



## U. S. Chemical Safety and Hazard Investigation Board

### RECOMMENDATION STATUS CHANGE

### SUMMARY

<b>Report:</b>	Foundation Food Group Fatal Chemical Release
<b>Recommendation Number:</b>	2021-03-I-GA-R1
<b>Date Issued:</b>	December 11, 2023
<b>Recipient:</b>	Gold Creek Foods
<b>New Status:</b>	Closed – Acceptable Action
<b>Date of Status Change:</b>	June 10, 2025

#### Recommendation Text:

*Include in the emergency action program provisions for proactively interacting with and informing local emergency response resources of all emergencies at the former FFG Plant 4 facility to which Gold Creek expects them to respond. At a minimum, Gold Creek should:*

- a) inform local emergency responders of the existence, nature, and location of hazardous substances at its facilities, including liquid nitrogen;*
- b) inform local emergency responders of the location of emergency-critical equipment such as bulk storage tanks, points of use, isolation valves, E-stop switches, and any other emergency equipment or systems with which emergency responders may need to interact; and,*
- c) provide local emergency responders with information, such as facility plot plans, engineering drawings, or other information needed to mount an effective emergency response.*

#### Board Status Change Decision:

##### A. Rationale for Recommendation

On January 28, 2021, liquid nitrogen overflowed from an immersion freezer located inside Plant 4 at the Foundation Food Group (FFG) in Gainesville, Georgia. The release occurred while two maintenance employees were troubleshooting the equipment. Once the liquid nitrogen was released, it quickly vaporized and accumulated inside the room in which the equipment was located, creating an oxygen deficient atmosphere.

The two maintenance employees were asphyxiated. Upon discovering the two maintenance employees, an emergency response was initiated which included attempts by other employees to rescue the two maintenance employees and to isolate the freezer from its liquid nitrogen source. During these activities, four additional FFG employees were asphyxiated. Additionally, three more FFG employees and one firefighter were seriously injured, presenting with symptoms of asphyxia. The incident resulted in an estimated \$1.95 million in damage.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found several safety issues including faulty equipment design, inadequate precautions for using

liquid nitrogen, the lack of atmospheric monitoring and alarms, inadequate emergency preparedness, a lack of a safety management system, and a lack of regulatory coverage for cryogenic asphyxiants. As a result of these findings, the CSB issued one recommendation to Gold Creek Foods. This status change summary addresses CSB Recommendation No. 2021-03-I-GA-R1.

B. Response to the Recommendation

In response to the recommendation, Gold Creek Foods hosted site walkthroughs with emergency responders from the county and city fire departments. During these site walkthroughs, the areas of the facility containing hazardous materials, including nitrogen, were toured and briefings and information were given addressing the nature and hazards of these materials. The equipment and systems available to mitigate releases of these materials were also covered during the site walkthroughs. Information on the layout of the facility and safety data sheets for the hazardous materials present onsite were provided to facilitate emergency response planning. Upon review of the relevant documentation provided, the CSB concluded that Gold Creek Food's actions address all the requirements of the recommendation.

C. Board Analysis and Decision

Based upon the information above, the Board voted to change CSB Recommendation No. 2021-03-I-GA-R1 to: "Closed – Acceptable Action."