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SC Issues Plague Chem Industry

Like many other businesses, the chemical industry has suffered terribly from the supply chain and transportation crisis. Now all indications are that because demand is growing for their products, these problems will only get worse.

This has been driven by modal service failures, particularly in the freight rail industry. That is the conclusion drawn by the American Chemistry Council from a recent in-depth survey covering its chemical manufacturing members.

"For three consecutive quarters, companies reported that supply chain and freight transportation disruptions harmed their United States manufacturing operations," the council pointed out in a recent survey report.

"In addition to lost manufacturing and customer orders, companies reported that higher shipping rates were compounded by costly workarounds, including increased inventories, investing in additional rail cars, and committing additional resources to managing shipments."

Almost all (97%) of the chemical companies reported modifying operations due to supply chain issues and transportation disruptions and delays.

Most chemical producers (92%) said they have increased inventories of raw materials and supplies on hand in response to supply chain challenges. More than half (62%) of respondents said they have increased inventories of finished products.

About half of the chemical producers (52%) said they curtailed production due to inability to ship products to customers and many companies (35%) have had customers cancel orders because they are concerned their order will not arrive or will not arrive on time.

Transportation costs have increased across all modes over the past year for nearly all of the chemical producers, according to the ACC members who were polled.

Other costs arose from managing the service crisis. Many companies reported that they have dedicated significant additional resources and employed a range of strategies to work through these transportation challenges.

ACC members weren't shy about sharing how the changes have affected their operations:

- "Transportation is the worst that I have seen in my 30 years in the chemical industry."
- "International or domestic, rail or truck. All are worse service for more cost."
- "We are paying about 45% more in freight and fuel for worse service."
- "We are onboarding new partners both for transportation and raw material supply to help mitigate capacity issues. In addition, we have

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increased our manpower internally to help keep up with the additional pressures of a more volatile supply chain environment."

- "Logistics issues are impacting almost every aspect of our business."

- "We continue incur higher costs for bad or worse service, specifically on rail, ocean and trucking."

Most chemical producers reported conditions at ports and in ocean shipping are worsening or about the same. Since the fourth quarter of 2021, 33% of companies reported port delays and congestion have gotten worse, 48% said conditions are about the same, and 19% said they are improving. When companies were asked in March 2022, 55% reported worsening conditions.

As a result of port delays and congestion, nearly all companies using ocean shipping faced increased rates (87%) and longer transit times (95%).

Other business impacts in the second quarter included cancelled bookings (87%), increased demurrage/detention charges (82%), shortages or imbalance of shipping containers (76%), increased costs from diverting shipments to alternative ports (76%), higher costs due to rerouting (63%), shortages or imbalance of specialized containers (e.g., refrigerated containers, ISO tanks) (48%), and carriers restricting hazmat commodities (55%).

On the other hand, the ACC survey found easing of concerns related to trucking delays and capacity. Since 4Q 2021, 29% reported conditions had gotten worse, while 26% reported that conditions had improved and 45% reported no change.

When asked in March 2022, 55% reported conditions were worse and only 8% reported that conditions had improved. Also, there was no relief in terms of increased rates. Nearly all companies (98%) continue to report rising trucking rates.

Labor shortages are a growing challenge with 81% of companies reporting that this constraint has impacted their business, with 63% reporting longer transit times, and 65% citing additional delays for shipping hazardous materials.

"For ground transportation, lack of drivers- although improving – and bulk equipment is still impacting service levels," one respondent said.

Another reported, "Truck capacity is impacting our ability to respond to emergencies, where we would leverage trucking for faster shipments." Tank trucks in particular are a problem for some ACC members. "Tank truck shipments are extremely difficult to book, and we've had to rebook loads with customers numerous times. Tank truck cost has more than doubled," one said.

Railroads Are a Sore Spot

Companies that ship by rail are increasingly reporting that railroad delays and service challenges are worse.

Since 4Q 2021, nearly all (93%) reported conditions were either getting worse (46%) or were about the same (48%). Only a small number (7%) said that overall, rail transportation related delays/service challenges have improved.

A large number of rail users also reported longer transit times (90%), missed switches (66%), increased demurrage charges (59%), reduced service days (64%), and higher rates (59%).

In addition, 43% of those polled reported that they have chosen to add tank cars to their fleets because of freight rail service issues.

“Adding tank cars to address freight rail service problems was certainly a costly and less than ideal solution,” said Emily Sanchez, ACC’s director of economics and data analytics. “Such a large investment demonstrates a lack of confidence that freight rail problems will be solved anytime soon.”

Looking at the overall results of the survey, ACC President Chris Jahn noted, “There are some positive signs most notably in ocean shipping and trucking where policymakers have taken action, but it’s clear that we still have a long way to go before we turn the corner.”

He took note of rail reform bill introduced this summer to strengthen that ACC supports, which would strengthen control exercised by the Surface Transportation Board over the nation’s railroads but added that much more needs to be done.

“That fact is driven home by the continued deterioration of rail service and its negative impact on manufacturing,” Jahn. “We need more solutions from policymakers and urge Democrats and Republicans to act without further delay.”

Is IRE on Verge Of Cooling Off?

The industrial real estate market is showing signs of slowing after a period of unprecedented expansion, according to a recent NAIOP Industrial Space Demand Forecast.

The commercial real estate development association says that "amid lower pressure on global supply chains, increasing inventory carrying costs, a cooling economy and a decrease in the rate of ecommerce expansion, retailers and logistics firms have slowed the rate at which they acquired additional industrial space this year."

It reports that net absorption of industrial space in the first two quarters of 2022 was 151.2 million sq. ft., down sharply from 2021's record pace but still notably higher than in prior years.

According to NAIOP's projections, the still-hot industrial market will cool and the net absorption rate will continue to decline until it returns to the pre-pandemic trend.

Total net absorption of industrial space in the second half of 2022 is forecast to be 112.4 million sq. ft., and full-year absorption in 2023 is forecast to be 209.4 million sq. ft.

"On balance, there may be a leveling off in the industrial real estate sector that is a healthy rebalancing of where things should be when viewed through a long-term historical perspective," said NAIOP President Marc Selvitelli.

"The sector saw unprecedented growth that was accelerated by the pandemic and related supply chain issues. As those two situations unwind, we will see a more natural course of growth."

Because supply chain congestion eased in the first half of 2022, retailers and logistics firms have shown less interest in leasing or buying industrial space before it is needed, the trend that contributed to higher absorption in 2021, NAIOP observes.

However, the association says demand for new space still has the markets out of equilibrium, a trend likely to continue for at least several quarters.

Robot Market To Hit $9 Bil

The warehouse robotics market is expected to grow from $4.7 billion in 2021 to $ 9.1 billion by 2026, according to a new report issued by [CQ] MarketsandMarkets, a consulting firm that performs private B2B research.

The company said a few of the drivers of warehouse robotics market include: the expansion of the ecommerce industry, increasing funding from venture capitalists, rising need for enhancing the quality and reliability of warehouse operations, and growing adoption of warehouse robotics by small and medium enterprises.

However, factors such as high installation cost and lack of a skilled workforce are expected to restrain the market growth, the company holds. "The integration of Industry 4.0 with warehouse robots and technological advancements in autonomous mobile robots (AMR) are expected to create high growth opportunities in the warehouse robotics market," MarketsandMarkets observes.

It expects the AMR segment to witness the fastest CAGR during the forecasted period. The increasing preference for ecommerce shopping platforms and the growing need for enhancing the efficiency of warehouses have led companies to focus on automation of operations. Increasing affordability and ROI also are expected to drive this growth

The picking and packaging segment is estimated to hold the second largest market share in 2021. "With the growing popularity of online shopping, many ecommerce companies are implementing picking and packaging robots to streamline their operations and improve efficiency," MarketsandMarkets says.

The scope of the report covers detailed information regarding the major factors, such as drivers, restraints, challenges and opportunities influencing the growth of the warehouse robotics market. It also includes a detailed analysis of the key industry players, both manufacturers and customers

Call to Reassess Drivers & Pot

Oner way to address the truck driver shortage is to take a second look at the federal regulations governing their use of marijuana, argues NORML, which for decades has lobbied for the legalization of the drug at the state and federal levels.

A report earlier this year on the national drug and alcohol clearinghouse operated by the Depart of Transportation revealed that many drivers who had been taken out of service when they were found to have used pot later chose not to undergo the rehab required to allow them to return to driving.

DOT also has reported that between Jan. 1 and April 1, of this year, more than 10,000 truck drivers tested positive for past cannabis exposure That figure represents a 33% increase over the same period the year before.

In addition, the Federal Motor Carrier Safety Administration has reported that 89,650 commercial drivers are currently on prohibited status because of drug use and more than half of those drug test failures were for marijuana.

Earlier this year, Rep. Earl Blumenauer (D-OR) wrote to Transportation Secretary Pete Buttigieg urging him to change marijuana-related policies.

"Outmoded and unfair federal drug policies are out of step with reality and directly contribute to the trucking shortage crisis," he wrote: "Too many of the 2.8 million Americans who hold commercial driver licenses are not working because of past cannabis tests and the difficulty they face re-qualifying for duty."

NORML Deputy Director Paul Armentano said, "It is time for workplace policies – and federal workplace policies and guidelines in particular – to adapt to this new reality and to cease punishing employees for activities they engage in during their off-hours that pose no workplace safety threat."

Planning Course Offered Online

The Association for Supply Chain Management introduced a new Supply Chain Planning Certificate online training program.

ASCM says the program features 20 hours of educational content to help individuals build fundamental knowledge in supply chain planning, with a focus on integrating and synchronizing all planning levels within a company.

"The global supply chain has seen a multitude of disruptions over the past two years and companies are constantly searching for new ways to educate themselves and their staff to help thrive amid mounting challenges," said ASCM Chief Executive Officer Abe Eshkenaz.

"This program provides supply chain professionals the necessary knowledge to see the big picture and help decrease inventory and warehouse costs, improve efficiencies, minimize risk, and enhance responsiveness to shifts in demand."

ASCM said that after earning their certificate, participants will have the knowledge to trace the flow of planning from business plan to execution, link business strategy to company plans, interpret and manage the master production schedule, and to organize material requirement plans.

Students are expected to learn how to help advance sales and operations planning meetings; identify technologies to support synchronous planning; create a channel tree design for a distribution system; determine order and reorder points; and contribute to production and control activities.

The self-paced, online program targets entry-to-mid-level supply chain professionals looking to build on their current supply chain knowledge or get familiar with a critical supply chain function.

The association also said the course is a good fit for companies who are looking to enhance or streamline planning knowledge of employees. Participants also will have access to flashcards, video clips, practice questions and more before completing a comprehensive final exam.

Naloxone Urged for Workplaces

A drug administered through nasal spray that helps to reverse an opioid drug overdose is being recommended by public health officials for employers to keep on hand in most workplaces.

Called Naloxone (a/k/a Narcan), the government of Ontario mandated in June that the drug be kept available by employers in that Canadian province, where about 2,500 people died of opioid-related causes between March 2020 and January 2021 (30% of them were construction workers).

"By ensuring access to life-saving naloxone kits where and when our workers need them, our government is helping to protect more Ontarians struggling with addiction from preventable deaths and taking decisive action to address the challenges of the opioid crisis," said Michael Tibollo, associate minister of the provincial office of Mental Health and Addictions

In the United States 93,657 people died of drug overdoses in 2021, the Centers for Disease Control and Prevention (CDC) reports. Some of these overdoses involved methamphetamine, cocaine and prescription drugs, but most of the deaths (71,238) stemmed abuse of fentanyl smuggled across our southern border with Mexico.

"Naloxone is a critical tool for preventing opioid overdose deaths," researchers at the CDC point out. "Research has found that overdose deaths decrease in communities that provide naloxone with opportunities for overdose education."

The CDC stresses that employers acquire the kits. "Overdose deaths occur across the workforce but are more common in some industries. As much as 43% of all drug overdoses deaths at work occurred specifically in the transportation and warehousing, construction, and healthcare and social assistance sectors," it says.

The U.S. Surgeon General recommended its use by the general public as early as 2018, and it has become common for police officers and emergency medical services providers to carry the Naloxone kits when they are on call, and this is believed to have saved many lives as a result.

In 2021, the National Institute for Occupational Safety and Health (NIOSH) published a video, "Addressing Opioid Overdoses in the Workplaces," to help employers and workers better understand the risk of opioid overdose and encourage employers to establish a workplace naloxone availability and use program.

This video was based on a NIOSH factsheet called Using Naloxone to Reverse Opioid Overdose in the Workplace: Information for Employers and Workers.

The National Safety Council also issued guidelines for employers who are considering stocking their workplaces with the kits. "Any opioid user – which may include employees, visitors or passersby – is at risk for an opioid overdose," NSC said.

It stresses that employers should take certain steps before acquiring the kits and starting a workplace program. Policies and procedures should be developed by a core group of company representatives, including human resources, safety and health professional employees and a legal representative, NSC recommends.

Issues the council says employers should consider include liability and other legal issues; recording and documenting trainings and incidents while protecting the privacy of the victims; and defining clear roles and responsibilities for potential responders to a suspected opioid overdose.

Employers also may want to take into account geographic factors before they make the decision to acquire the kits and engage in staff training (which can be obtained for free). In 2021, for example, the states with the highest numbers of overdoses were Alaska, Oregon, Mississippi, Maine and Kansas. The lowest rates ranged from Arizona, Virginia and Florida, to Vermont, Ohio and Pennsylvania.