





### Disasters --- Why?

- **Act of God:** An event that <u>directly and exclusively</u> results from the occurrence of natural causes that <u>could not have been prevented</u> by the exercise of foresight or caution.
- Stuff happens
- Inadequate internal controls, includes safeguarding of assets and
  - Operations Effectiveness and efficiency of operations
  - Reporting Reliability of reporting for internal and external use
  - Compliance Compliance with applicable laws and regulations...
     (From GAO Green Book)
- · Management condones or is willfully ignorant





## **Top 10 OSHA Violations Found in 2018 Worksite Inspections (~32,000)**

- Related to falls: protection, scaffolding, ladders, training
- Hazard Communication
- Respiratory Protection
- Control of Hazardous Energy (Lockout/Tagout)
- Powered Industrial Trucks
- Machine Guarding
- Eye and Face Protection





- 49 CFR § 192.513 Safety Standards, Test requirements for plastic pipelines. Max. 50 psi (Effective at least or before 1970)
- INTERNATIONAL FUEL GAS CODE (On Private Property) 406.4.1 Test Pressure Operating .5 psi times 1.5 but not less than **3 psi**
- NiSource Gas Standard GS 1500.010 90 psi

Not paying attention to detail by so many for so long Lack of self-correction culture

Lax internal and external oversight

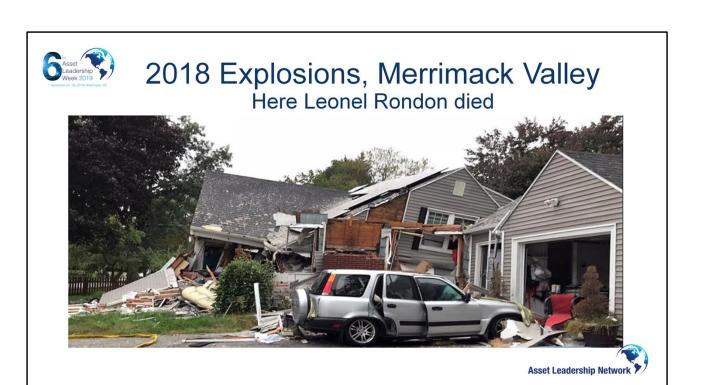




## 6 Asset Caddership 2015 Explosion, North Arlington OH



Asset Leadership Network





## 2019 Explosion Washington, PA 5 injured including 3 firefighters





### We care about your safety

• If you see, smell or hear natural gas...



#### Stop what you're doing

Don't light a match or operate anything that could cause a spark. Don't open the windows.



#### Leave the area immediately

If you're inside, get out immediately. If you're outside, leave the area quickly.



#### Call 911 and us

From a safe location, away from the building, call 911 and 1-800-344-4077 and wait for crews to arrive.







### Results of Improper Control of Hazardous Energy

- Management is responsible for inadequate internal controls,
- Understand and Comply with laws and regulations,
- Management must not condone or be willfully ignorant,
- Good internal controls will include preventative and detective attributes,
- Must have self-reporting and correction of deficiencies.





# Governance ... The Big Four to Achieve Objectives

**GAO Green Book Standards for Internal Control...** 

ISO 55000 Asset Management

**ISO 9000 Quality Management** 

**GAO Yellow Book ... Auditing Standards** 

