

THE STATE REVIEW PROCESS

- *Meeting the Challenges of U.S. Oil & Gas Development*
- *Collaboration to Improve the Regulatory Environment*

Ground Water Protection Council

2011 Annual Forum

Tuesday, September 27, 2011



STRONGER, Inc.

STRONGER

2

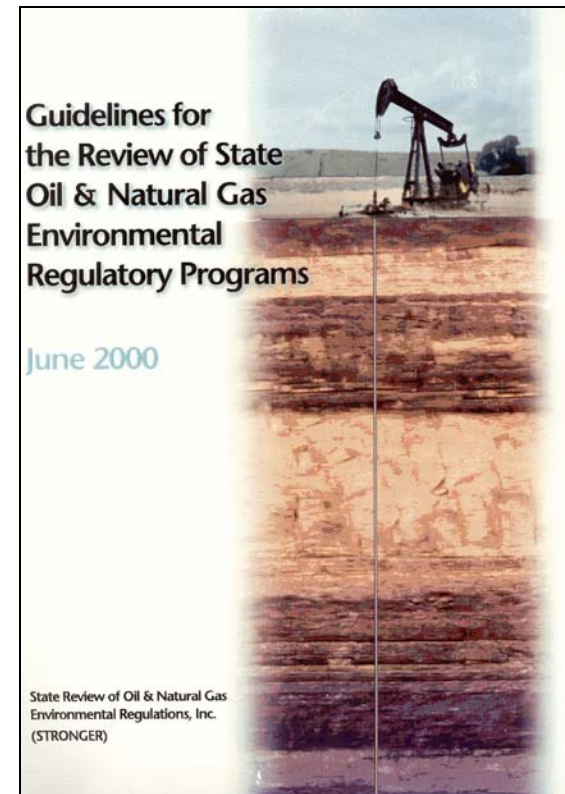
- State Review of Oil and Natural Gas Environmental Regulations, Inc.
- A multi-stakeholder collaborative effort to
 - Benchmark state regulatory programs
 - Develop recommended state program guidelines
 - Establish a review process to evaluate state regulatory programs against those guidelines



STRONGER

3

- Stakeholders
 - ▣ States
 - ▣ Industry
 - ▣ Environmental Organizations
- Supporters
 - ▣ IOGCC
 - ▣ GWPC
 - ▣ Federal agencies (EPA, DOE)



Background

4

- RCRA definition of solid waste
- Hazardous waste regulated under Subtitle C
- Exemption until EPA study
- Report to Congress – December 1987
- EPA regulatory determination – July 1988
- 3-prong approach

State Review Process

5

- Established by IOGCC with support from EPA
- Stakeholder involvement
- Guidelines developed
- State reviews against Guidelines
- Guidelines updates and revisions
- Follow-up reviews



STRONGER

6

- Formed June 1999
- Functions:
 - ▣ Manage state review process
 - ▣ Sponsor new/revised guidelines
 - ▣ Develop procedures for reviews, training
 - ▣ Assemble review teams
 - ▣ Contract administrative/clerical support
 - ▣ Settle disputes



State Reviews

7

- State volunteers, completes questionnaire
- Review team assembled & trained
- In-state interview
- Team drafts report w/findings & recommendations
- Draft distributed for comments
- Final approved by Board, published & posted



Reports

8

- Executive summary
 - ▣ Highlights program strengths
 - ▣ Summarizes key recommendations for improvement
- Discussion of program elements
- Findings and recommendations
- Appendix
 - ▣ Response to questionnaire (state's description of its program)

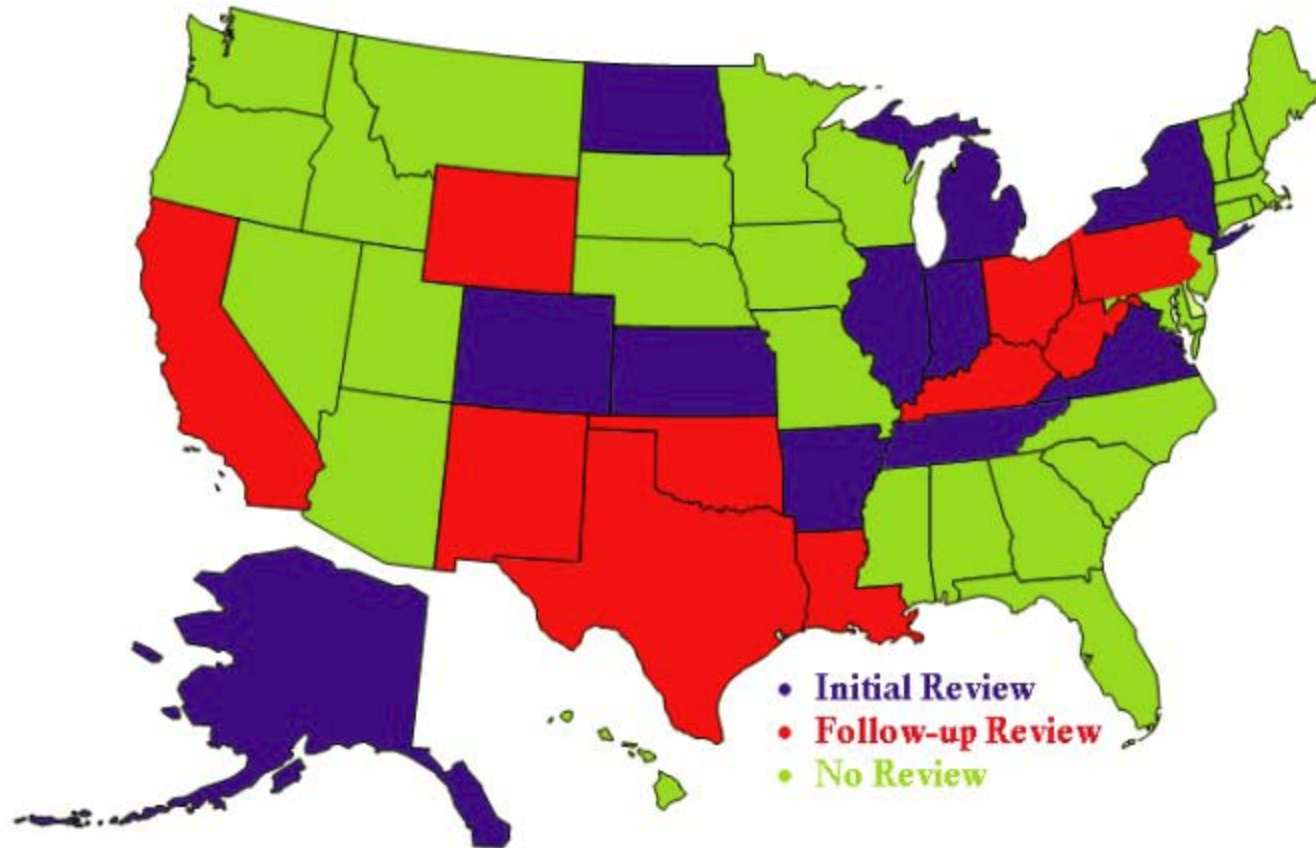
Results

9

- 21 states reviewed – 94% onshore production
- North Carolina scheduled for October 2011
- 10 states with follow-up reviews – 76% of recommendations satisfied
- 2009 survey – all states implemented some recommendations
 - 33% fully implemented
 - 27% partially implemented
 - 26% outstanding
 - 14% unknown



State Reviews



Hydraulic Fracturing

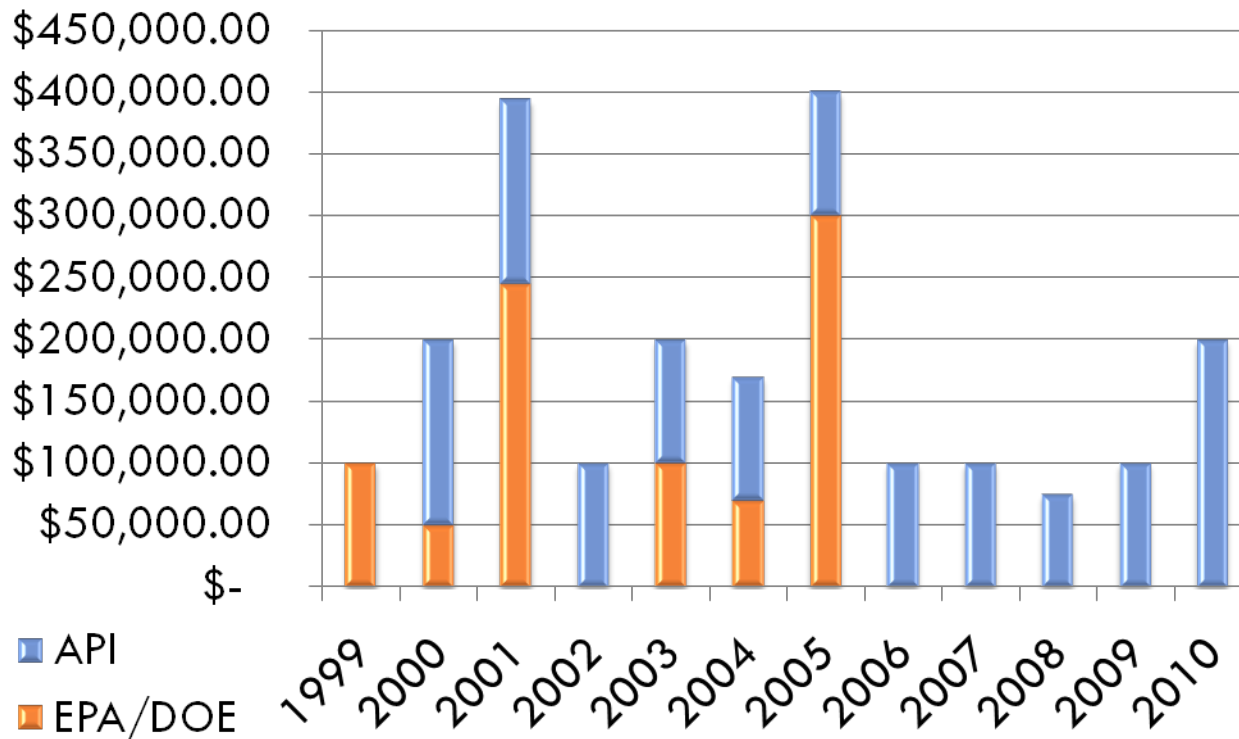
11

- Workgroup convened (Aug. 2009)
- Guidelines submitted to STRONGER (Jan. 2010)
- Reviews completed:
 - ▣ Pennsylvania
 - ▣ Ohio
 - ▣ Oklahoma
 - ▣ Louisiana
- Reviews underway:
 - ▣ Colorado report under review
 - ▣ Arkansas scheduled for November 2011

STRONGER Funding Summary

12

1999 to 2010



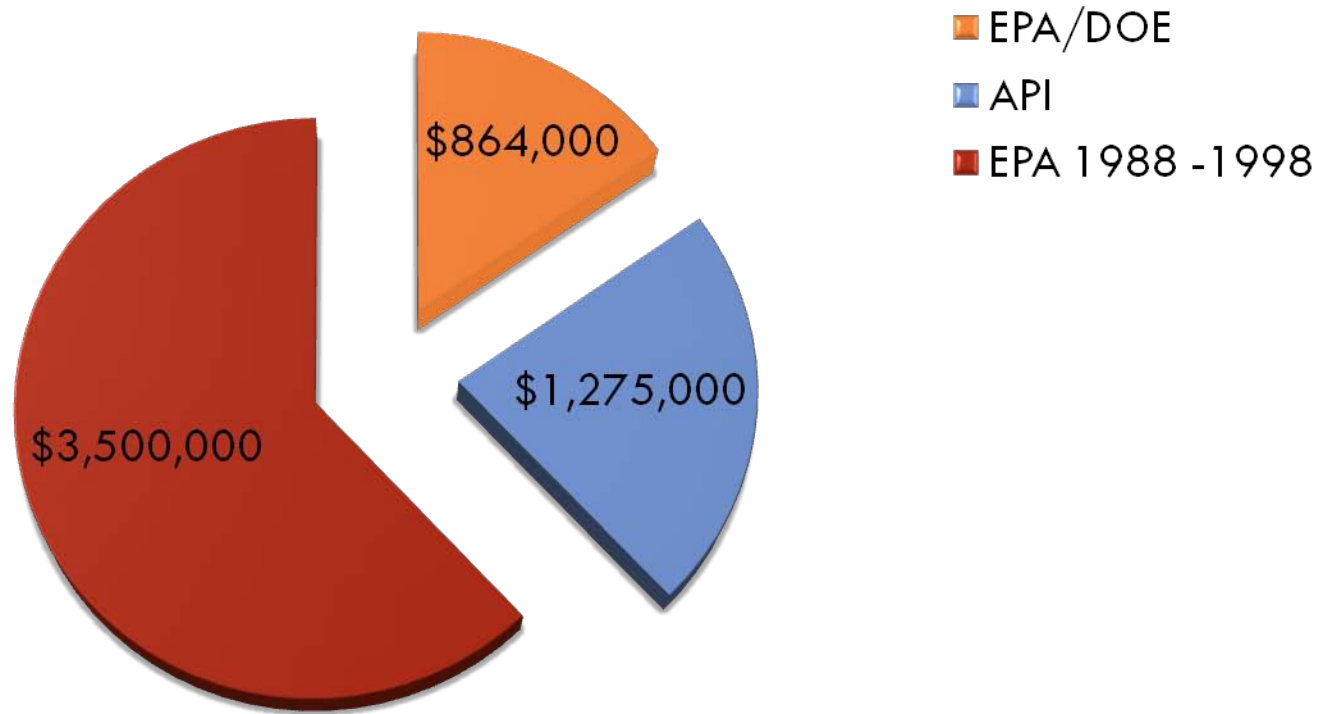
Notes:

- Prior to 1999 and STRONGER, EPA contributed \$3.5 million to IOGCC to manage the state review process.
- This summary does not reflect in-kind contributions from states and other stakeholders.



STRONGER Funding Summary

13



Strengths of Review Process

14

- All work performed by stakeholder teams
- Guidelines recognize regional differences
- Reviews document program strengths and opportunities for improvement
- Follow-up reviews are conducted
- The process is transparent and timely



Benefits of Review Process

15

- State control of E&P waste programs
- Improved state oil and gas environmental regulatory programs
- Process for continuing program improvement
- Opportunity to share and promote new or unique concepts and ideas
- Flexible reviews to meet state needs
- Great educational process for all participants



SEAB Interim Report

16

Improve communication among state and federal regulators:
Provide continuing annual support to STRONGER (the State Review of Oil and Natural Gas Environmental Regulation) and to the Ground Water Protection Council for expansion of the Risk Based Data Management System and similar projects that can be extended to all phases of shale gas development.

August 2011 Secretary of Energy's Advisory Board (SEAB) Interim Report on Shale Gas Production recommendations



NPC Report

17

“STRONGER should be bolstered and increase the scope of its activities. All states with natural gas and oil production should actively participate in STRONGER and use its recommendations to continuously improve regulation. It should be adequately funded, including from the federal government.”

September 2011 National Petroleum Council (NPC) report “Prudent Development: Realizing the Potential of Abundant North American Natural Gas and Oil Resources”

