LEGAL PERSPECTIVE

SUPPLY CHAIN ISSUES CONTINUE TO IMPACT CONSTRUCTION INDUSTRY

BY JAMES R. MALL

Since March of last year, the COVID-19 pandemic has caused serious disruption to supply chains across the globe, the effects of which continue to plague U.S. businesses, including the construction industry, which has been particularly hard hit. Supply chains that were disrupted during the global pandemic have yet to bounce back to pre-pandemic levels and, as high consumer demand continues to outpace supply in many segments of the construction industry, there is little hope that the system will be able to reset itself anytime soon. Experts predict that supply chain problems will get worse before they get better and that the effects will continue in the foreseeable future, possibly into 2023, before things return to normal.

The rapid spread of the virus in the first half of 2020 caused many non-essential businesses, including the construction industry in Pennsylvania, to shut down temporarily. While construction did pause briefly at the beginning of the COVID-19 lockdown, it is now up and running as an essential industry, but continues to feel the impact caused by the pandemic with no end in sight at least in the near term. While lockdowns initially resulted in decreased consumer demand and a brief recession, as the lockdowns were lifted, demand for materials like lumber, steel, plastic and aluminum increased quickly above pre-pandemic levels and suppliers struggled to keep up with rising consumer demand. As manufacturers began reopening, they faced unprecedented labor and raw material shortages creating production delays that further drove up costs. Many of the goods that have been in short supply come from the Far East and freight rates for merchandise coming from China to the U.S. have skyrocketed while a shortage of trucks and truck drivers has exacerbated the problem of getting goods to their final destination also contributed to higher prices.

Consumers also played a role in disrupting the supply chain. Many people were forced to work from home and consumer spending habits shifted to on-line buying and people took up new habits, such as home improvement projects, which boosted demand for construction materials and further strained supply chains. For instance, the price for drywall and plywood soared as people stuck at home decided to do more home improvement projects. Increased on-line shopping created a host of warehousing and logistic/transportation issues which were unprecedented in scope.

Visual evidence of supply chain disruptions is well documented in news photographs showing dozens of huge container ships, each containing between 10,000 and 21,000 containers, anchored off west coast ports waiting for open docks to unload their cargo. Ships are waiting up to two weeks to dock and unload – as much time as it takes a ship to cross the Pacific Ocean. Some California harbors are operating on limited capacity due to COVID outbreaks and other regulations. Once unloaded, the containers often stack up at the port. While many component parts are being manufactured overseas to pre-pandemic levels, the log jam at the U.S. ports are keeping them out of the hands of manufacturer and consumers. Due to truck and driver shortages, transportation delays further exacerbate supply chain disruptions. If companies can't get supplies, they can't meet project schedules and deadlines.

A year and a half after the pandemic started, construction firms, which were already absorbing costs associated with protecting workers from the pandemic, are still confronted with widespread supply-chain problems. Soaring material costs and delayed deliveries of materials, parts, equipment, and supplies are resulting in project deferrals and cancellations and are wreaking havoc with many contractors.

The pandemic is not entirely to blame. In the words of one commentator, the impact of COVID was to take a bad situation and make it worse. At the time the pandemic struck in the spring of 2020, there were already labor shortages, warehouse, distribution and truck and driver shortages nationwide, as well as a shortage of containers to ship goods to and from the ports. There was a convergence of other unrelated factors that contributed to the supply chain disruptions – storms and winter freezes in Texas, the Suez Canal blockage in March, rising inflation and cyber security attacks. The pandemic has demonstrated how interconnected, and how easily destabilized, global supply chains are.

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four to eight months, with uncertain availability of fasteners and other essential items. Construction firms are struggling to cope with supply chain challenges and rising material prices, which is undermining demand for new projects and impacting firms' abilities to hire new workers. A recent AGC workforce survey found that 88 percent of the surveyed construction firms were experiencing project delays with 75 percent saying that longer lead times and material shortages were to blame.

The financial impact of the supply chain disruptions is staggering. For instance:

- The cost to move a container from China to the U.S. west coast is 4 times what it was a year ago and more than 10 times what it was before the pandemic;
- Shipping costs for containers from China to the east coast of the United States have increased more than 500 percent from a year ago;
- In-bound freight container costs nearly tripled during the second quarter of 2021;
- Supply disruptions were up 638 percent in the first half of 2021;
- The Consumer Price Index increased 6.2 percent from October, 2020 to October, 2021, the largest increase in 40 years;
- U.S. trucking freight rates rose in October, 2021, by more than 36 percent from a year earlier, the biggest annual increase in three decades;
- There has been an average increase of 27.8 percent in input costs on construction projects from April, 2020, to August, 2021;
- Wood is up 101 percent year over year;
- Iron and steel prices have more than doubled in the last year and are up 95 percent while copper has increased 61 percent and aluminum 33 percent. All of these materials have experienced multiple cost increases since the second half of last year.

Now, builders, developers, manufacturers, architects, and contractors are dealing with the reality of a broken system and trying to figure out the best way to move forward in these uncertain and volatile times. Some short-term solutions include the following:

Price Escalation Clauses

Legal counsel should be consulted to review all prospective bid proposals and long-term contracts to ensure they have a price escalation clause to protect the contractor from volatility in the construction industry. Existing agreements should

be carefully reviewed to determine what remedies may be available in the event material procurement issues impact time for performance and/or cost of performance. With new strains of the virus now appearing, contracts should always address the risk of pandemic-related supply chain delays and contain a force majeure clause and other disclaimer language to hedge against the impact of material price escalations and supply delays. Existing long-term contracts should also be reviewed with a focus on provisions relating to force majeure, excusable delays, emergencies, changes, contingency, suspension and termination, site investigation, as well as representations and warranties. By carefully reviewing these provisions, contractors may not only be entitled to relief for unanticipated events, but also may find that they are entitled to obtain both time extensions and financial compensation for unknown impacts of a known event – the COVID-19 pandemic.

Supply Chain Risk Mitigation

- Lead times of key construction materials, such as steel and lumber, should be monitored on a regular basis. Long lead time components should be pre-ordered and placed into inventory in anticipation of demand over the next year.
- Planning in advance to stockpile certain key materials allows construction projects to be managed with far less disruptions. If economically feasible, begin stockpiling materials for back log projects which have been awarded, but not scheduled to start.
- Develop a redundancy in the supply chain, by placing multiple orders for the same products from different factories, even though it may cut into profit margins.
- Look to source from alternate suppliers key components and critical materials and utilize geographic diversification to obtain goods manufactured closer to home with less risk of transportation glitches in getting the product to the jobsite.
- Look for alternate building materials that are readily available, albeit more expensive, when standard products are delayed or unavailable when needed on a project.
- Work to bring some of the supply chain stateside ("Buy American").
- Consider alternative project delivery methods like Integrated Project Delivery (IPD). Design Buildings (DB) and Construction Management at Risk (CMAR), stress collaboration to allow early decision making on alternative materials and delivery methods.
- Increase dialogue and collaboration among all members of the construction team, owner, contractor, architect, construction manager, to determine whether all crucial materials are available to meet the proposed construction schedule and if they are not, to meet early on in the process to make alternate arrangements. For

instance, architects and interior designers should plan on meeting with manufacturers' reps before specifying certain materials for a particular project to determine if those materials are available and if they are not, to specify comparable materials that are not experiencing long lead times.

- Identify the appropriate building systems based upon cost and availability to insure that the project is appropriately planned by allowing materials to be procured in alignment with the current market conditions.

- Practice predictive analytics which allows contractors to make informed decisions about their supply chain risks. Utilization of this type of analytics allows contractors to determine when is the right time to place a particular order and from which suppliers. Reach out to legal counsel to proactively develop strategies that will provide a basis for an adjustment to the contract price or schedule if it appears likely that delays and cost increases are in order.

- Mandating vaccines for all eligible employees who work in manufacturing and raw materials processing in order to reduce labor turnover and inefficiencies in the supply chain.

Political Solutions to Help Alleviate Supply Chain Issues

Construction industry lobbying groups may be able to ease some of the supply chain bottlenecks through political channels by contacting their legislators to:

- Ease or remove tariffs enacted during the Trump Administration on key construction materials such as steel and lumber. In addition, barriers for importing materials from Canada should be addressed and eased.

- Ease maritime shipping delays by considering the repeal of the 100-year-old Jones Act which prohibits ships flying foreign flags from transporting goods within U.S. ports. Also, exploring regulatory measures to keep ports operating 24/7 until the supply chain log jam has been erased.

- Increase funding for infrastructure projects especially at ports and transportation hubs across the country, which will increase the country's efficiency in transporting goods from manufacturers to the ultimate consumer in the long term, and hopefully avoid similar supply chain issues from arising from the future.

Summary

While the current supply chain crisis constitutes a real obstacle for the profitability of many in the construction industry, the hurdles are not insurmountable and can be managed by collaboration among the construction managers and by advance planning by owners, architects and general contractors designed to eliminate or at least minimize delays and inefficiencies caused by supply chain disruptions. BG

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