



To: MacCarb's Valued Customers

From: David L McCarthy

Subject: Food and Beverage Carbon Dioxide and COVID-19

Date: March 16, 2020

Dear Valued MacCarb Customer:

We want to take a moment to thank you for your business over the many years and especially during these difficult times. Please know that MacCarb, Inc is open for business as we are closely monitoring the Coronavirus (COVID-19) and will be following the guidance of our leading government and health authorities to ensure we are taking the right actions to protect our customers, employees, and the communities we operate in. Please also know that we continue to maintain our high standards for safety, cleanliness, and are rigorously ensuring our employees remain healthy during this crisis. As of 03/17/2020 we know that bars and restaurants have been ordered to close to dine-in customers and can only operate drive thru lanes and curbside pick-up. We understand the unprecedented hardship this is going to cause our valued customers and will work with you regarding payment terms.

- 1) **Will my CO₂ supply be interrupted?** – No supply interruptions are currently anticipated. We are currently positioned with over a 500,000 lbs. CO₂ storage at our facilities and a fleet of CO₂ transport tankers that can travel all over the continental US to obtain carbon dioxide gas. This will ensure that we can get the necessary carbon dioxide gas to keep your operations running during this crisis.
- 2) **Does my CO₂ come from a part of the world experiencing rapid spread of COVID-19?** No, all CO₂ consumed in the U.S. is produced and distributed from within the U.S.
- 3) **What special provisions have you implemented with your product and deliveries?** - Carbon Dioxide is stored in sealed containers as a pressurized gas over liquid. The normal storage conditions of CO₂ bulk liquid is 300 psig at 0°F. High pressure cylinders containing CO₂ are at ~870 psig at room temperature. This prevents any potential ingress of COVID-19 into a CO₂ container. All our CO₂ containers have outlet connection covers on them, and all our delivery truck hoses are kept capped. We inspect all customer tank connections prior to making a delivery, and our procedure is to notify our customers if we observe anything a-miss with their delivery tank or hose connections. Additionally, CO₂ is a natural anti-microbial agent, and when mixed with water forms Carbonic Acid, whose pH is too low to support microbial growth.
- 4) **Can COVID-19 be transmitted by CO₂?** – The FDA Commissioner advised on February 27, 2020 that there have been no known cases of COVID-19 transmission by foods or beverages. The closed and pressurized properties of the CO₂ storage and dispensing system, along with CO₂'s antimicrobial properties, is an additional safeguard for CO₂.
- 5) **What special provisions have you implemented with your employees?** – Our food safety program includes provisions for any employee who is sick or feeling ill to be excused from food operations. We are advising all our employees who feel sick or may have been exposed to stay home. Our food safety program has always included provisions for employees to follow good hygienic practices. We will also be issuing our delivery drivers new delivery gloves more frequent than the current once a month.
- 6) **Can COVID-19 be transmitted by your delivery truck?** – Our delivery vehicles operate in an industrial environment. They are not exposed to large crowd. Typically, only the driver of the vehicle and possibly a product loader are the only two people who interact with the vehicle at all. There is an extremely low likelihood of our vehicles coming into contact with a source of COVID-19
- 7) **Are incoming and returning high pressure cylinders a hazard?** – We ask that all customers begin disinfecting every empty cylinder before pick up. Upon receiving the empty cylinders at our facility, we will be washing them with water that goes above 180 degrees Fahrenheit to help reduce any contaminants coming back from outside facilities. This will help further ensure nothing is transmitted from the customer environment back to a cylinder filling facility. Our full cylinders are shipped primarily in open trucks, and even the closed cylinder trucks are ventilated. Corona virus cannot exist outside the body for prolonged periods of time. Under optimal conditions of humidity and temperature the virus's life is still just minutes. This ambient exposure is yet another level of security that full high-pressure cylinders are not a virus hazard.

We remain committed in upholding these practices and will take additional precautions as recommended by the CDC (Center for Disease Control & Prevention, WHO (World Health Organization), local, and state governments.

We will continue to monitor this evolving situation and will keep you informed of future updates.

We thank you for your continued loyalty and wish you the best during these challenging times as we are all in this together, and we will prevail.

Sincerely,

David L McCarthy

Executive VP

MacCarb, Inc.