



PRE-MAIN CONFERENCE BREAKFAST BRIEFING

08:15 Comprehensive Update of New Federal Flaring Requirements & Methane Calculations For Upstream Oil & Gas Facilities

Understand changing compliance requirements and develop practical strategies for implementing these regulations effectively.

- Overview of the latest federal regulations on flaring and their specific requirements
- Strategies for compliance with new flaring standards to avoid penalties
- Understanding the Waste Emissions Charge and the Super Emitter Program
- SubPart W Reporting Requirements for flaring

Dan Sims and Michael Partee, *Technical Specialists, Rule Registrations Section, Air Permits Division, Texas Commission on Environmental Quality*

08:35 – 08:45 Curated Q&A

MAIN CONFERENCE DAY 1 - FACILITY DESIGN & FLARE/VENTING MITIGATION

Exploring Cost-Effective Solutions for Meeting New Flaring and Venting Emissions Standards

09:00 Chair's Opening Remarks

OPENING PANEL – STRATEGIC LEVEL FACILITIES DESIGN IN RESPONSE TO NEW FLARING & METHANE REGULATIONS

09:05 TCEQ ON THE NEW VOC AND METHANE STANDARDS IN 40 PART 60 SUBPARTS 0000b/c

Texas-Specific Implementation Of EPA Emissions Limits, Air Quality Monitoring & Enforcement Programs For Oil & Gas Facilities

This presentation provides an overview of EPA's final greenhouse gas rules for new and existing oil and gas sources, including:

- General rule information
- Air permitting impacts
- State plan development (for existing sources)
- Rule applicability criteria
- Standards for covered operations / facilities

Dan Sims, *Technical Specialist, Rule Registrations Section, Air Permits Division, Texas Commission on Environmental Quality*

09:45 Questions & Answers

09:50 Colorado's Framework for EPA Emissions Limits and Air Quality Management in Oil and Gas

- Colorado's State Implementation Plans for the oil and gas sector
- Techniques for maintaining compliance without incurring excessive costs
- Meeting the 36-Month Compliance Deadline
- Comprehensive timeline for SIP submission and enforcement.
- Best practices to ensure timely and efficient compliance



Christy Woodward, *Senior Regulatory Specialist, Colorado Oil & Gas Association*

10:20 How Regulations are Evolving in New Mexico and Developing Industry Partnerships to Meet the New Challenges

What challenges do new environmental regulations pose for both the midstream and upstream sectors and how are new partnerships evolving to help tackle these?

Kaitlyn Lopez, *Environmental Director, Pinon Midstream*

10:35 Panel Discussion: Comparing Strategies Between States For Developing And Enforcing Effective Emission Reduction Programs, Balancing Compliance Costs, And Meeting EPA Timelines

11:00 – 11:30 Refreshments and Networking in The Exhibition Area

EFFECTIVE OPERATOR STRATEGIES FOR REDUCING EMISSIONS AND ROADMAP TO ACHIEVING NET ZERO

11:30 Investing In Technology To Improve The Efficiency Of Flaring & Meet Increases To The Methane Calculation From 1 January 2025, Whilst Innovating Facility Design For Longer Term Future Proofing

A strategic-level, big-picture look at the impact of new flaring and emissions regulations on facility design and new technology innovation. How do differently sized operators design their facilities? What are the key technologies? How have operators redesigned operational processes and efficiency?

- How to execute – what are the key technologies across the board?
- Prioritising the modification of equipment and implementation of real-time surveillance to deploy people to fix issues quickly
- Ensuring compliance with new regulations – for example, making sure flares operate cleanly and tank leaks are prevented
- Strategies for balancing compliance with cost and production optimization

11:30 Strategies for Reducing Emissions and Roadmap to Achieving Net Zero at the US Largest Natural Gas Producer

How EQT is reducing emission across its assets during the production phase of gas wells in the Appalachian Basin

How EQT ties in emissions reduction to production optimization, including:

- Complete elimination of pneumatic device emission sources
- Changing Operational practices on wells - eg well shut-ins, installing VRU's on tank batteries
- Exploring different forms of artificial lift technology for emissions abatement related to unloading gas wells
- Exploring predictive technologies to reduce or eliminate liquid loading events on gas wells

Zach Densmore, *Production Engineer, EQT Corporation*

11:50 Q & A

OPERATOR PANEL - NAVIGATING CHANGING REGULATIONS

12:00 – 12:45 OPERATOR PANEL ON MODIFYING FACILITY OPERATIONS TO MEET NEW REGULATORY REQUIREMENTS

Developing Effective Action Plans For Modifying Facility Operations to Meet New Regulatory Requirements



How can technology be leveraged to not only meet regulatory requirements but also optimize overall operational efficiency? How can operators develop long-term facility design plans that anticipate future regulatory changes and technological advancements? What key technologies are emerging as game-changers in reducing emissions at wellsites, and how can they be integrated into existing operations?

- Best practices and strategic recommendations for adapting operations to meet new regulatory requirements
- Balancing compliance with cost and production optimization
- Prioritizing the deployment of new technology
- Developing and implementing an effective action plan to ensure compliance and optimize operational efficiency
- Strategies for reducing reliance on compressors and pneumatic devices in facility design
- Impact of innovative design practices on environmental compliance and operational costs

Panelists: Mark Jagers, *Senior Facilities Engineer*, **Marathon Oil Corporation**

Shayne Jeter, *Production Superintendent*, **Riley Permian**

Gary Baxter, *Operations Manager*, **HighPeak Energy**

12:45 – 13:45 Networking Lunch Break

STRATEGIES AND TECHNOLOGIES FOR METHANE DETECTION & MEASUREMENT: HOW INNOVATIONS IN ADVANCED MONITORING AND DETECTION ARE BEING DEPLOYED IN WELLSITE FACILITY ENVIRONMENTS

13:45 **Assessing The Pros & Cons Of Different Approaches To Methane Monitoring & Detection**

3 x 20 min Overviews of Advanced Monitoring and Detection Technologies Innovations:

- **Optical Gas Imaging (OGI):** Newer, more sensitive infrared cameras for detecting methane and other emissions at lower concentrations.
- **Satellite Monitoring:** Increased use of satellites for global methane detection and real-time monitoring, providing comprehensive coverage and data analytics capabilities.
- **Laser-Based Detection:** Development of laser-based sensors that offer high precision and can detect gas leaks from a distance.

Rationalizing Operational Data with Colorized Gas Plume Wellsite Images For Root Cause Mitigation and Super Emitter Defense

Robert Ward, *Vice President of Business Development*, **KUVA SYSTEMS**

Case Study - Leveraging Data Analytics for Emissions Reporting & Compliance

Discover how a cutting-edge online Emissions Reporting solution transformed operations at an Oil & Gas operator in under 60 days. Transitioning from manual spreadsheets to a real-time, automated system revolutionized emissions tracking and compliance. Learn how this operator tool tracks actual emissions against targets automatically, uses oil production data to refine goals for emissions, flaring, and venting while enabling agile production adjustments to meet sustainability objectives.

Benjamin Decio, *CEO*, **NarrativeWave**



14:45 Panel Discussion: Challenges Faced In Accurate Measurement Of Emissions

What are the issues around the direct measurement of emissions to ensure accurate reporting and regulatory compliance? While vendor calculations provide initial estimates, true emissions measured directly at the stack offer a more accurate representation of the environmental impact. Understanding and implementing appropriate measurement techniques for flow rates and emissions is crucial for optimizing operations, meeting regulatory requirements, and reducing environmental impact.

15:15 – 15:45 Coffee & Refreshments in the Networking Exhibition Area

PANEL - THE LATEST FLARING AND VENTING TECHNOLOGY INNOVATIONS - TECHNOLOGY SHOWCASE

15:45 Implementing New Advanced Technologies & Innovations To Enhance Flare Efficiency & Detect Methane – Operator Strategies & Knowledge Sharing

Leveraging advanced technologies, such as automated control systems and real-time monitoring, can improve flaring efficiency. Innovations in flare design and combustion technologies also contribute to better performance. What are the latest new solutions to enhance flaring efficiency and reduce emissions, based on real-time monitoring data?

15:45 Recent Innovations in Flareless Facility Design

- Introduction of new technologies that integrate seamlessly into onshore wellsite facilities
- Enhancing operational efficiencies for producers
- Eliminating and monetizing traditional emissions sources

Hans Mueller, VP, EcoVapor, EcoVapor Recovery Systems (a DNOW Company)

16:05 Linear Flare Technology/ Smart Flares and Automation/Innovations in Flare Gas Recovery Systems (FGRS)

- **Improved Efficiency:** Enhanced systems for capturing and reusing flare gas, converting it into usable energy or feedstock for chemical processes.
- **Modular Units:** Development of modular and scalable FGRS that can be easily installed and adapted to different site requirements
- **What's New on the Horizon? Integration with Renewables:** Combining FGRS with renewable energy sources to create hybrid systems that maximize energy efficiency and reduce emissions

16:25 Best Practices in Flaring Meter Selection and Calibration

Showcasing successful implementation and benefits of accurate flaring metering systems and providing a further perspective on selecting and calibrating the most effective flaring meters for achieving high accuracy, reliability, and compliance.

- Understanding the various types of flaring meters and their suitability for different applications
- Calibration for achieving reliable and accurate flaring measurements
- Criteria for selecting the optimal meter based on specific testing, allocation, and operational needs
- Best practices for calibrating meters to ensure high accuracy, reliability, and compliance

16:45 Panel Discussion: Operator Best Practices for Implementing Comprehensive Real-Time Flaring Monitoring and Surveillance Systems For Identifying and Addressing Flaring Issues



- Identifying effective technologies for tracking and resolving flaring issues promptly
- Selection of the latest technology innovation and preferred systems for tracking and controlling flaring-related issues to ensure continuous compliance
- Understanding the essential components and setup of a real-time flaring monitoring system

17:15 – 17:45 INTERACTIVE ROUNDTABLES AND NETWORKING Following on from the flaring monitoring panel there will be an extended Q&A followed by small roundtable breakouts. What innovative technologies are being trialled for flaring and venting mitigation? What's fit for purpose for different kinds of facility set up? What are the results so far? How are companies tracking issues, including surveillance, control, and monitoring? What types of meters are being used for flaring measurement? What key best practices can be shared regarding controlling the cost of compliance?



REAL-TIME MONITORING



METERING



MULTI-PHASE



FLARING DESIGN



AUTOMATION



VRU's



THERMAL OXIDIZERS

17:45 - 18:45 Evening Drinks Reception in the Exhibition Area



DAY 2 – FACILITY DESIGN, TECHNOLOGY SWAPS, OPERATIONAL ADJUSTMENTS & AUTOMATION TO MEET NEW COMPRESSOR/PNEUMATICS EMISSION STANDARDS AND OPTIMIZE EFFICIENCY

08:30 Registration and Refreshments in the Networking Exhibition Area

09:10 Chair's Opening Remarks

Josh Wenzel, *Global Sales Manager, Coiled Line Pipe, FET Global Tubing*

HOW AUTOMATION IS TRANSFORMING UPSTREAM OIL AND GAS FACILITIES INTEGRATING NEW AUTOMATION TRENDS AND TECHNOLOGICAL INNOVATIONS INTO ONSHORE WELL SITE FACILITIES

09:15 **The Future Of Automation and Remote Facility Operations**

- How Automation Is Transforming Upstream Oil And Gas Facilities/Integrating New Automation Trends And Technological Innovations Into Onshore Well Site Facilities
- The benefits of using remote operating centers and less manual intervention
- Implementation of the people and the technology inc edge devices, and cameras
- Using data for real time decision making and predictive maintenance
- Upsides and downsides of increased automation on the facility
- Connectivity issues/ 5G network/ fiber optics
- Workforce safety

Gary Baxter, *Operations Manager, HighPeak Energy*

09:45 Panel & Audience Discussion: **Effective Use And Automation Of Data For Predictive Maintenance And Better Operational Decisions**

Cory Allen, *Advanced Engineer, Upstream Research, ExxonMobil*

Benjamin Decio, *CEO, NarrativeWave*

10:30 – 11:00 Refreshments and Networking in The Exhibition Area

EMERGING TECHNOLOGIES FOR ENVIRONMENTAL COMPLIANCE

How can facilities engineers and designers adopt advanced technologies and optimize processes, to achieve profitable operations and meet the demands of evolving regulations?

11:00 – 11:30 **An Innovative Solution to Control Sand Production WITH Real-Time Quantification AND The Elimination of Methane Emissions**

Sand separation equipment plays a crucial role in preventing sand particles from entering downstream equipment, reducing erosion, and maintaining production efficiency. The session will explore various types of sand control equipment, their



operational principles, benefits, and the implications for fugitive methane release during the flowback and other phases of production.

Horizontal Gravity Desanders

- Discussing the operational principles and data capabilities of gravity desanders in sand management
- Examining the various applications such as flowback, production, and in conjunction with artificial lift
- Designing a closed-loop flowback to eliminate methane emissions without sacrificing sand quantification capabilities

Anthony M. Sisto, *Vice President – U.S. Sales, Specialized Desanders Inc.*

12:00 Furthering Steel Coiled Line Pipe Technology for GHG Emissions Mitigation

Josh Wenzel, *Global Sales Manager, Coiled Line Pipe, FET Global Tubing*

12:30 Demonstrating How Modular, Flexible Product Design Can Help Meet a Diverse Range of Transportation Needs

- Transporting CO₂ – capability to transport CO₂ in all phases, with first CO₂ application install in 2010
- Qualification Testing – Flexpipe’s liner has been rigorously tested with samples saturated in 100% CO₂ at maximum operating conditions before decompressions the samples at 100 psi/minute. Additionally, Flexpipe has a venting system that allows permeated gases to escape the annulus, which prevents liner collapse and outer jacket blistering.
- Case Study – in 2010 a company used Flexpipe during its pilot project consisting of 12,500 feet transporting 100% CO₂ in liquid and gas phases.

Francisco Rodriguez, *Product Manager, Flexpipe*

13:00 – 14:00 Networking Lunch in the Exhibition Area

PANEL - EMERGING TECH FOR COMPRESSOR & TANK RETROFITTING: EFFICIENCY & EMISSIONS

14:00 Implementing New Technology & Facility Design Strategies to Meet Emission Requirements for Tanks and Compressors: *Insights and Perspectives*

BALANCING COMPLIANCE WITH COST AND IMPLEMENTING EMERGING TECHNOLOGY

Panel Discussion: Implementing New Technology & Facility Design Solutions To Cost Effectively Meet New Emission Requirements & Quality Standards For Tanks and Compressors

- Assessing the impact of new regulations across the board including situations when it might be uneconomic to produce
- Navigating the shift from low to high-pressure tanks and meeting new source categories for compressors and pneumatics
- Hear about successful implementations of technologies to capture emissions from compressor stations to meet emissions standards
- Prioritising emerging technologies for implementation
- Optimizing compressor capacity for emission reduction: strategies to meet new source category requirements, enhance compressor efficiency and minimize emissions while meeting operational demands

Curated Q&A



How do you prioritize and select emerging technologies for implementation that offer the best balance of cost-

What are the primary technical challenges encountered when retrofitting existing compressors with VFDs or other advanced technologies, and how are these challenges addressed?

How do predictive analytics improve compressor operation by forecasting performance and pre-emptively identifying maintenance needs to minimize downtime?

What are the essential best practices for implementing advanced control systems to optimize compressor operation, including considerations for training and operational adjustments?

14:30 INTEGRATING GAS LIFT SYSTEMS: EMISSION CHALLENGES AND SOLUTIONS FROM THE PERMIAN BASIN

Panel Discussion: Alternative Approaches For Minimizing The Required Amount Of Compressed Gas To Manage Reservoir Pressure & Maintain Production In Light Of New Emission Requirements

Quantifying how the transition from traditional pumping units to gas lift systems plays a role in shaping the emissions profile of onshore well site facilities. Optimizing gas lift operations to minimize the required amount of compressed gas.

- Discuss methods for improving overall operational efficiency through integrated field management systems
- What compression capacity was needed to handle increased gas production on new production sites
- Optimizing gas lift operations to minimize the required amount of compressed gas and the impact on emissions
- Learn about technological advancements and strategies for reducing emissions from gas compressors and pneumatics

15:00 Networking Break in the Exhibition Area

15:30 OPERATOR CASE STUDY ON REPLACING PNEUMATIC DEVICES & IMPLEMENTING LEAK DETECTION SOLUTIONS

Overcoming Challenges in Cost Effectively Replacing Pneumatic Devices and Implementing Leak Detection Solutions To Meet New Regulatory Requirements

Identify common challenges and considerations when replacing pneumatic devices with more efficient alternatives

Evaluating costs associated with replacing pneumatic devices and implementing leak detection solutions, including ROI analysis

16:00 INSTRUMENT AIR COMPRESSOR PACKAGES AND AIR-DRIVEN PNEUMATICS (GRID-TIED AND SOLAR-POWERED)

Operators Experience On Integrating Instrument Air Compressor Packages Into Existing Facility Infrastructure & Replacing Natural Gas-Driven Pneumatic Devices with Air-Driven Alternatives

16:20 TECHNOLOGY CASE STUDY: RENEWABLE ENERGY - Utilizing Electric Compressors Powered By Renewable Energy Sources To Reduce Co2 Emissions on Onshore Well Site Facilities

17:10 Closing Panel: Future Challenges Faced In Well Site Facilities Management

17:30 Chairs Closing Remarks and End of Day 2