New England Kiln Dryers Association

Goal – Find Root Cause(s) to a incident

Objectives:
1. Explain what causal factors are.
2. Define intentional/unintentional errors.
3. Given incidents, determine what type of causal factors are seen.
4. Given Root Cause map, apply causal factors to find root causes.
Root Cause?
Root Cause?
Root Cause?
• What needs to happen for an accident to occur?

Human Errors

Equipment Failures
“The human errors and equipment failures that directly lead to the incident or make the consequences of the incident larger”
Causes of Accidents

Causal Factor #1

- **Human Error**
What Types of Human Error Do We Have?

• Unintentional
• Intentional
Unintentional Human Error

Committed or Omitted w/ NO prior thought typically think of these as ACCIDENTS

- bumping wrong switch
- misreading a gauge
- spilling coffee on control panel
Intentional Human Errors

We DELIBERATELY Commit or Omit because we believe that for whatever reasons

• our actions are correct
• our actions will be better (safer, quicker, etc)
• We think our way is better
• etc
Causes of Accidents

- Causal Factor #2
- Equipment Failures
Root Cause Definition

• The basic causes of events.

• The absence, neglect, or deficiencies of management systems that caused the:
  • causal factor events to occur or
  • allowed the causal factor conditions to exist.

• For the typical causal factor, there are multiple root causes.

W. J. Cox Associates, Inc.
1-29-300

- Serious / Fatal Injuries (0.30%)
- Minor Injuries (8.8%)
- Near Miss, Holy Smokes! (90.99%)
Causal Factors Identified

- Human Errors – Equipment failures

- Let's put the Root Cause Chart to work!

W. J. Cox Associates, Inc.
Lets Look at the Accident Again
Another Accident Scenario
Conclusion

• **ALL** accidents should be investigated
• Causal factors (human errors and/or equipment failures) should be identified
• Root Cause(s) should be identified
• Corrective actions applied
Thank YOU!