

Midwest Energy Association

Leak Investigation

David G. Zak

AEGIS Insurance, Loss Control

April 25 – 29, 2022

MEA Leak Investigation

Sessions: 8:30 – 10:00am.

Course Objective: Protect Life, Then Property

Day 1	Welcome & Introduction
Day 2	Setting a Foundation
Day 3	1 st Responder – Hazardous Conditions
Day 4	Inside Investigation
Day 5	Outside Investigation

MEA Leak Investigation

Session Ground Rules

1. Participation is the key
 - Designated times to comment and ask questions
 - Use the chat function for a comment or ask a question
 - Pre-assignment of case studies
2. Background Noise
 - Keep your computer on mute
3. Video
 - Designated times to use your video function
4. Evaluation Forms
5. Armageddon – We will make it right

MEA Leak Investigation

Group Breakdown

Group 1	Carter Aalfs, Ty Benson, Tim Burke, Zachary Cataldo
Group 2	Kevin Day, Fischer Grady, Blake Hearit, Chad Horn
Group 3	Ben Horstmann, William Layman, Trenton Lynema, Nicholas Martin
Group 4	Kody Moore, Caleb Moore, Olivia Nielson, Ryan Nissen
Group 5	Brian Olson, Kristopher Pullins, Sam Riley, Holli Stone
Group 6	Joseph Tourtillott, Justin Witte, Gilbert Zanni

Group Introduction

Name

Position

**Years
Experience**

**What
Stands
Out?**



Cut Gas Line

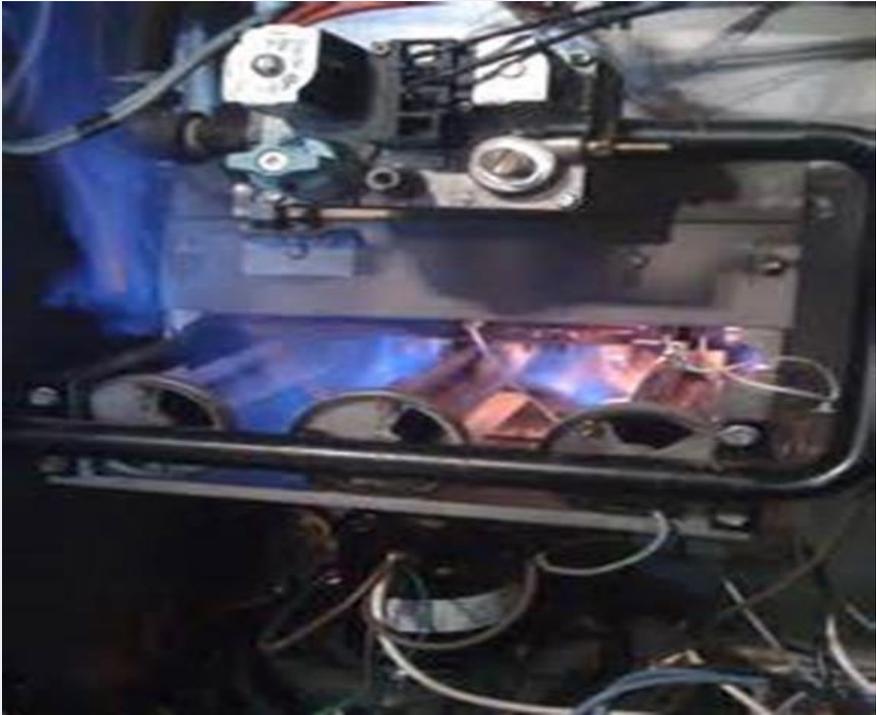


1st Responder



Weather Related

Customer Premise



Construction



Safety



Group Introduction

Name

Position

**Years
Experience**

**What
Stands
Out?**

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Welcome & Introduction – Day 1 – Protection of Life

1. AEGIS – What We Know.
2. Landmark Cases
3. The #1 Risk
4. Case Study (Example)
5. Stories from the Field - Deposition

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Associated

Electric

Gas

Insurance

Services, Inc.

- Mutual Insurance Company.
- Created by the Natural Gas Industry in the mid 1970s.
- Risk Management.
- 1st Layer of Insurance - \$90,000,000.

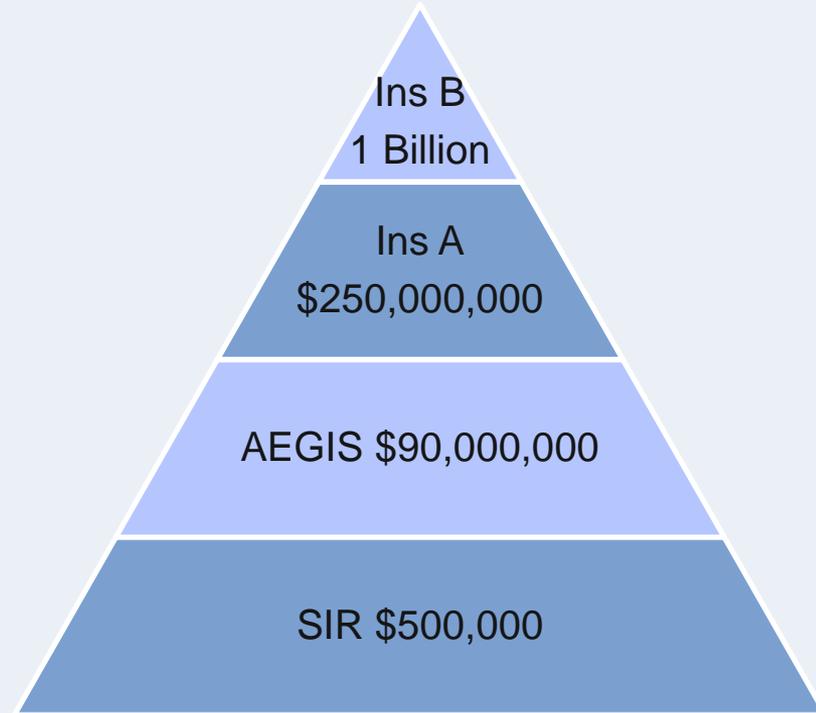
**Protect Life
Then Property!**

AEGIS Loss Control

Review of Major Liability Loss (RMLL)

Lessons Learned – Case Files

- Gas/Electric Company Incidents:
 - Litigation,
 - Settlement/Verdict,
 - Company Liability.
- Rulings/Lessons Learned – Impact Industry, Company Procedures.



Associated

Electric

Gas

Insurance

Services, Inc.

What we have learned over the past 46 years

- One incident per day – Low vs High Order
- What field employees should know....

Every Task, Every Job Matters

AEGIS Case Study



Valve Maintenance

1. Check for Natural Gas Leak.
2. Location/Measurement of Valve.
3. Valve Box Condition.
4. Corrosion
5. Valve Wrench Accessibility.

AEGIS Case Study

A fire took place in a 40 unit apartment complex. Although not the original cause the fire was later fueled by the natural gas service. The fire department captain requested that the gas company respond and shut off the service to the building.

Case Investigation.

A company 1st responder arrived and after 40 minutes located and attempted to shut off the gas valve. The employee was unable to insert the valve key due to valve box misalignment and debris stuck in the valve box. The 1st responder called for a gas crew to dig up the valve and 1.45 hours later the gas line was shut down.

Case Findings:

- Although Natural Gas was not the cause of the original fire, the delay in shutting down the service line made the Gas Company liable.

Company SIR \$1,000,000 + AEGIS \$1,040,000 = \$2,040,000

AEGIS Case Study



Fusion Steps

1. Clean the Pipe.
2. Scrape the Pipe.
3. Mark the Pipe.
4. Insert the Fitting
5. Clamp the Fitting.
6. Scan the Fitting.
7. Recognize the Correct Fusion Time.
8. Cool Time.
9. Work Time.
10. Backfill.

AEGIS Case Study

A 23 year old woman died when leaking gas from plastic weld migrated into her apartment and the natural gas exploded.

Case Investigation

- The source of the leak was a plastic fusion butt weld that was misaligned.

Case Findings

Although company procedures and initial training addressed fusion misalignment, the companies Annual Qualification did not review these procedures. Subsequently, additional areas where excavated where records showed that the employee made additional butt welds. Qualifications for employees who install and inspect plastic fusions must be followed.

AEGIS

A DEEPER DIVE INTO OUR CLAIM HISTORY



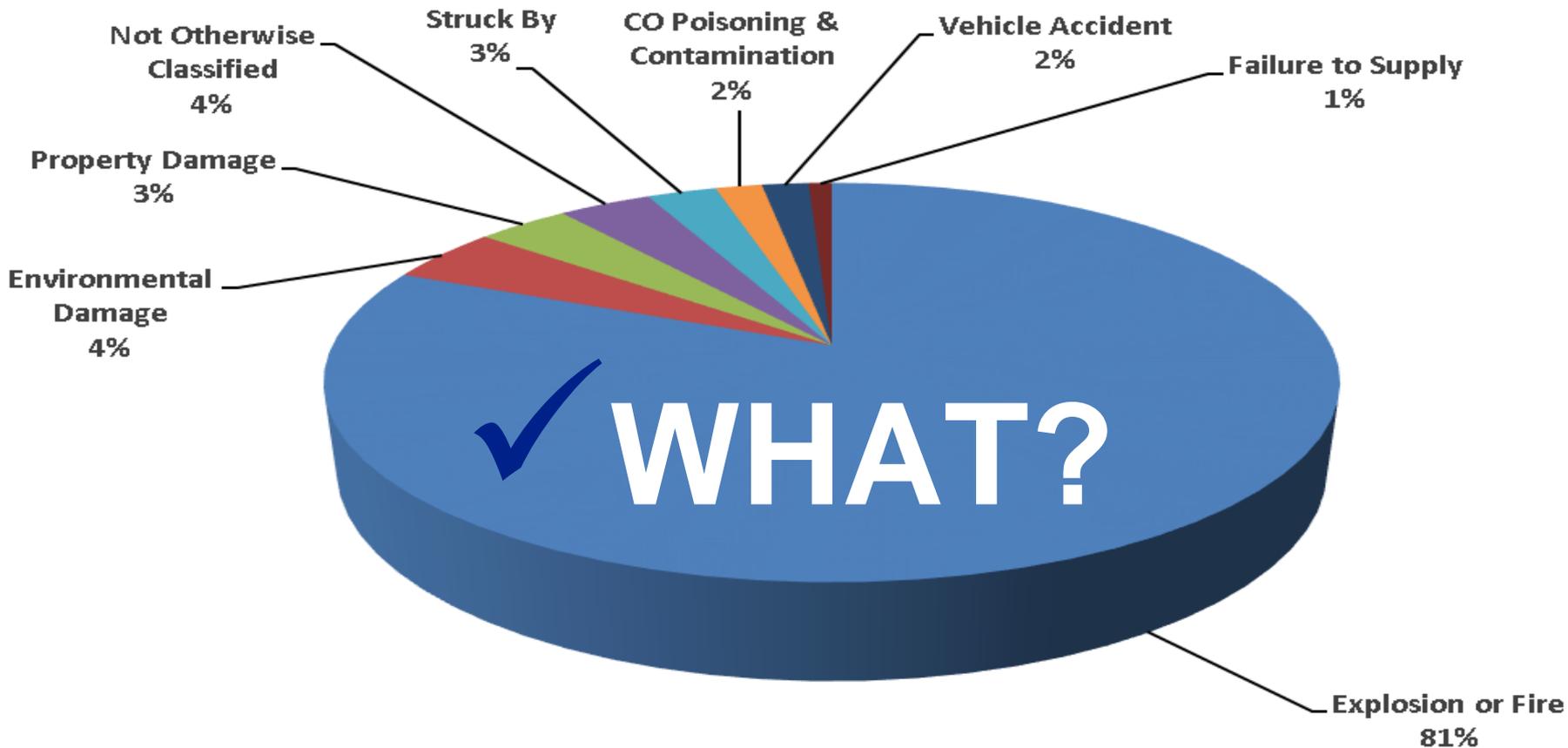
WHAT?

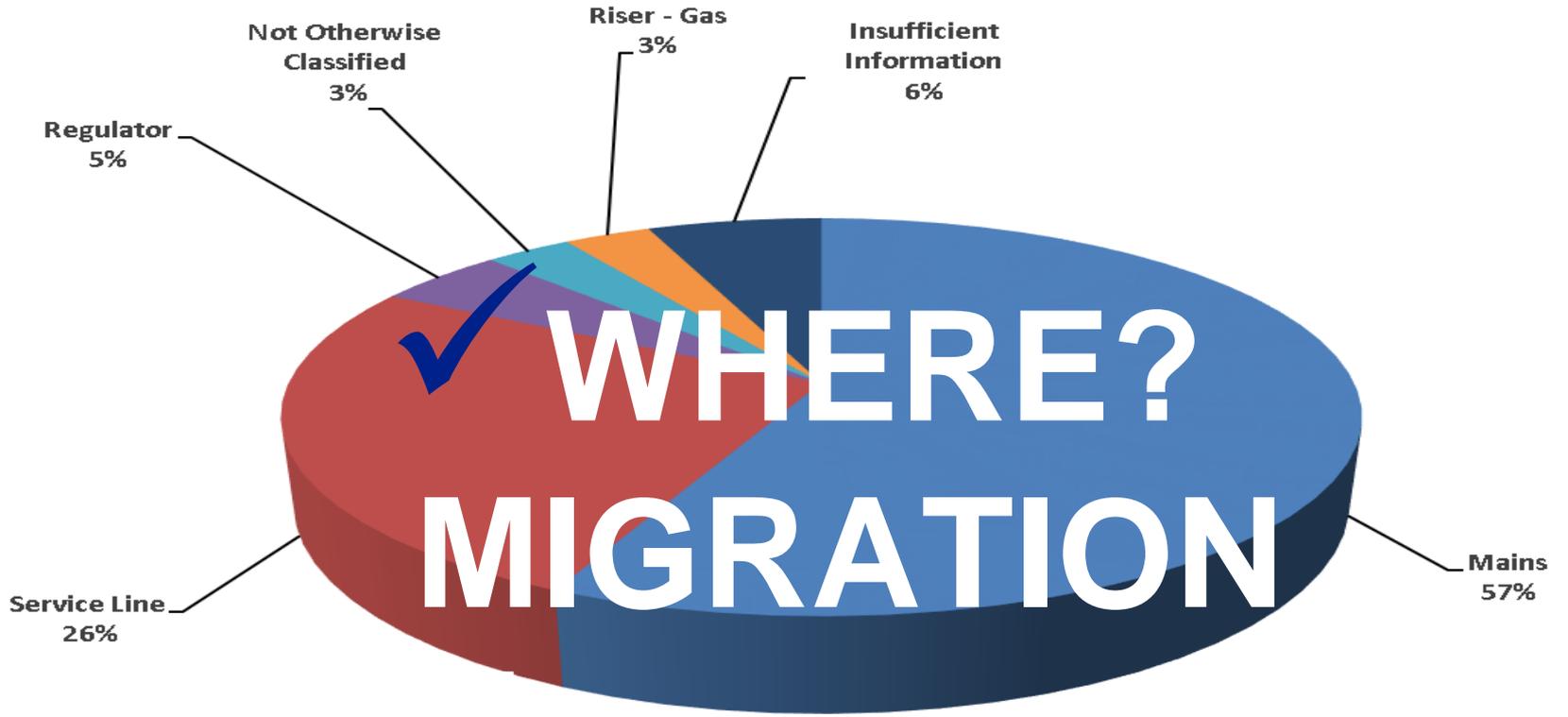


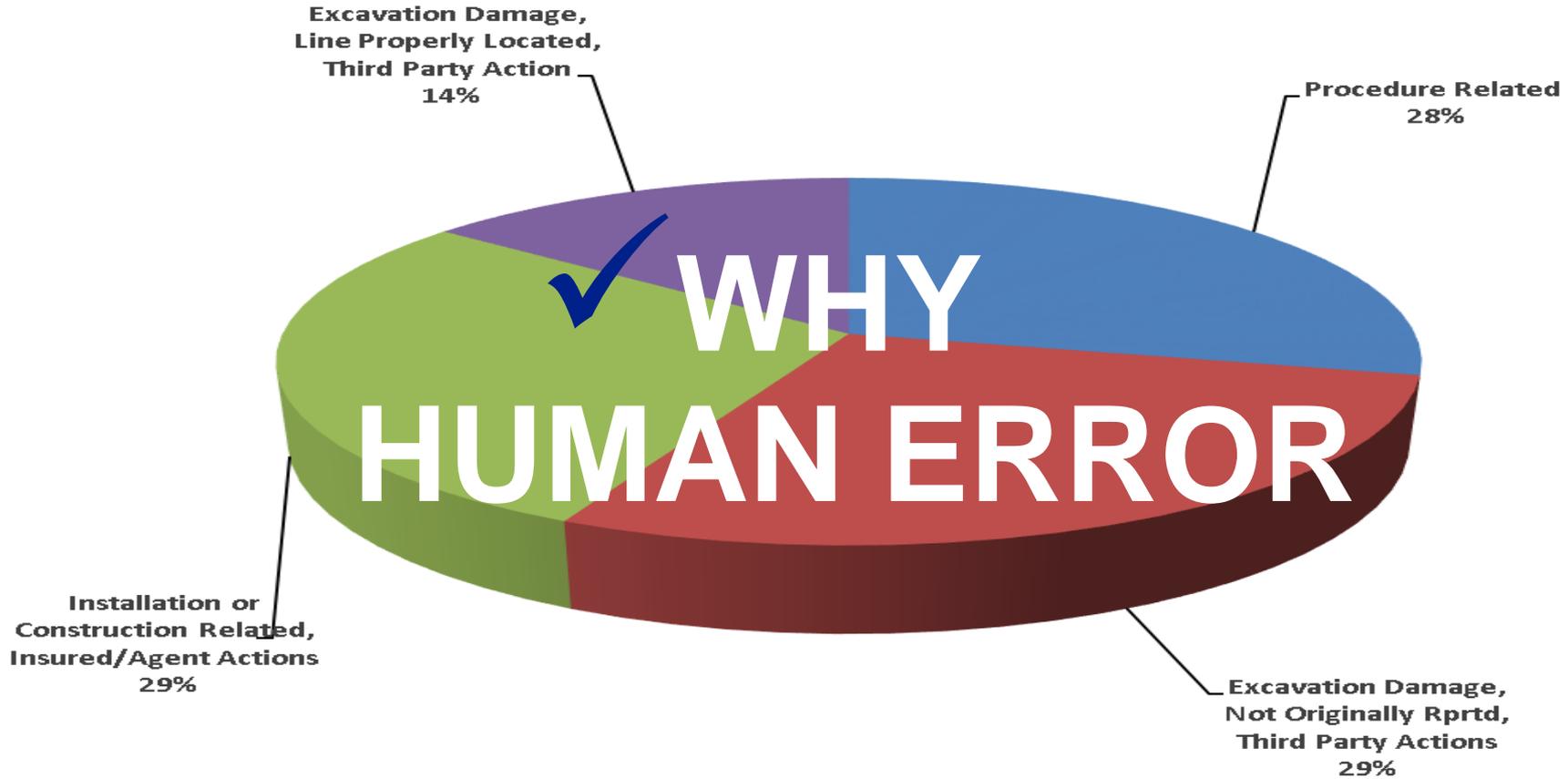
WHERE?



WHY







✓ WHY

Complacency

Distractions

Short Cuts

Failure to Follow Company Procedures

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AEGIS Landmark Cases

Andover, MA – September 2018

- **1 Fatality**
- **> 50 Building Fires**
- **AEGIS \$35,000,000**
- **Total Cost - > \$1.8 Billion**

DEVELOPING NEWS

Confirmed Fires in Andover, North Andover & Lawrence

AVERAGE YOU CAN COUNT ON



**Questions
or
Comments**

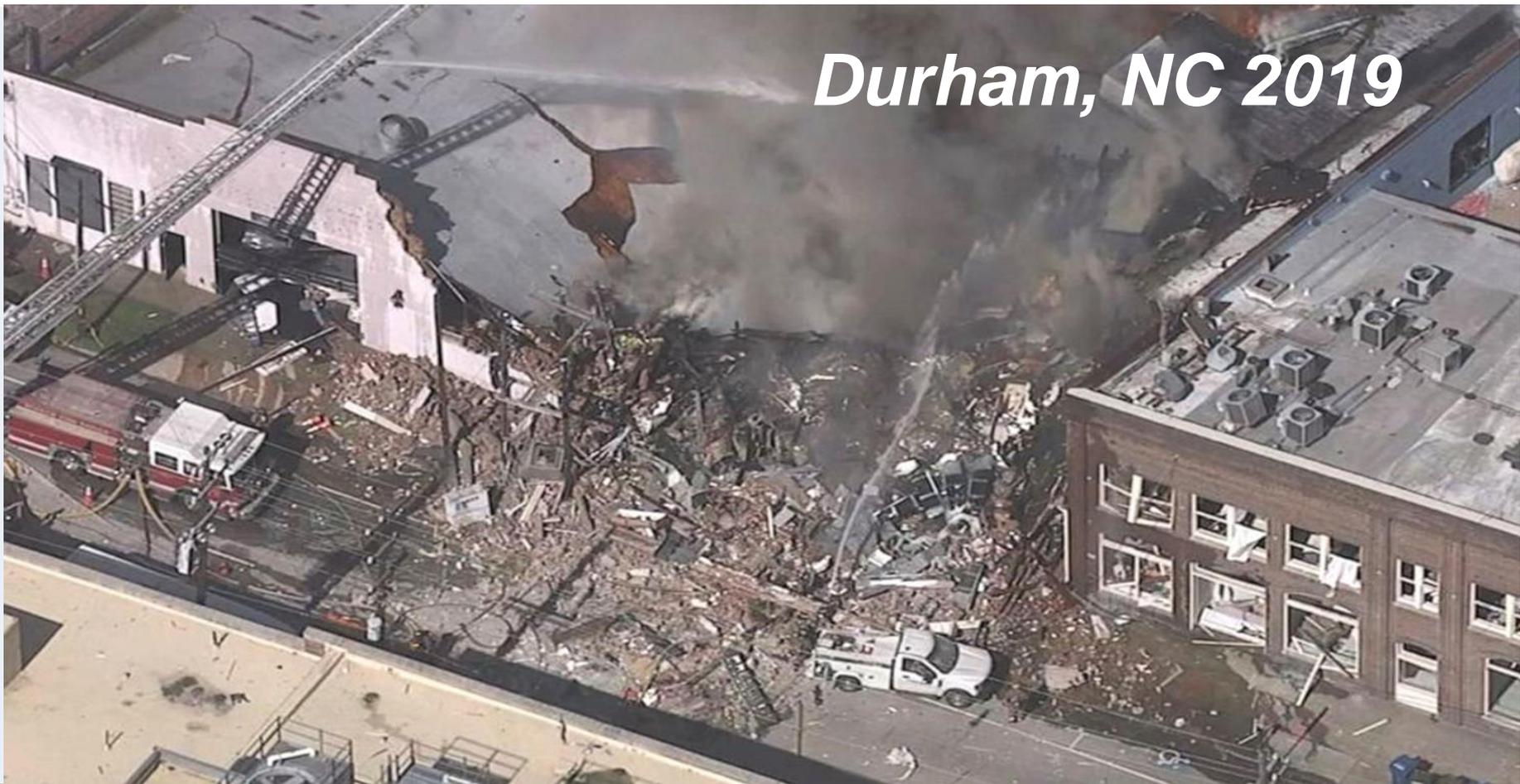
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Durham, NC 2019



Canton, IL 2016

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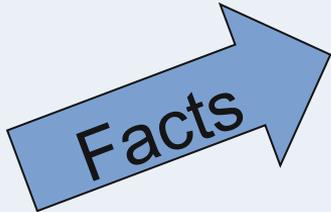
Carbon Monoxide RMLL

Case Results

Two children were overcome by carbon monoxide in their home after the mother left for work. The eldest child recovered with few residual problems. The other child was found in a coma and did not recover.

Case Investigation

- A service tech perform a gas turn on 3 days prior to the incident.
- He lit the pilots of the stove
- The sole source of heat was a small space heater. This unit was required to be vented to the outside and was not.
- The service tech advised the customer not to use the heater and left unit off at the valve.
- The mother turned the unit on after the service tech left and set the heater to “medium”



Points of Discussion

Discussion Points to Consider

1. What would you have done differently?
2. What do your companies procedures require?
3. What are other options in a case like this?
4. Where is the liability on the company/individual?
5. What factors would influence a settlement/outcome?

Carbon Monoxide Lessons Learned

1. When potentially hazardous conditions are found by an employee who has training in and responsibilities for safety conditions on customer fuel lines and
2. Disconnection of appliances, warning tags and possibly locking the gas valve are actions that need to be considered.
3. The company procedures specifically required that a “warning tag” be placed at the defective appliance and that the appliance be turned off or disconnected.

Additional Facts

The mother claimed that if the warning tag has been present, she would have not relit the heater and placed her children in a dangerous situation.

Company SIR \$1,000,000 + AEGIS \$3,700,000 =

Total \$4,700,000

**Questions
or
Comments**

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Stories From the Field

Depositions

- Work with your attorney.
- Be honest...honesty is always the best policy!
- It is okay to say, “I don’t know” or “I don’t remember” as long as it is the truth.
- Don’t speculate or answer what other people did if you did not witness their actions.
- Be calm and pause before answering, that will give your attorney time to object.



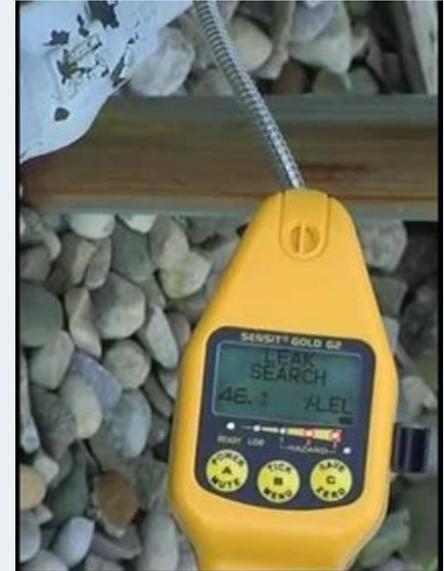
Combustible Gas Indicators

- ❑ Know your Instrument
- ❑ Understand Manufacturers Instructions
- ❑ Calibration
- ❑ Daily checks

Deposition

- ❑ 25 year Service Technician
- ❑ Established Countless Investigations
- ❑ Evacuations & Red Tags
- ❑ **What are the daily checks you perform each day on your instrument?**

Stories From The Field!



#1 Priority is to Protect Life then Property

H IS THERE A **H**AZARD?

E WHAT IS THE **E**XTENT OF THE HAZARD?

L WHAT ARE THE **L**IFE CONCERNS?

P **P**ROPERTY & **P**RIORITIES?

**Be Alert,
Be Prepared &
Be Safe**



Disclaimer

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