

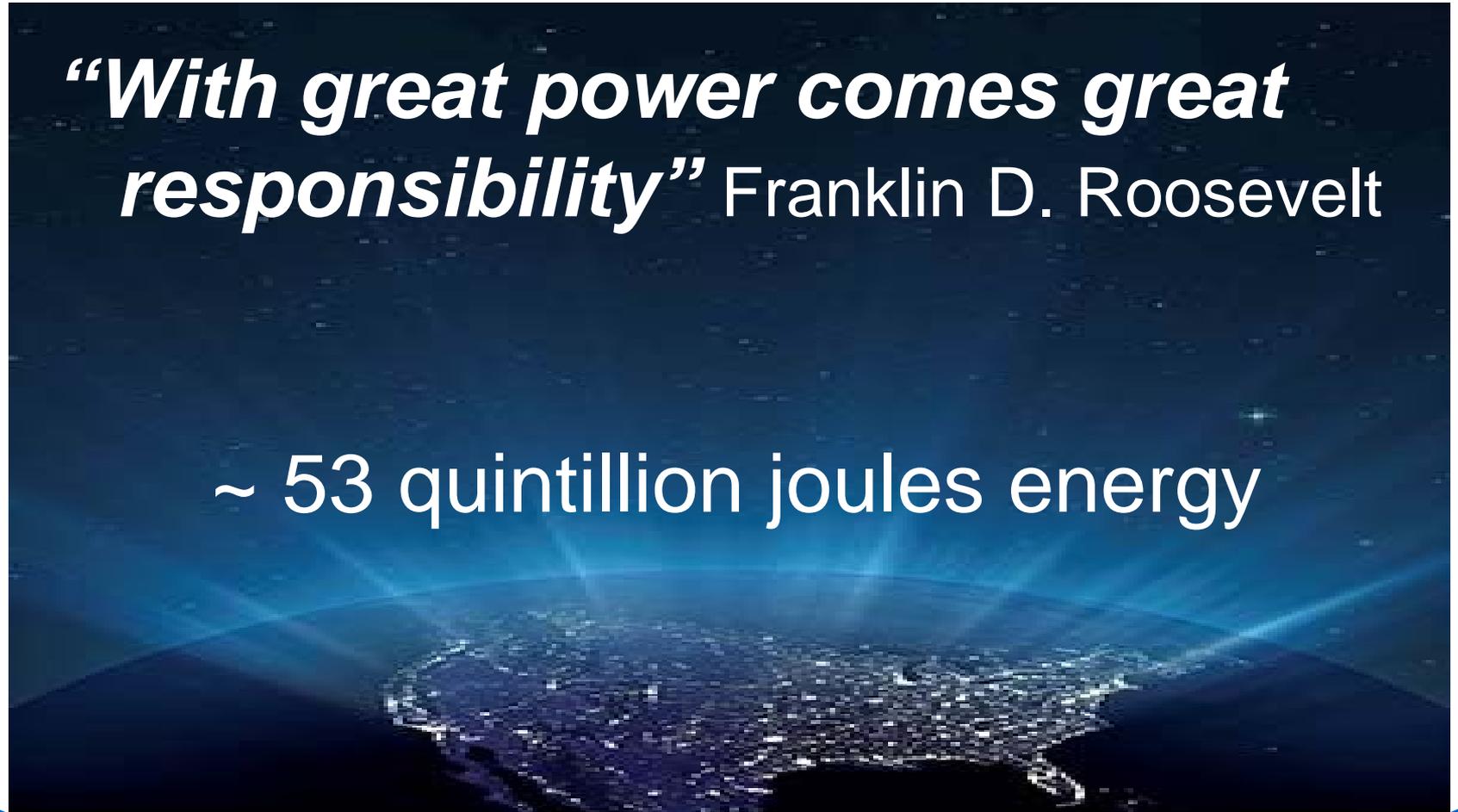




What comes after a trillion?

***“With great power comes great responsibility”*** Franklin D. Roosevelt

~ 53 quintillion joules energy





# Original Pig "Research Lab"



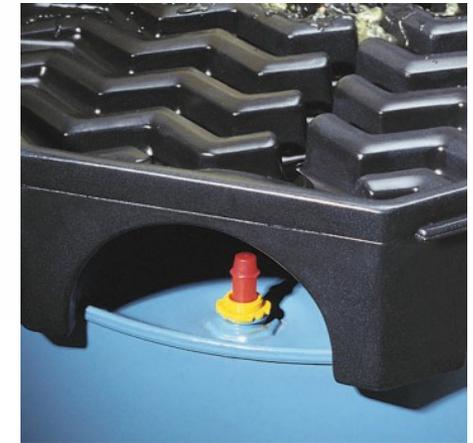


# Helping Oil & Gas Companies for Years

Talisman Energy –  
May 1999

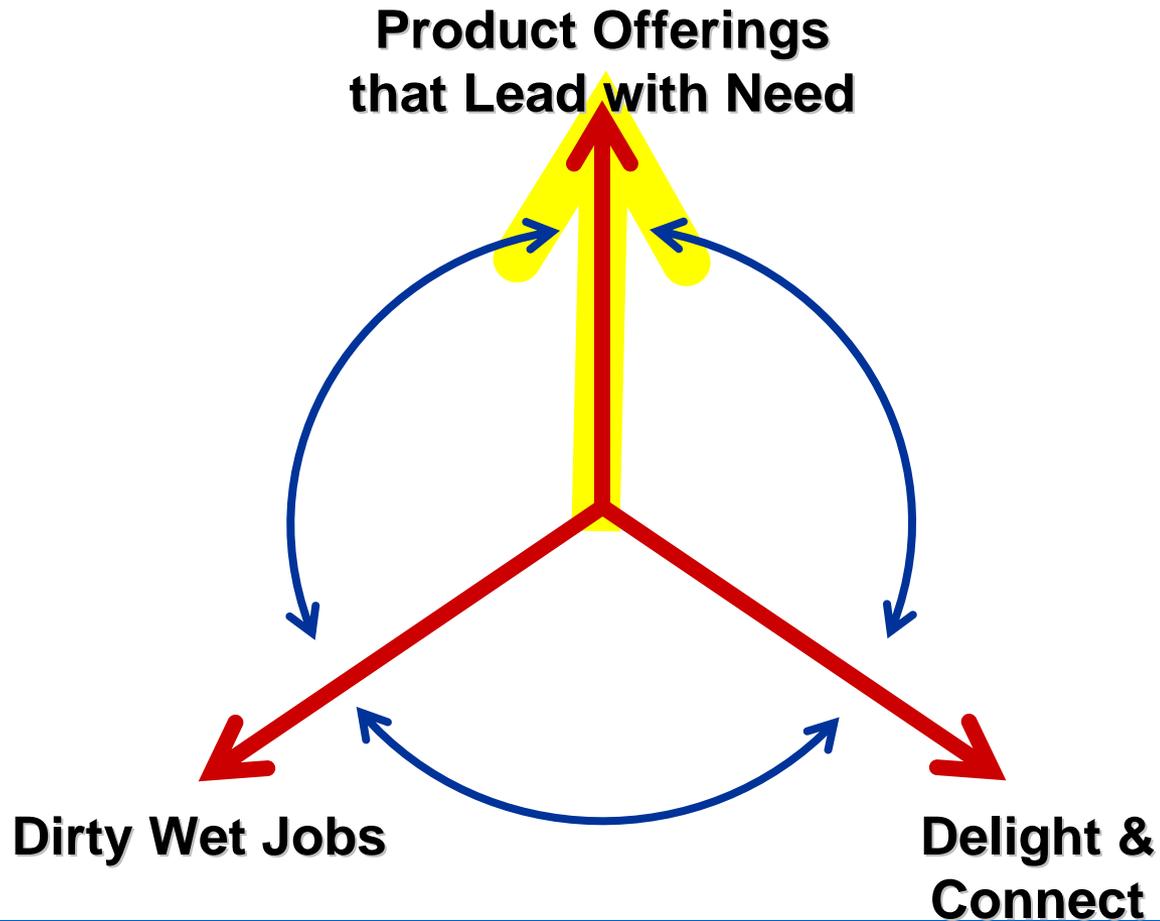
Consol Energy -  
March 1996

Anadarko Petroleum -  
March 1996





# New Pig's Innovation Strategy





# Better / Best Practice Required





# Better / Best Practice Required

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# Surface Spills vs. “Down-the-Hole”

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- University of Texas
- US EPA
- Marcellus Shale Advisory Commission
- DOE Advisory Board Shale Gas Subcommittee
- Citizen’s Marcellus Shale Commission
- PA DEP





# The Risk of Surface Spills – University of Texas, Preliminary Findings

## Fact-Based Regulation for Environmental Protection in Shale Gas Resource Development



Dr. Chip Groat

**An Initiative of the Energy Institute**  
The University of Texas at Austin



*Charles G. Groat, Associate Director*  
*November 9, 2011*





# The Risk of Surface Spills – USA EPA

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# The Risk of Surface Spills – Marcellus Shale Advisory Commission

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## Governor's Marcellus Shale Advisory Commission

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Report

7/22/2011



# The Risk of Surface Spills – DOE Advisory Board Shale Gas Subcommittee





# The Risk of Surface Spills – Citizen's Marcellus Shale Commission



**Marcellus Shale:  
A Citizens View**

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Citizens Marcellus Shale Commission  
October 2011





# The Risk of Surface Spills – New Proposed PA DEP Regulation

Draft – 09/02/2011

**DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Bureau of Oil and Gas Management**

**DOCUMENT NUMBER:** \*\*\*.\*\*\*.\*\*\*

**EFFECTIVE DATE:** Month DD, YYYY

**TITLE:** Addressing Spills and Releases from Oil & Gas Wells and Related Operations.

**AUTHORITY:** The Oil and Gas Act of 1984, Act of December 19, 1984, P.L. 1140, as amended, (58 P.S. §§601.101-601.607), The Clean Streams Law (35 P.S. §§691.1-691.1001), The Solid Waste Management Act (35 P.S. §§6018.101-6018.1003), and the Pennsylvania Land Recycling and Environmental Remediation Standards Act (35 P. S. §§ 6026.101 - 6026.908) (Act 2).

**POLICY:** It is the policy of the Bureau of Oil & Gas Management that persons responsible for spills and/or releases from and related to oil and gas well operations shall follow this policy in addressing those spills and releases to ensure protection of people and the environment

**PURPOSE:** This policy is developed to facilitate a consistent and uniform general response by those working in and for the oil and gas industry to address spills and releases related to oil and gas well operations regulated by the Pennsylvania Department of Environmental Protection (DEP or Department).

**APPLICABILITY:** This policy applies to any and all parties responsible for spills and releases from oil and gas wells and related operations.

**DISCLAIMER:** The policies and procedures outlined in this guidance are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements. The policies and procedures herein are not adjudications or regulations. There is no intent on the part of DEP to give these policies and procedures that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

**PAGE LENGTH:** \*

**LOCATION:** Volume \*, Tab \*\*





# Best Practice- Secondary Containment





# Better / Best Practice Required





# Best Practice- Secondary Containment



# Application-Specific Innovation



18 Product-of-the-Year Awards

# Shale-Specific Innovation

2011 New Product of the Year





Ask us  
about our  
new solutions  
for the utility  
industry!



**Your tough problems  
create our products.**

# Questions?

Doug Laplante  
New Pig Corporation

[dougla@newpig.com](mailto:dougla@newpig.com)



Code of Federal Regulations

<http://ecfr.gpoaccess.gov/>

PA Code

<http://www.pacode.com/secure/search.asp>

WV Code

<http://www.legis.state.wv.us/WVCODE/Code.cfm>

American Petroleum Institute (API)

<http://www.api.org/Standards/new/api-hf3.cfm>

Marcellus Shale Coalition

<http://marcelluscoalition.org/>

Pennsylvania Independent Oil & Gas  
Association (PIOGA)

<http://www.pioga.org/>

State Review of Oil & Natural Gas  
Environmental Regulations  
(STRONGER)

<http://www.strongerinc.org/reviews/reviews.asp>



# Addendum

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