehouse in Joliet, Illinois. The Joliet building becomes the fourth Interstate Warehousing facility to earn this certification.



KINGSPAN INSULATED PANELS invested \$10 million into the Benchmark by Kingspan North American business. This investment will include state-of-the-art foam-in-place panel manufacturing and increased capacity to meet growing demand. The company is also running a Generation Kingspan (GenK) Student Architectural Design Competition, where it provides students with a platform to showcase their work and win cash prizes.



LOS ANGELES COLD STORAGE has received British Retail Consortium (BRC) recertification for meeting the Global Standard for Storage Services. The BRC audit certified Los Angeles Cold Storage as meeting the BRC Global Standard for the storage of meat, seafood, poultry and chilled juices.



MERCHANDISE WAREHOUSE has launched a new website. The simplified and streamlined site highlights a number of videos, customer testimonials, facility tours, fast-paced “trailers” and employee-featured movies. www.mwindy.com.



NOVA COLD STORAGE is building a new \$9.5-million storage facility at the Atlantic Gateway-Halifax Logistics Park. Nova Cold is

expanding to accommodate its frozen-fish and processed-food storage business, which serves processors, exporters and freight forwarders. The 60,000-square-foot cold-storage trans-loading facility will house 5,500 pallets.



PARTNER LOGISTICS has signed a two-year contract with global bakery supplier Dawn Foods to manage storage for their range of frozen confectionery products at its super-sized frozen food warehouse in Wisbech, Cambridgeshire, United Kingdom.



PRIMUS BUILDERS delivered the USDA room and offices at AGRO Merchants’ Charleston facility yesterday, ensuring AGRO’s official status as a certified meat and poultry import/exporter. The area surpasses the strict regulatory performance standards and passed detailed inspections by USDA officers. This area is the first of multiple phases which will include the addition of state-of-the-art blast freezing capabilities.



(Member News continues on page 31)

ASSOCIATION NEWS

NEWS ABOUT GCCA CORE PARTNERS

(Member News continued from page 30)

RYAN COMPANIES US was selected to provide architecture, engineering, and construction expansion services for a Save-A-Lot Distribution Center in Muncie, Indiana. The \$2.6 million project, which is on target to be completed by December 2014, will add 15,000 square feet of freezer space to the existing 320,000-square-foot distribution center.



UNITED STATES COLD STORAGE is opening a warehouse in Salt Lake, Utah, USA. It features 5.2 million cubic feet of refrigerated storage (22,850 pallet positions) and another 1 million cubic feet of food-grade dry storage (4,084 pallet positions). This flexible facility will accommodate products in four distinct freezer, refrigerated, and dry storage areas. The company is also expanding its newest facility in Turlock, California, USA. The expansion will bring the facility to 13.3 million cubic feet of warehouse space and add an additional 17,000 pallet positions and 15 dock doors.



U.S. GROWERS COLD STORAGE INC. awarded the 3rd Annual, Sam Perricone Memorial Scholarship to Luis Hernandez. Company Owner and President Angelo Antoci (left in photo) presented the scholarship.



VERSACOLD LOGISTICS SERVICES appointed Michael Spence to the position of Chief Financial Officer and Joe Sammon to the position of Vice President Engineering. ☎

The 2014 **GCCA** Latin American Cold Chain Congress took place October 6-7 in Cartagena, Columbia. More than 100 cold chain industry professionals participated, representing nine countries including Bolivia, Ecuador, Peru, Mexico, Colombia, United States, Spain, Guatemala and Brazil. The educational programming focused on a variety of topics including: global standards for food safety, importance of a strong port system, energy savings, and ammonia refrigeration systems.



In response to member feedback, **GCCA** upgraded its e-commerce site. The new *Member Portal* has a new look and improved event registration, expo registration, and directory listing update tool. In addition, the portal features a new online store where you can purchase publications and other merchandise. Under “My Account,” you can also customize your online experience by adding your interests and/or language preferences. You can also add your areas of expertise to be considered for speaking or consulting opportunities.



The third quarter of 2014 brought significant movement on potential regulatory changes related to the Executive Order on Chemical Safety and Security. The EPA released a Request for Information (RFI) related to potential changes to the Risk Management Program (RMP). The RFI contains policy considerations similar to those raised by OSHA in its RFI on Process Safety Management. Also connected to the Executive Order was an Advanced Notice of Proposed Rulemaking for the Chemical Facilities Anti-Terrorism Standards program that was released by the Department of Homeland Security on August 18th. **GCCA** is working with IIAR and other likeminded partners to response to these proposals.



IARW Chairman Tom Poe represented the association at the 82nd New Zealand Cold Storage Association Annual Conference, which took place August 17-19 in Wellington and the 2014 Refrigerated Warehouse & Transport Association of Australia’s (RWTA)

National Conference and Exhibition, held August 20-22 in Cairns.



Registration is now open for the 52nd **WFLO** Institute and 2nd Graduate Institute. Following the success of the first Graduate Institute last year, we are continuing this program that focuses on two key objectives. First, attendees will be able to proactively respond to a customer by completing a customer profile, creating a pragmatic pricing strategy, and developing implementation considerations. Second, attendees will be able to articulate their personal leadership philosophy. **WFLO** was awarded a grant by USAID and the Save the Children Federation, Inc. to evaluate postharvest capacity building activities in Ethiopia, Uganda, and Tanzania. In addition, WFLO, in collaboration with The People’s Group, was awarded a grant to conduct a reverse trade mission for delegates from China involved in the cold chain sector.



The 34th **IACSC** Conference & Expo, held November 6-8 in Boca Raton, Florida saw over 200 participants and a sold-out expo with a record number of companies exhibiting. The educational programming included the brand new Construction Café – a series of interactive, roundtable discussions hosted by IACSC Board and Committee members. Topics for education sessions included an overview of the Food Safety Modernization Act (FSMA) and its impact on the design of food facilities, small charge ammonia systems, and low oxygen fire protection.



IRTA hosted its third Cold Chain Executive Connection (CCEC) of the year in Anaheim, California on October 16. This exclusive roundtable meeting was held in conjunction with the Produce Marketing Association Fresh Summit Convention & Expo. CCEC discussions focused on topics including driver shortage, maintaining temperature integrity during multi-stop deliveries, broker-customer relationships, and many others. The next IRTA CCEC will take place in Miami, Florida in December 2014. ☎

NEW MEMBERS

NEW MEMBER COMPANIES OF GCCA CORE PARTNERS



IARW-WFLO WAREHOUSES

Almatrans, S.A.S.

Santo Domingo, Dominican Republic

Atlantic Coast Freezers, LLC

Vineland, New Jersey, US

IFS Group SAC

Lima, Peru

Reparación Integral de Contenedores S.A.P.I. DE C.V.

Veracruz, Ver. C.P., Mexico

Subzero Logistics and Cold Storage Warehousing

St. Louis, Missouri, US

Best Foods Fresh Farms Ltd.

Lagos SW Ikoyi, Nigeria

Frio Frimac S.A.

Floridablanca, Santander, Colombia

IARW ASSOCIATES

Fike Corporation

Blue Springs, Missouri, US

Red Pointe Roofing

Orange, California, US

Shoppas Material Handling

Forth Worth, Texas, US

GCCA AFFILIATE PARTNERS

Associação Brasileira da Indústria de Armazenagem Frigorificada

São Paulo, Brazil

Georgian Logistics Association

Tbilisi, Georgia

New Zealand Cold Storage Association

Cherrywood, Tauranga, New Zealand



WFLO MEMBERS

Cargill Transportation and Logistics

Aurora, Colorado, US

ColdEx

Mahipalpur Extn. New Delhi, India



IACSC MEMBERS

Consolidated Construction Co., Inc

Appleton, Wisconsin, US

Evapco, Inc.

Westminster, Maryland, US

Fike Corporation

Blue Springs, Missouri, US

Groom Energy Solutions

Salem, Massachusetts, US

Koldware Industries (Private) Limited

North Nazimabad, Karachi, Pakistan

PrimeComposite Flooring Systems-Rabine Group

Schaumburg, Illinois, US

Star Refrigeration

Glasgow, United Kingdom

Red Pointe Roofing

Orange, California, US

Therm-L-Tec Building Systems

Basehor, Kansas, US

Wieland-Davco Corporation

Celebration, Florida, US



IRTA

Approved Canadian Transportation Inc.

Concord, Ontario, Canada

Best Foods Fresh Farms Ltd

Lagos SW Ikoyi, Nigeria

CoilCare, LLC

Dousman, Wisconsin, US

ColdEx

Mahipalpur Extn. New Delhi, India

Datamyne, Inc.

Miami, Florida, US

Frio Frimac S.A.

Floridablanca, Santander, Colombia

Northwest Naturals

Bothell, Washington, US

2014-2015 CALENDAR UPCOMING EVENTS

NOVEMBER 6-8, 2014
34th IACSC Conference & Expo
 Boca Raton, Florida, United States

NOVEMBER 13, 2014
GCCA Webinar: Managing Substance Abuse in the Workplace
www.gcca.org

NOVEMBER 21-22, 2014
Indian Cold Chain Expo (ICE)
 Ahmedabad, Gujarat, India

DECEMBER TBD, 2014
IRTA Cold Chain Executive Connection
 Miami, Florida, United States

FEBRUARY 5-8, 2015
2nd WFLO Graduate Institute
 Atlanta, Georgia, United States

FEBRUARY 7-11, 2015
51st WFLO Institute
 Atlanta, Georgia, United States

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

OCTOBER 1-2, 2015
ECSLA Fall Cold Chain Logistics Conference
 Windsor, Berkshire, England

OCTOBER 19-21, 2015
GCCA Latin America Cold Chain Congress: Mexico
 Guanajuato, Mexico

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

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COOL PEOPLE

PROFILING INFLUENTIAL PEOPLE CONNECTED TO THE COLD CHAIN INDUSTRY



I thought if we could emulate the transit of a long-haul truck utilizing the railroad networks then the produce industry would at least have capacity coming out of the two largest growing areas, the Pacific Northwest and California's Central Valley."

ANDREW POLLAK

Owner/CEO
Railex

Andrew Pollak is the Owner/CEO of Railex and the recipient of the 2014 IRTA Executive of the Year Award. The award recognizes an individual in the refrigerated transportation industry who has made a significant contribution to the industry by fostering innovation, resolving industry issues or improving the industry's image and efficiency.

CF: (COLD FACTS) You identified a specific intermodal need you believed the industry had. Can you describe that need?

ANDREW POLLACK: Back in 2005, our country was going through high diesel prices and the beginning of trucking regulations that would make it difficult to keep the transportation capacity needed for the fresh industry. We felt the crunch in my produce business. However, for the previous 10 years we utilized the conventional railroad boxcar system to move our product from the Western United States to my facilities on the Eastern Seaboard. I thought if we could emulate the transit of a long-haul truck utilizing the railroad networks then the produce industry would at least have capacity coming out of the two largest growing areas, the Pacific Northwest and California's Central Valley.

CF: How does Railex meet that need?

AP: We negotiated a rail service agreement between two Class 1 rail carriers; Union Pacific in the West and CSX in the East. We would build or load a unit train of refrigerated railcars from one origination location in the west and have them move it to one destination location in the east. We needed to have enough track to efficiently move blocks of rail cars and combine them into one unit train. We also needed buildings on each side large enough to load enough rail cars in a relatively short time frame; and multiple temperature zoned coolers to place the fresh inventory in its optimal environment. The rail service would run at least once per week and the rail transit would be five days, as fast as a single driver truck. In 2006, we had built our Wallula, WA facility and our Schenectady, NY location and began running a unit train in October 2006. In 2008, we opened our Delano, CA location and this year opened Jacksonville, FL. We now have two trains each week running from our western locations to our eastern locations.

CF: What's next for integrated intermodal transportation in the cold chain industry?

AP: I feel the benefit is in consolidation. Allow the railroad networks to move product on the long haul and control your distribution regionally by truck. Where Railex differs is the consolidation facilities. Commodities

can arrive from varying originations and can be mixed in one location to allow receivers to better control on-hand inventory as well as maximizing the shelf life of those products by having them shipped and stored in their optimal environment. I believe that is the value on the horizon.

CF: IRTA Chairman Chris Mnichowski calls you a true entrepreneur. What do you think is the most important skill set an entrepreneur should possess?

AP: Well that is very kind of Chris to say, I think an entrepreneur is a person who can look at an issue and say it can be done better. And then goes about trying to make it better. We looked to the future and executed a plan we believe in and have not wavered from that core thought. We have improved processes, added services, but the core thought has been the same from the beginning.

CF: What does the recognition of IRTA Executive of the Year mean to you?

AP: This has been a long road and we are not there yet. Being recognized by IRTA is a great honor and lets me and my company know that we are on the right path. ☺

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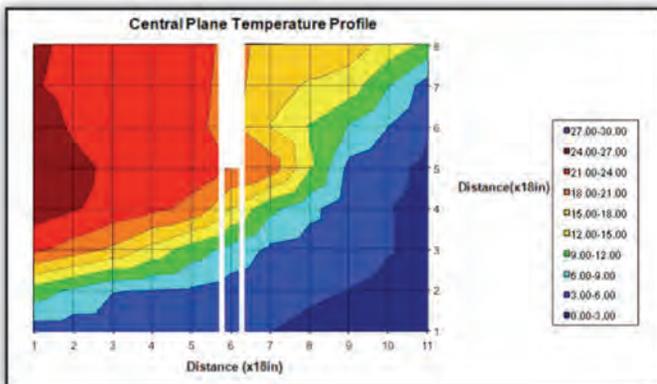
For more details about the CTS test results, visit www.hcrairdoors.com

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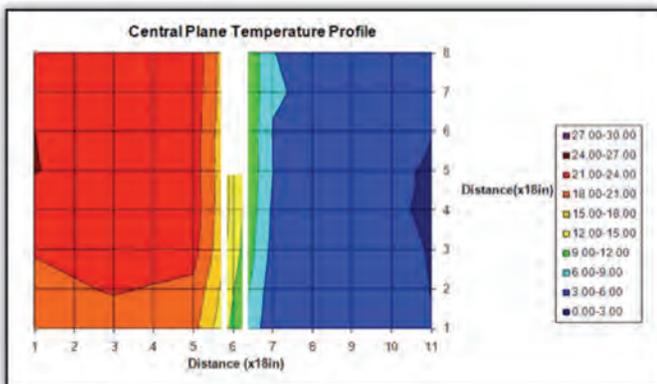
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*For details and the lab performance report visit www.hcrairdoors.com, contact your Jamison or HCR representative, or call 800-326-7700. Request the White Paper on the Evaluation of Horizontal Recirculatory Air Curtain Efficiencies – Cooler to Conditioned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



Temp profile: air door off

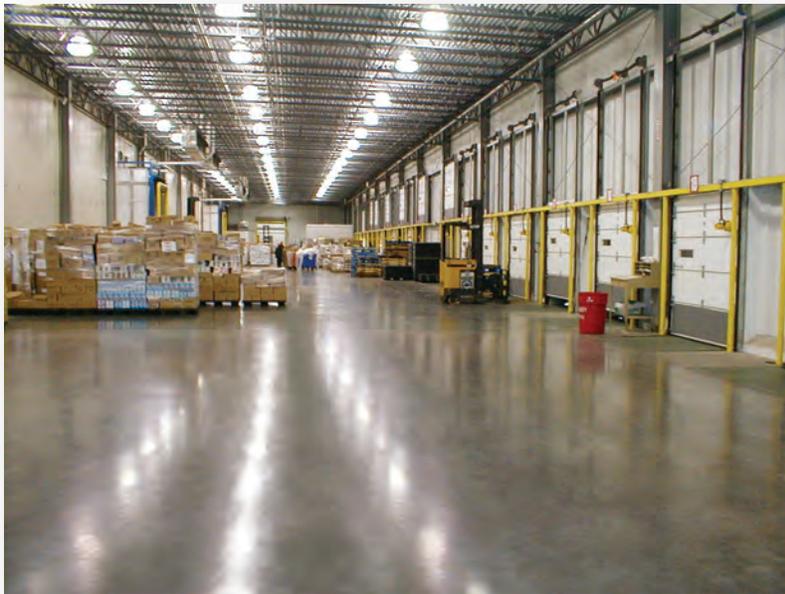


Temp profile: air door on

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