A Century of Leadership: Energy Regulation at the Railroad Commission of Texas

International Petroleum Environmental Conference 2017
RRC History

• Established in 1891
  – Texas’ oldest regulatory agency
  – Led by three statewide elected officials

Commissioner Ryan Sitton  Chairman Christi Craddick  Commissioner Wayne Christian
IPEC History

• 4th IPEC
  – 1997 in San Antonio
  – Keynote speech by Commissioner Matthews
    • IT enhancements
    • Waste minimization
    • Well plugging and site remediation
  – RRC exhibit booth visited by Commissioner Murray
Jurisdiction

- Activities associated with oil and gas exploration and production
  - Drilling and production operations at well sites
  - Transportation of crude oil, natural gas, and produced water by pipeline
  - Oil and gas waste haulers on public roads
  - Oil and gas waste management facilities

- Purposes
  - Water protection
  - Public safety
  - Waste prevention
Not Jurisdictional

- Mineral interests/leases
- Noise, odors, and lighting
- Roads and traffic
- Air quality
- Railroads
Oil and Gas Activity in Texas

• Well inventory:
  – 433,926 total wells
  – 314,608 active wells
    • 179,660 producing oil wells
    • 90,530 producing gas wells
    • 44,418 service wells
  – 119,318 inactive wells
    • 5,712 “orphan” wells

• Daily production:
  – 2.7 million barrels of crude oil
  – 20 billion cubic feet of natural gas
Natural Gas, Crude, and Hazardous Liquids Pipelines

Natural Gas Pipelines

Crude Pipelines

Hazardous Liquids Pipelines
Pipeline Safety

• 448,446 total pipeline miles in Texas

• 224,067 miles of pipeline under direct RRC safety oversight
  – RRC regulates intrastate pipeline in Texas
  – interstate pipeline regulated by Pipeline Hazardous Materials and Safety Administration (PHMSA)
Ecoregions of Texas

1. Piney Woods
2. Gulf Coast Prairies and Marshes
3. Post Oak Savannah
4. Blackland Prairie
5. Cross Timbers
6. South Texas Plains
7. Edwards Plateau
8. Rolling Plains
9. The High Plains
10. Trans Pecos
Recent Developments

- Inactive wells
- Hydraulic fracturing
- Recycling
- Well construction
- Seismicity
- IT enhancements
- Regulatory relief
Inactive Wells

- September 2010-July 2012: New and amended provisions of Statewide Rule 15
  - Surface equipment removal requirements
  - Inactive well plugging requirements
  - Financial assurance requirements
Inactive Well Program Elements

- Statewide Rules 1 and 78
  - Annual organization report
  - Financial security requirements
  - Inactive wells must be in compliance for renewal

- Statewide Rule 14 well plugging requirements

- Statewide Rule 15 inactive well requirements
  - Surface clean-up requirements based on length of well inactivity
  - W-3X plugging extension requirements

- Oil Field Cleanup Program
  - State-managed well plugging and site remediation
  - Industry funded
Trends

Texas Well Counts
Total and Inactive
05/2005 to 09/2017
Hydraulic Fracturing

• January 2012: New hydraulic fracturing fluid disclosure requirements (Statewide Rule 29)
  – Information must be listed on FracFocus website: http://fracfocus.org/
  – Texas among the first states in the nation to require disclosure
April 2013: Amended recycling rules (incl. Statewide Rule 8)
- Encourage recycling in the oil field
- Reduce water use
- Create rules for authorized fluid recycling
- Streamline recycling permits
May 2013: Amended casing/ cementing requirements (Statewide Rule 13)

- Provide consistent and clear well construction regulations
- Update requirements for:
  - cement quality, cementing, well equipment and well casing centralizers
  - well control and blowout preventers
• Oct. 2014: Amended disposal well rules to address operations in areas of seismic activity
  – Require permit applicants to provide additional data
  – Clarify RRC authority to modify, suspend, or terminate a disposal well permit

• Bureau of Economic Geology and partners
  – TexNet Seismic Network
  – Research projects
  – Technical Advisory Committee
IT Enhancements

- Website redesign
- GIS enhancements
- Inspection, Compliance, and Enforcement (ICE) System for inspectors
- RRC Online expansion
  - Request for groundwater protection determination (GW-1)
  - Request for surface-casing exceptions
  - Well logs
Regulatory Relief

• Ongoing efforts to reduce regulatory burdens while ensuring personal and community safety

• Recent examples:
  – Amended Statewide Rule 15 to accurately reflect when inactive wells are returned to active production status
  – Issued guidance for implementing the Texas Environmental, Health, and Safety Audit Privilege Act
2016 Year in Review

- milestones
- accomplishments
- video
- photos
- infographics
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