Presented by: Sophia Ridl

NIOSH
WSD - Denver

volume 1:
the invisible menace
EXTRA, EXTRA, read all about it. Oilfield workers die at a rate 7X that of general industry.
AGENT:
NATIONAL STEPS Network

SUPERPOWERS:
-DYNAMIC, LARGE SKILL SET
-INDUSTRY KNOWLEDGE
OSHA

AGENT:
OSHA

SUPERPOWERS:
- Enforcement
- Multifaceted
Silica. It's not just dust! Use controls!

Silica focus group meeting today!

Hazard Alerts! Get your Silica Hazard Alert here!
OSHA, the National STEPS Network, and NIOSH leaders sign Alliance
The New York Times

OSHA, the National STEPS Network, and NIOSH leaders sign Alliance

December 2, 2014
TIME TO SHOW WHAT WE ARE MADE OF!

ALLIANCE MISSION.
ALL AGENTS REPORT!
Looks like another possible fatal exposure to hydrocarbon gases and vapors while tank gauging. How many is that now?

There's been 9 similar incidents since 2010.

There's work to be done.
Looks like another possible fatal exposure to hydrocarbon gases and vapors while tank gauging. How many is that now?

There’s work to be done.

There’s been 9 similar incidents since 2010.
**Tank Hazard Alert**

**Hazard:**
- gauging • thieving • fluid handling

**Recognize and Avoid Hazards:**
- Opening hatches of storage tanks can lead to the rapid release of high concentrations of hydrocarbon gases and vapors. Those may result in very low oxygen levels and toxic and flammable conditions around and over the hatch. Recent reports have documented fires or explosions, and described workers experiencing dizziness, fainting, headache, nausea, and, in some cases, death while gauging tanks, collecting samples, or transferring fluids. Tank gauging, thieving, and fluid handling can be performed safely with proper precautions.

**Employers:**
- Must Conduct Exposure and Hazard Assessments at Workplaces to determine needs for:
  - Engineering Controls
  - Respiratory Protection
  - PPE
- Must Provide Training to Workers:
  - Hazard Communication
  - Lone Worker Policy
  - Proper use of PPE and respiratory protection
  - Types, use, and limits of respiratory protection equipment as appropriate
  - Recognizing ignition sources
- Should Implement Engineering Controls such as:
  - Remote Gauging
  - Closed Loop Systems
  - Auto Gauging
- Verify sub-contractors are following work practices/procedures

**PPE:**
- Protect your head, eyes, face, ears, body, hands, legs, feet
- Use:
  - Face Shield
  - Respirators
  - Gloves
  - Safety Shoes

**Workers:**
- Your employer has established safety procedures for your protection including a Hazard Assessment and Work Practices/Procedures
- Follow your employer’s Hazard Assessment and Established Work Practice/Procedures
  - Use toxic or multi-gas meter provided by your employer as per your training
  - Use alarms
  - Stop flow into tanks prior to gauging, when possible
  - Minimize leaning over open hatches—stand away/around/crosswind when possible
  - Ensure high humidity/low wind could increase danger
- Wear PPE as required/provided
- Attend Hazard Communication Training
- Be aware of potential Ignition Sources:
  - Static
  - Cell phones
  - Sparks from tools or metal objects
  - Open flames
  - Non-approved electrical equipment/devices
- Ensure proper grounding/bonding

**You can change your life in a single breath with one spark.**

Through the OSHA National State Alliance (NSA), this Tank Gauging Hazard Alert is for informational purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor. March 2015

Under the Occupational Safety and Health Act, employers are responsible for providing a safe and healthy workplace, free of recognized hazards. Employers and workers have rights to report hazards and injuries. OSHA can help answer questions or concerns from employers and workers. OSHA has an enforcement program, with priority given to high-hazard workplaces. For more information, contact your regional OSHA office (www.osha.gov/pls/ps胳/region.html), call 1-800-321-OSHA (6742), or visit www.osha.gov.
TANK HAZARD ALERT

gauging • thieving • fluid handling
how to recognize and avoid hazards

Opening thief hatches of storage tanks can lead to the rapid release of high concentrations of hydrocarbon gases and vapors. These may result in very low oxygen levels and toxic and flammable conditions around and over the hatch. Recent reports have documented fires or explosions, and described workers experiencing dizziness, fainting, headache, nausea, and, in some cases, death while gauging tanks, collecting samples, or transferring fluids. Tank gauging, thieving, and fluid handling can be performed safely with proper precautions.

EMPLOYERS:

1. Conduct Exposure and Hazard Assessments at Locations to determine needs for:
   - Engineering Controls
   - Respiratory Protection
   - PPE

2. Provide Training to Workers:
   - Hazard Communication
   - Lone Worker Policy
   - Proper use of PPE and respiratory protection
   - Types, use, and limits of respiratory protection equipment as appropriate
   - Recognizing ignition sources

3. Implement Engineering Controls such as:
   - Remote Gauging
   - Closed Loop Systems
   - Auto Gauging

Verify subcontractors are following work practices/procedures

PPE protect your...

WORKERS:

Your employer has established safety procedures for your protection, including a Hazard Assessment and Work Practices/Procedures

1. Follow your employer’s Hazard Assessment and Established Work Practices/Procedures
   - Use toxic or multi-gas meter provided by your employer as per your training
   - Heat or cold
   - Stop flow into tanks prior to gauging, when possible
   - Minimize leaning over open hatches – stand away/spread/crosswind when possible
   - Placement of high/motionless objects

2. Wear PPE as required/provided

- Face Respiratory Tract
- Head
- Hands
- Legs

Attend Hazard Communication Training

1. Be Aware of Potential Ignition Sources:
   - Static
   - Open flames
   - Non-approved electrical equipment/devices
   - Bumping

If you are not sure, STOP the job and ask!

Everyone has the right to STOP work that is unsafe.

YOUR LIFE can change in a SINGLE BREATH or with ONE SPARK.
EXTRA, EXTRA, read all about it \textbf{no oilfield worker deaths} due to exposure to hydrocarbon vapors and gases in \textbf{2015}
EXTRA, EXTRA, read all about it no oilfield worker deaths due to exposure to hydrocarbon vapors and gases in 2015.
ALL AGENTS REPORT FOR DUTY!
Questions?