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*This information is preliminary and subject to change.*

# UGI Corporation Natural Gas-Fueled Explosion and Fire

West Reading, Pennsylvania

March 24, 2023

On March 24, 2023, about 4:55 p.m. local time, a natural gas-fueled explosion and fire occurred at Building 2 of the R. M. Palmer Company (Palmer) in West Reading, Pennsylvania. The explosion destroyed Building 2 and caused significant structural damage to the adjacent Building 1 and other surrounding structures. (See figure.) Seven people were killed, 11 people were injured, 3 families were displaced from a neighboring apartment building, and many more people were evacuated from the area. Visibility conditions at the time of the accident were clear with no precipitation, the temperature was 51.8°F, and winds were about 4.6 mph. Damage costs are currently unknown.



**Figure.** Overhead image of the accident. (Source: Western Berks Fire Department.)

At the time of the explosion, about 35 office staff and 70 production employees were working in both buildings. In postaccident interviews with National Transportation Safety Board (NTSB) investigators, Palmer employees from Building 2 recalled that they were sanitizing equipment in the building when they detected an odor of natural gas.<sup>1</sup> The employees in Building 1 recalled the smell of rotten eggs around the same time. After the explosion, emergency response units from the West Reading borough were joined by multiple emergency responders from adjoining communities to put out the fire and to conduct search and rescue efforts until the evening of March 26, when the last employee was accounted for.

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<sup>1</sup> Because natural gas is odorless, strong-smelling chemical additives called odorants are mixed with natural gas before distribution to help reduce the risk that leaks will go unidentified. The most common odorant added to natural gas is methanethiol, or mercaptan, which has a characteristic "rotten egg" or sulfurous odor.

UGI Corporation (UGI) provided natural gas service to the Palmer buildings through two natural gas mains adjacent to the accident site.<sup>2</sup> One 4-inch-diameter steel main was located in front of Building 2 along South Second Avenue, and one 1.25-inch-diameter "Aldyl A" plastic main was located along Cherry Street between Buildings 1 and 2.<sup>3</sup> The factory buildings had two natural gas pipeline meter sets regulated by the Pennsylvania Public Utility Commission. UGI reported no known work in the area and no pressure spike in gas usage before the explosion.

Investigators from the NTSB examined the accident site, secured evidence, and completed interviews with Palmer employees and with members of the public who were nearby at the time of the accident. Future investigative activity will focus on review of collected evidence, identifying the source of the explosion, and related industry practices and federal regulations.

Parties to the investigation include the Pipeline and Hazardous Materials Safety Administration, the Pennsylvania Public Utility Commission, Pennsylvania State Police, the West Reading Police Department, the West Reading Fire Department, the Berks County Fire Marshal, Palmer, and UGI.

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<sup>2</sup> A *natural gas main* is a distribution line that serves as a common source of supply for more than one natural gas service line. See Title 49 *Code of Federal Regulations* 192.3.

<sup>3</sup> "Aldyl A" is the trademarked name of a polyethylene plastic gas pipeline product manufactured by the DuPont chemical company using a proprietary polymer resin.