



Chemical Decomposition, Fire, and Toxic Gas Release at Bio-Lab, Inc.

CSB Public Business Meeting
January 23, 2025



U.S. Chemical Safety and
Hazard Investigation Board

Bio-Lab, Inc. Conyers Background



- Bio-Lab Conyers is in Conyers, Georgia (Rockdale County)
- Has been in operation since 1973 and employs ~241 full-time employees
- Converts raw materials and packages finished recreational water care consumer products for retail sale
- Operates several production facilities and storage warehouses
 - A bulk chemical storage warehouse (Plant 12) was involved in the incident on September 29, 2024. Raw and packaging materials were also stored in Plant 12.

Bio-Lab, Inc. Conyers Background Cont.



- Per Bio-Lab, Plant 12 stored super sacks containing multiple solid oxidizers in granular form, that have a chlorine odor, including:
 - 99% trichloroisocyanuric acid,
 - 99% sodium dichloroisocyanurate, and
 - Bromochloro-5,5-dimethylimidazolidine-2,4-dione
- These bulk solid oxidizers can release toxic and corrosive products upon decomposition
- Bio-Lab had established a permanent fire watch a few months before the incident after detecting strong odors in storage buildings to mitigate any potential product decomposition events

Bio-Lab, Inc. Conyers Incident Overview

- The morning of September 29, 2024, a chemical reaction occurred inside Plant 12 involving bulk materials stored inside, which resulted in product decomposition, the generation of excessive heat, multiple fires, extensive off-gassing, and a massive plume of potentially toxic smoke
 - Shelter-in-place orders issued
 - Final shelter-in-place warning expired several weeks after the incident on October 17
 - Mandatory evacuations
 - Interstate I-20 closed for ~19 hours; other smaller roads closed longer
 - Smog or haze with a chlorine smell drifted in parts of the metropolitan area
 - Plant 12 warehouse completely destroyed
 - No injuries were reported at the site during the incident or in the subsequent emergency response that followed
- Site remediation and clean-up activities continue





- Continue to gather facts and analyze key areas of the incident, including:
 - Cause or probable cause of the material decomposition, off-gassing, possible ignition source, and fire
 - Storage and handling of oxidizers and their compatibility
 - Regulatory and Industry guidance on fire protection systems for bulk solid oxidizers with reactive chemical characteristics
- Complete findings, analyses, recommendations, if appropriate, and key lessons will be detailed in the final investigation report



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