# KALAMAZOO AIR QUALITY PROGRESS UPDATE

Graphic Packaging is committed to improving air quality and reducing odors in the community where we live and work. The health and safety of our employees and neighbors are our top priorities. That is why we have taken significant steps to ensure that we are part of the solution to air quality and odor issues.

H<sub>2</sub>S readings **481%**over two years

H<sub>2</sub>S readings (1.0 ppb<sup>1</sup>)

# **6x below**

Michigan's compliance standard (7.2 ppb)

Investing more than

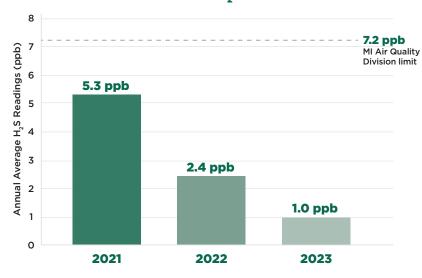
# \$8 million

in health and safety improvements

#### What is hydrogen sulfide (H,S)?

 $\rm H_2S$  is a colorless gas that occurs naturally and comes from a variety of sources, including hot springs, natural gas and petroleum operations, paper mills, landfills, and wastewater treatment plants. Although the odor of  $\rm H_2S$  can be detected, the U.S. Environmental Protection Agency (EPA) does not classify it as a hazardous air pollutant.

### Since 2021, we've reduced H<sub>2</sub>S concentrations by 81%\*



# Actions to improve air quality & reduce odor

- 1 Implemented state-of-theart H<sub>2</sub>S and odor mitigation techniques including optimizing chemical processes in the mill's wastewater
- Planned installation of a permanent scrubbing system by December 2023 and installation of a permanent oxygenation system by early 2024, having received site plan approval from the City of Kalamazoo in October 2023
- Active participant in Kalamazoo's Odor Task Force since 2019 and supported the city's creation of an odor hotline
- 4 Developed and implemented an odor action plan
- Installed 16 EnviroSuite monitors around the Kalamazoo mill to provide real-time monitoring data online
- 6 Continuing to evaluate emerging technologies to support further odor and H<sub>2</sub>S reduction



<sup>1</sup> parts per billion

 $<sup>^{*}</sup>$  2023 YTD through June 30. The annual averages were calculated using all the available data from the on-site Envirosuite  $\rm H_2S$  monitors utilizing 15-minute readings – there were no adjustments for false positives during power outages or similar conditions.