# RISK Manufacturing



# Combatting the Carbon Dioxide Shortage

There has a been a sudden stop in a major UK supply chain—food and drink suppliers are suffering at the hands of the recent carbon dioxide (CO2) shortage, leaving them with a limited ability to not only manufacture their products, but keep them from spoiling at increased rates.

This major supply chain disruption—the result of lower seasonal production, plants closed due to routine maintenance and bad timing—leaves food and drink suppliers without an essential ingredient to their production process, affecting companies and consumers alike.

# How CO2 Is Used Across the Industry

CO2 serves a variety of purposes within the manufacturing process of food and drink. Here are some of the most common ways that CO2 helps put food on consumers' tables:

- Animal slaughter—CO2 gas is seen as one of the most humane ways to stun animals such as pigs, chicken and cattle before slaughter.
- **Fizzy beverages**—Drink manufacturers add CO2 gas to beverages such as colas and beers to keep them fizzy and provide the freshest taste.
- Staying cool—CO2 is also particularly useful as dry ice, which is used to maintain freshness during the transport of food and drink to supermarket locations.
- Extending shelf life—CO2 gas can also be dispensed within the packaging of various foods to ensure freshness and quality for longer periods.

• **Dispensing beer**—Many pubs take advantage of CO2 gas to dispense their beer, using it to apply pressure and release the beverage from the keg.

Although the CO2 shortage is a temporary problem, it is a perfect example of the need for year-round business continuity planning.

#### Who Will Get Hit the Hardest

Although a variety of food and drink manufacturers will experience difficulties from the CO2 shortage, the following industries will likely suffer the most:

- The pub industry—CO2 is critical for multiple aspects of producing beer, from creating it to dispensing it. The shortage has already prompted some beer and soft drink distributors to temporarily<u>limit</u> their clients to 10 cases of beer and five cases of cider or soft drinks.
- The meat and poultry industry—Several meat production lines have shut down because of lacking CO2 gas for stunning animals before slaughter. Diminished CO2 gas availability for packaging meat and poultry leaves the industry with few alternatives for keeping products fresh.
- Packaged food industries—A variety of foods are packaged in plastic bags or containers and sealed for freshness with a little help from CO2 gas. However, packaged food such as iceberg lettuce and crumpets may have to take a break from the supermarket shelves until CO2 becomes more available.

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 The bottling industry—Without fizzy drinks to dispense into bottles, the bottling industry will be left without work until CO2 availability returns.

### How to Cope with the Shortage

Although the Department for Environment, Food and Rural Affairs has reported <u>that this is a short-term</u> <u>production issue</u>, your company will need to find ways to cope with this supply chain disruption. Consider these temporary measures:

- Using alternative slaughter methods—Despite being less humane and slowing production, alternative slaughter methods such as nitrogen gas and electrical stunning also works to stun animals.
- Swapping gases for beer dispensing—Pubs can temporarily preserve their limited CO2 supply by using nitrogen gas to dispense their beers.
- Pumping less CO2 into packaging—Pumping little to no CO2 within your product packaging may decrease freshness and move up expiry dates, but it allows products to stay on supermarket shelves.
- Ensuring quality communication—Both you and your customers need to stay updated on the shortage. Keep communicating with your suppliers to get a better understanding of the timescale for the shortage. In addition, be transparent with your employees and customers without being negative.

# Keeping Business Continuity in Mind

A disruption in your supply chain is just one of the many major problems your business may face. Whether it be a material shortage, natural disaster or criminal activity, follow these practices to promote business continuity in the event of an interruption:

- Create a business continuity plan (BCP)—Ensure supply chain resilience and continued production by developing a quality plan of action in the event of disaster. In order to make your BCP effective:
  - Ensure commitment to the plan from highlevel management within your company.

- Identify your company's critical business functions, such as taking orders, production processes, distribution and payment cycles.
- Build a BCP core team with members from all sectors of the company to receive proper information and input on necessary changes or alternatives in the event of disruption.
- Create a risk assessment that identifies potential threats that could disrupt the company, as well as the degree of vulnerability to each threat.
- Create a business impact analysis that identifies impacts of any potential threats to the company, such as loss of facility, disruption in operations, technology disruption or organisational issues.
- Establish a recovery plan that lessens business interruption by turning to alternative supply chain sources, outlining a continuity plan, and ensuring quality communication between the supplier and customer contacts.
- Develop a periodic BCP test to find weak spots in the plan and offer any updates over time.
- Rely on business interruption (BI) cover— BI cover can provide peace of mind in the event of a disaster by offering compensation for:
  - Lost income if your business has to vacate the workplace due to disaster-related damage
  - Gross profits that would have been earned, had the loss not occurred
  - Operating expenses, such as utilities, that must be paid despite business interruption
  - Increased cost of working or costs of operating in a temporary location while the permanent location receives repairs

Contact Robison & Co Ltd about business continuity planning and cover today.

