

- 1  **WELCOME**
  - Please call 605-475-6006, enter access code 844157#
  - Then introduce yourself
  - Then hit \*6 to mute your phone line
  - You may hit \*6 again to un-mute your phone to ask a question
- 2  **Presents**

**Oregon UST Service Provider**  
Webinar Series

Sponsored by
- 3  **www.USTtraining.org**
- 4  **<http://www.deq.state.or.us/lq/tanks/ust/>**
- 5  **POLLS: Who are you?**
  - Years in business
  - Cert. Type
  - 2007-2008 attendees
  - Why back
  - Webinar experience
  
- 6  **Schedule: Sign up for some or all**
- 7  **FEEDBACK: HOW MANY OF THESE WEBINARS ARE SIGNED UP FOR?**
- 8  **Outline**
  - 1 • Session 1: Introduction
    - Overview
    - Energy Policy Act
  - Session 2: Fire Safety
    - General Site Safety
    - Fire Triangle
    - Alternative Fuels
    - Purging Vs. Inerting
    - Urban Legends

2 • Session 3: Installation & Modifications

- Installation Permits
  - Recommended Practices
  - Notification and Reporting
- Operating Permits
  - Notification
- Modification Permits
  - Recommended Practices
  - Notification and Reporting

9  **Outline**

1 • Session 4: UST Rules Overview

- Inspecting, Testing, Maintenance, Repair and Record Keeping for
  - Release Detection
  - Release Prevention

2 +Session 5: Closure, Overfill

- +Recommended Practices
- +Notification and Reporting
  - +Temporary Closure
  - +Permanent Closure
- +Overfill Prevention

10  **Tools**

- Chat box
- Feedback Form
- Polls
- Handouts
- Web Links
- Videos

11  **Ground Rules**

- 1 • Speakers have the floor
- If you have a questions, raise your hand or type in the chat box
  - Hit \*6 to un-mute your phone before asking a question

- 2 • Questions throughout
- Final Q&A review at end

12  **ALL HANDOUTS HERE**  
<http://www.petroleumtrainingsolutions.com/orserviceproviders.html>

13  **SESSION 2:**  
**Fire Safety**

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23  **Flammable Range**

24  **Flammable Range of Gasoline**

25  **Flammable Range of  
E10**

26  **Flammable Range of  
E85**

27  **Flammable Range of  
Ethanol**

28  **Flash Point**

29  **Fire Triangle**

30  **Fire Triangle**

31  **Fire Triangle**

32  **Fire Triangle**

33  **Fire Triangle**

34  **Oxygen Concentrations to Remember**

35  **Purging**

Theory

Maintain atmosphere well below LEL

Process

Move large volume of air through the tank

Target Concentration

10-20% of LEL

Monitoring Equipment

CGI (explosimeter)/O<sub>2</sub> meter

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**Purging Cautions**

- Tank vapors and exhaust vapors will go through the flammable range
- Will generate large quantity of vapors
- Beware of ignition sources – especially static electricity
- Vapors regenerate
- Explosimeter needs oxygen to read correctly

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**Inerting**

Theory

Maintain O<sub>2</sub> level well below combustion limit

Process

Add non-combustible gas to tank

Target Concentration

6-7% O<sub>2</sub> or less

Monitoring Equipment

Oxygen meter not affected by inerting gas

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**Inerting Cautions**

- Need 15-25 lbs CO<sub>2</sub> (dry ice) per 1000 gallons of tank capacity
- Need 50 lbs N<sub>2</sub> per 3000 gallons of tank capacity
- Do not use CO<sub>2</sub> fire extinguisher as source of CO<sub>2</sub>
- Do not use vehicle exhaust as inert gas

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**2003 International Fire Code**

“Tanks shall be purged of vapor and inerted prior to removal.”

3404.2.14.2

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50  **Surviving Tank Closure**

51  **Good Future Resources**

- Petroleum Equipment Institute ([www.pei.org](http://www.pei.org))
- Yahoo LeakList ([www.kwaleak.com/leaklist.htm](http://www.kwaleak.com/leaklist.htm))
- New England Interstate Water Pollution Control Commission ([www.neiwpsc.org](http://www.neiwpsc.org))