





Interstate Oil & Gas Compact Commission

Welcome

Energy Resources, Research & Technology Committee

Chair: Scott Dawson

Vice Chair: Lanny Schoeling

Summer Intern: Kayla Randall













Regulators Responding to New Technologies

- In today's regulatory environment, technologies change rapidly; regulators have trouble keeping rules aligned to new and developing technologies.
- Regulators conduct more hearings, do more research, supervise rulemaking and rule changes and yet still keep pace with day-to-day duties.
- Most regulators agree: "we are having to do more and more, with less and less!"













Agenda

- •Regulatory Challenge & ERRT Response
- ERRT Mission & Methodology
- Key Issues From the Regulators
- Navigate the New and Improved Site
- Feedback and Next Steps
- Summary and Questions













Regulatory Challenge & ERRT Response

- •Regulate the exploration, development and production of the jurisdictions' natural resources in a manner that protects public safety, health, welfare, the environment and wildlife resources
- ERRT launched a project designed to better connect regulators with technical societies, up-to-date information and SMEs on their key issues
- ERRT has developed an information-sharing portal for regulators focused initially on key 2018/2019 issues













ERRT Mission

In May 2015, the IOGCC initiated a project through its ERRT standing committee to develop recommendations to the IOGCC and its membership on ways to improve regulatory agency awareness and responsiveness to the changing technical and operational practices in the oil and gas exploration and production (E&P) industry.













ERRT Mission

Draft Recommendations:

- 1. Identifying issues and compiling responsive technical information & SME's
- 2. Chief technology officers
- 3. Regulatory excellence academy
- 4. State oil and gas regulatory exchange
- 5. Inspector professional interaction and training
- 6. Non-rulemaking policies
- 7. Data development and evaluation
- 8. Risk communication and science education
- 9. Technology transfer

This project is all about initiating #1... identifying issues and compiling responsive technical information













ERRT Approach

- Combine two years of CSPRO notes and surveys requesting input regarding key issues: well operations, orphan wells, P&A, air, produced water
- Working with Technical Societies on best ways they can assist with providing leading information and subject matter experts
- Summer intern (Kayla Randall) building the portal and uploading initial information sets
- ERRT committee securing subject matter experts
- Interviewing various jurisdictions for their views on the portal, the information and SME's
- Portal will be a dynamic tool, continuously updated and upgraded based on needs









Members Only Page



ENERGY RESOURCES, RESEARCH AND TECHNOLOGY

A national forum, the Energy Resources, Research and Technology (ERRT) Committee debates, studies and develops positions on economic, technical, research and safety issues that confront domestic oil and natural gas production.

Chair: Scott Dawson, Bureau Chief, New Mexico Oil Conservation Division

Vice Chair: Lanny Schoeling, Vice President Oilfield Innovation, NeoTek Energy, Inc.

IOGCC Staff Liaison: Amy Childers

For more information about the ERRT committee or to find out how to become a member, please contact Amy Childers at email address: amy.childers@iogcc.state.ok.us

News:

Helpful Information:

Information Links https://iogcc.publishpath.com/links

Current Projects

FracFocus







COMPACT COMMISSION

- Prarginal Well Report
- Summary of State Statutes

IOGCC Committee Projects:

Legal and Regulatory Affairs Committee:

- · 2016 Committee project: State Financial Assurance Requirements
- · 2017 Committee project: Idle Well Toolbox for State and Provincial Regulators
- 2018 Joint Committee projec Travis evior Infinishmetice and Utilities

Public Outreach Committee:

· 2019 Committee project: 2019 Community Outreach Toolbox

Issues

- Carbon Sequestration
- Hydraulic Fracturing
- Model Statutes

Presentations:

IOGCC Annual Business Meeting and Annual Conference Speaker Presentations: https://iogcc.publishpath.com/presentations

IOGCC Annual Business Meeting, Oklahoma City, Oklahoma - May 5 - 7, 2019
Energy Resources, Research and Technology Committee
"Regulatory Adaption To New Technologies"

Publications

Click here to access the IOGCC publications.

Members Only Portal

Click here to access the Energy Resources, Research and Technology Members Only portal.

HOME SITE MAP SEARCH LINKS CONTACT US





	ABOUT US	WHAT WE DO	MEMBER STATES	ISSUES	NEWS	EVENTS	LINKS	PUBLICATIONS	
	Well Operations	Orphan Well	s Plugging	Air	Produc	ed Water	· All	Subject Matter	
E	xperts								

Energy Resources, Research and Technology Committee Table of Contents

Well Operations
Simultaneous Drilling

Frac Hits

Anti-Collision

Surface Safety Issues

Subsurface Interference Related to Drilling

Completing Wells in Close Proximity to Each Other

Hydraulic Fracturing Monitoring

Latest Techniques

Induced Seismicity

Servicing High Pressure Wells

Subject Matter Experts

Robert Barba

Lloyd Hetrick

George King

Kan Wu

Orphan Wells







ABOUT US	WHAT WE DO	MEMBER STATES	ISSUES	NEWS	EVENTS	LINKS	PUBLICATIONS	
Well Operations	Orphan Wells Plugging		Air	All Sub	ject Mat	ter Exp	erts	

Simultaneous Driding

Frac Hits

Articles

HartEnergy, Article April 01, 2019, by Brian Walzel "Finding A Solution To The Frac Hit Problem"

North American Shale, Article February 12, 2019, by Luke Geiver "Reveal releases FracEYE system to reduce frac hits in shale wells"

Hart Energy, Article February 06, 2019, by Brian Walzel "SPE Hydraulic Fracturing Show Takes On Frac Hits"

Journal of Petroleum Technology, Article November 07, 2018, by: Trent Jacobs "Frac Hits To Take Center Stage at SPE Hydraulic Fracturing Conference"

MRT, Article February 20, 2018, by Mella McEwen
"'Frac Hits' growing issue as infill drilling, frac stages rise"

Journal of Petroleum Technology, Article August 01, 2018, by Trent Jacobs "In the Battle Against Frac Hits, Shale Producers Go to New Extremes"

Journal of Petroleum Technology, Article November 2017, by Trent Jacobs
"Frac Hits Reveal Well Spacing May be Too Tight, Completion Volumes Too Large"

Conferences

AICHE, Conference November 02, 2018, by M. Nikolaou, N. Goyal, and M. Marongiu-Porcu "Estimating the Drainage Area of 'Frac-HIT' or Refractured Horizontal Well"

SPE Annual Technical Conference and Exhibition, Conference September 24-26, 2018, by Tom Whitfield, M. Hunter Watkins, and L. James Dickinson "Pre-Loads: Successful Mitigation of Damaging Frac Hits in the Eagle Ford"

This Page Contains:

> Simultaneous Drilling

Hydraulic Fracturing Monitoring

> Servicing High Pressure Wells

Subject Matter Experts

Redirect:

All Subject Matter Experts







			MEMBER STATES						
	Well Operations	Orphan Wel	lls Plugging	Air	Produc	ed Water	r All	Subject Matter	
E	xperts								

Identifying & Plugging Orphan Wells

Articles

Houston Harbaugh, Article 2019, by Robert J. Burnett
"Abandoned Oil and Gas Wells - More Than Just a Rusty Eyesore"

PennState Extension, Article October 23, 2018, by Seth Pelepko and Luke Plants "Addressing Orphan and Abandoned Wells from a Regulatory and Industry Perspective"

Michigan Journal of Environmental & Administrative Law, Article 2018, by Bret Wells and Tracy Hester "Abandoned but Not Forgotten: Improperly Plugged and Orphaned Wells May Pose Serious Concerns for Shale Development"

KUNC, Article October 22, 2018, by Rae Ellen Bichell "Here's A Map Of Orphaned Oil And Gas Wells Across Colorado"

KUNC, Article July 19, 2018, by Rae Ellen Bichell

"Orphaned Oil And Gas Equipment Must Be Plugged Or Cleaned Up, Says Colorado Executive Order"

The Denver Channel, Article July 18, 2018, by Blair Miller

"Hickenlooper's executive order aims to eliminate Colorado's orphaned oil and gas wells"

Oklahoma Magazine, Article 2018, by Russell Lawson

"Orphaned Oil Wells Plugging and cleaning abandoned sites throughout the Osage Nation cost millions of dollars"

Occupational Safety and Health Administration, article January 18, 2018, by OSHA "Plugging and Abandoning Oil and Gas Wells"

Offshore, Article November 19, 2017, by Delaney Olstad "New P&A technology cuts operational time in half"





Identifying & Plugging Orphan Wells

Subject Matter Experts

Redirect:

All Subject Matter Experts



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Well Operations Orphan V ell ร วา๊เกษฐภาษา			Aiı	Al' Sub	ject Mat	ter Expo	erts	

Well Operations

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Operations Engineering Advisor at Newfield Exploration Company Newfield Exploration Company Operations Engineering Advisor Email Phone Number

Orphan Wells



Redirect: Well Operations Orphan Wells Plugging

Air











Regulator Interviews

Interviewed several jurisdictions to demonstrate the portal

- Is the material relevant; does it help?
- What can we add, remove or adjust to better fit your needs?
- Is the material clearly displayed, organized and easily accessible?

The portal was also sent to technical societies and subject matter experts for their review and analysis.

- How can technical societies be better integrated into populating the contents of the portal and SME's?
- How can this best be kept up-to-date and relevant?













Some Regulator Responses & Recommendations

New Mexico, North Dakota and Ohio

- •Useful, very good first steps
- •Material must be kept up-to-date
- •SME's will be critical
- •Additional linking needed
- •Perhaps a search engine using key words
- •Note SME specific expertise
- •Exhibit applicable conferences and workshops upcoming for tech societies
- •Have a comment box
- •Expand the number of issues













Going Forward

- Annual data collection: new CSPRO & surveys
- •Update key issues; add more topics of interest
- Maintenance of content and SME's
- •Input from technical societies, SME's & regulators
- •Rollover annually at IOGCC Annual Conf.
- •Not simply a database of papers....critical to promote communication amongst jurisdictions, technical societies and SME's!













Summary

- Regulatory Challenge
- ERRT Mission
- What We've Done
- Key Issues From the Regulators
- Navigate the New and Improved Site
- Feedback and Next Steps













THANK YOU...Questions?

The ERRT would like to thank the following organizations for their enthusiasm and dedicated help with this important effort:

SCHLUMBERGER

API

SEG

SPE

AAPG

IADC

AGI

NETL

State and Province Regulators Individuals who helped support the ERRT Committee













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