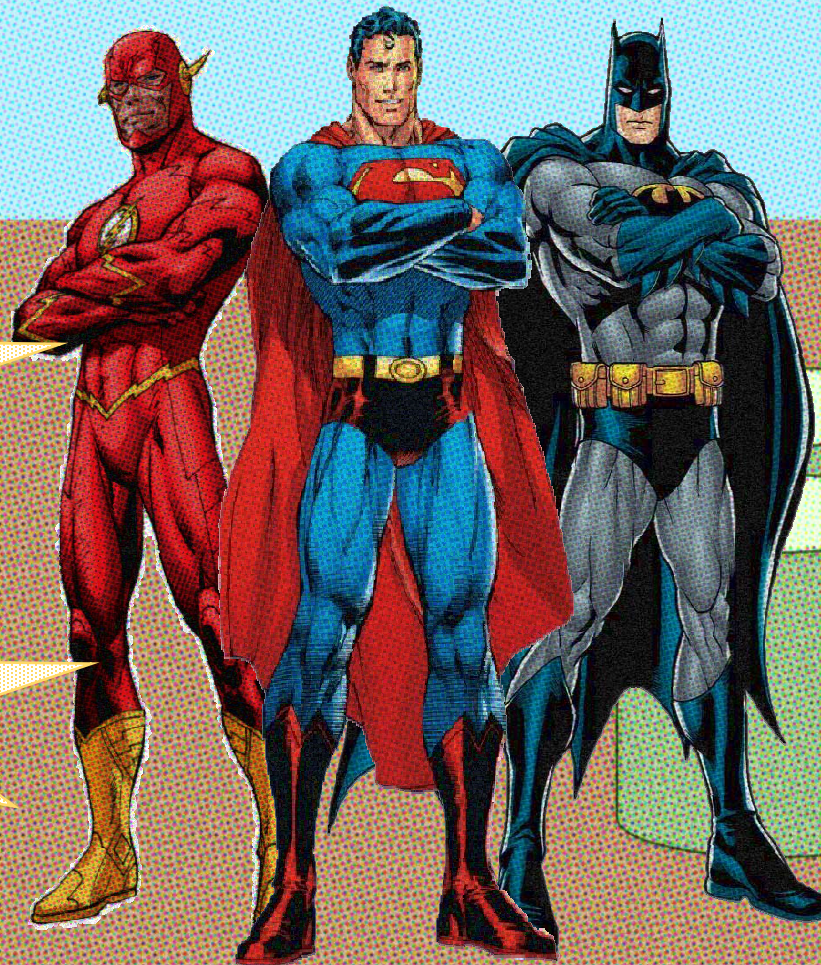


the alliance

Presented by:
Sophia Ridl

NIOSH
WSD- Denver

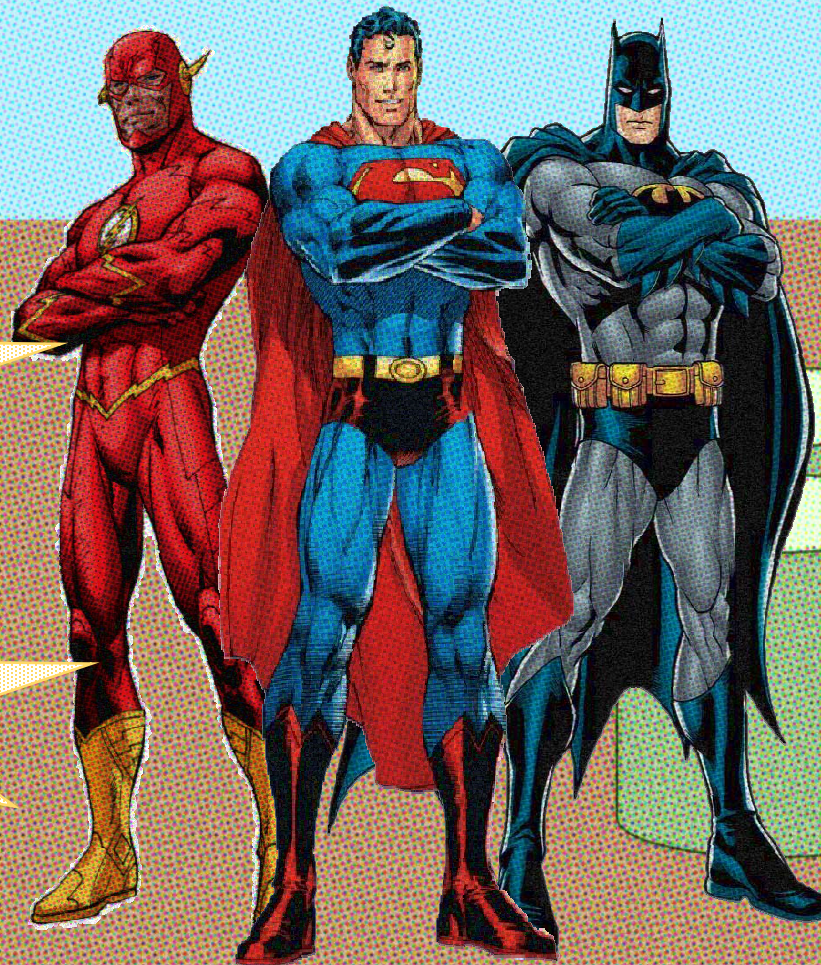


volume 1:
the invisible menace

the alliance

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volume 1:
the invisible menace

2014



EXTRA, EXTRA,
read all
about it **oilfield**
workers 7X
die at a rate
that of general industry

TIME

Superheroes of the Year





AGENT :

NATIONAL STEPS NETWORK

SUPERPOWERS :

- DYNAMIC, LARGE SKILL SET
- INDUSTRY KNOWLEDGE

NIOSH

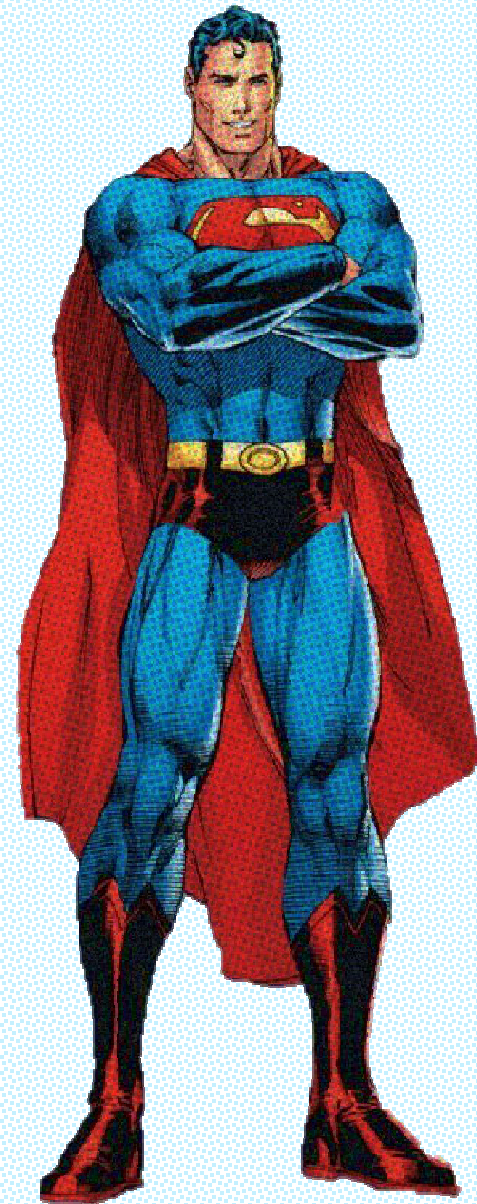
AGENT :

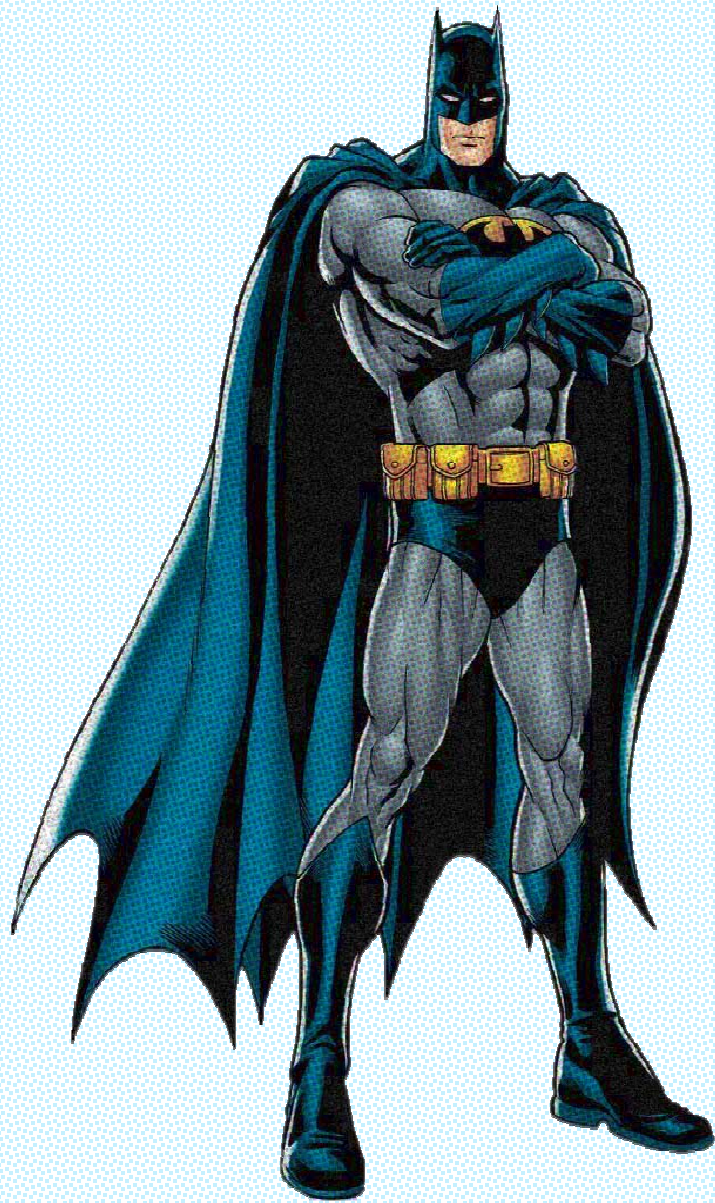
NIOSH

SUPERPOWERS :

—RESOURCES

—RELIABLE





OSHA

AGENT :

OSHA

SUPERPOWERS :

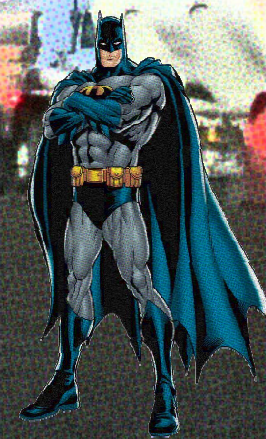
- ENFORCEMENT
- MULTIFACETED

Silica. It's not just dust! Use controls!



Silica focus group meeting today!

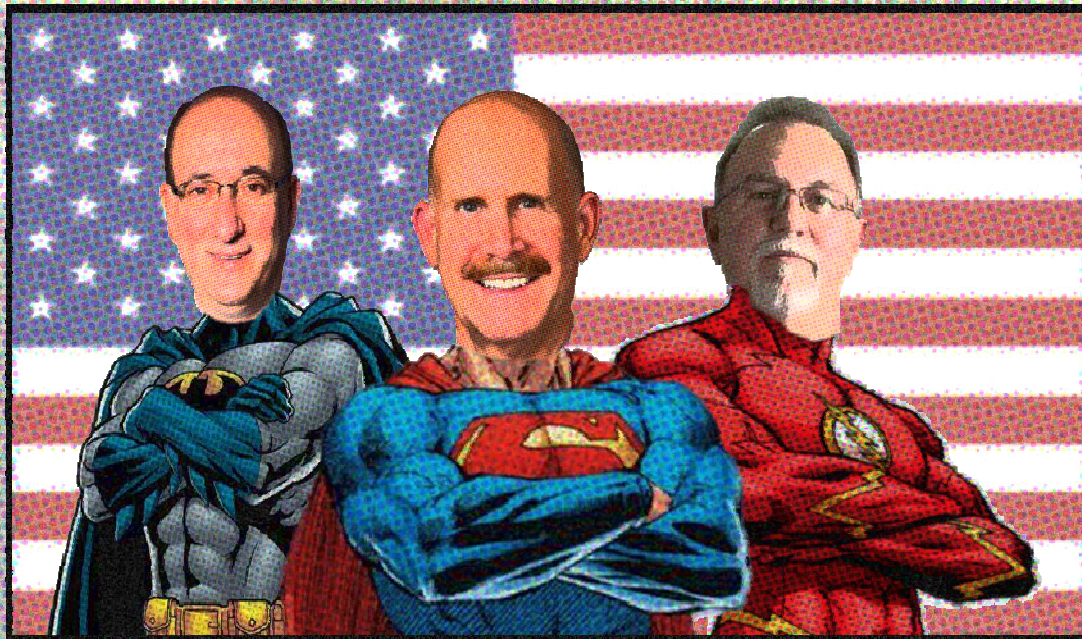
Hazard Alerts! Get your Silica Hazard Alert here!



The New York Times

December 2, 2014

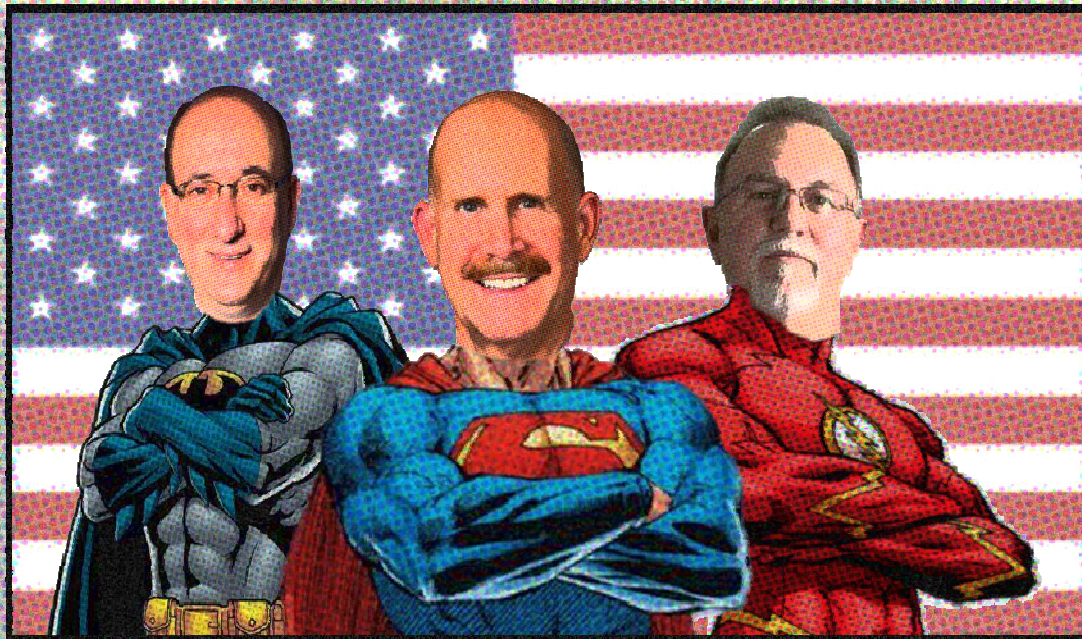
**OSHA, the National STEPS Network,
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ALLIANCE MISSION.
ALL AGENTS REPORT!

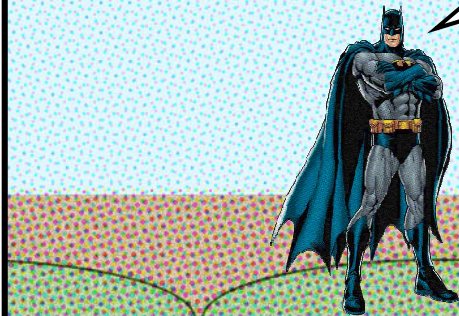
TIME TO SHOW WHAT
WE ARE MADE OF!



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.

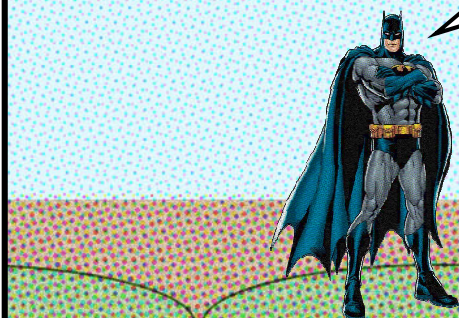
There's work to be done.



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There's work to be done.



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. 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.

alliance
An OSHA Cooperative Program



designed by:
PEC
SAFETY

hazards
that workers can encounter

- oxygen deficiency
- fires & explosions
- chemical toxicity
hydrocarbon vapors
propane
butane
benzene
hydrogen sulfide (H₂S)

potential effects
of exposure

- death
- chronic illness
- flash fire burns
- dizziness
- irregular heartbeat
- irregular breathing
- respiratory irritation
- fatigue
- nausea
- eye irritation
- headache

EMPLOYERS:

Must Conduct Exposure and Hazard Assessments at Worksites to determine needs for:

- Engineering Controls
- Respiratory Protection
- PPE
- Monitoring Device such as:
 - ▶ Multi-gas meter
 - ▶ Other direct-reading toxic gas meter (benzene)

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
- Tank Gauging work practices/procedures
- Emergency Response Plan
 - ▶ Procedures for alarm response and site re-entry
- Use and limits of toxic- or multi-gas meter for O₂, H₂S, LEL, and CO

Should Implement Engineering Controls such as:

- Remote Gauging
- Closed Loop Systems
- Auto Gauging
- Sight Glasses/Gauges
- Remote Venting

Verify sub-contractors 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**

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
- Heed all alarms
- Stop flow into tanks prior to gauging, when possible
- Minimize leaning over open hatches – stand away/upwind/crosswind when possible
- Inversion/high humidity/lock of wind could increase danger
- Follow your employer's "lone worker" policy
- Allow tanks to ventilate after opening thief hatches
- Evacuate unsafe work areas and report immediately
- Know the limits of your respiratory protection as provided during employer training
- Immediately report any health symptoms

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

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

Everyone has the right to STOP work that is unsafe.

Through the OSHA National Steps Alliance, 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 and workers have rights. OSHA can help answer questions or concerns from employers and workers. OSHA's On-site Consultation Program (www.osha.gov/consultation) offers free and confidential advice to small and medium-sized businesses, with priority given to high-hazard worksites. For more information, contact your regional or area OSHA office (www.osha.gov/html/RAmap.html), call 1-800-321-OSHA (6742), or visit www.osha.gov.



**YOUR
LIFE**

can change in a **SINGLE BREATH** or with **ONE SPARK.**

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gauging • thieving • fluid handling
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designed by:



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potential effects of exposure

death

chronic illness

flash fire burns

dizziness

irregular heartbeat

irregular breathing

respiratory irritation

fatigue

nausea

eye irritation

headache

hazards
that workers can
encounter

oxygen
deficiency

fires &
explosions

chemical
toxicity

hydrocarbon
vapors

propane

butane

benzene

hydrogen sulfide (H₂S)

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EXTRA, EXTRA,
read all
about it **no oilfield**
worker deaths
due to exposure to hydrocarbon
vapors and **gases in 2015**



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read all
about it **no oilfield**
worker deaths
due to exposure to hydrocarbon
vapors and **gases in 2015**





ALL AGENTS REPORT FOR DUTY!



NORA Council Meeting
Sept. 2015



OSHA Oil and Gas
Safety and Health Conference
2016

the alliance



the alliance



Questions?

