

# Virginia's Oil and Gas Program

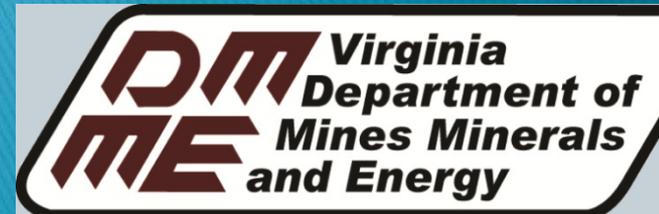
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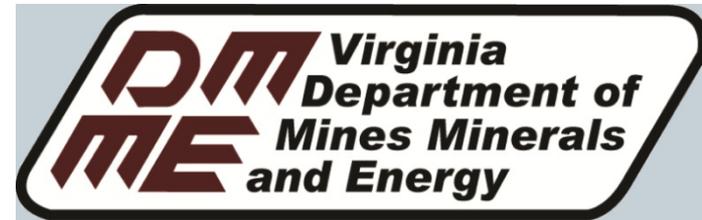
Regulatory Advisory Panel Meeting #3

Abingdon, VA – July 23<sup>rd</sup> 2014



# ROADMAP

- ▶ Introduction to DMME
- ▶ Brief history of fracking in Virginia
- ▶ Program requirements
- ▶ Overview of the regulatory process
- ▶ Update on panel's prior meetings



# AN INTRODUCTION TO DMME

- ▶ An executive branch agency within the Secretariat of Commerce and Trade
- ▶ Formed in 1985 as the result of a government reorganization
- ▶ Approximately 200 full time employees located in four offices across the Commonwealth



# THE VIRGINIA GAS AND OIL ACT

- ▶ To foster, encourage and promote the safe and efficient exploration for and development, production and conservation of Virginia's gas and oil resources;
- ▶ To protect Virginia's citizens and environment from public safety and environmental risks associated with the development and production of gas or oil;

# THE VIRGINIA GAS AND OIL ACT

- ▶ To recognize that use of the surface for gas or oil development shall be only that which is reasonably necessary to obtain the gas or oil.

# DMME's MISSION

We enhance the development and conservation of energy and mineral resources in a safe and environmentally sound manner to support a more productive economy.

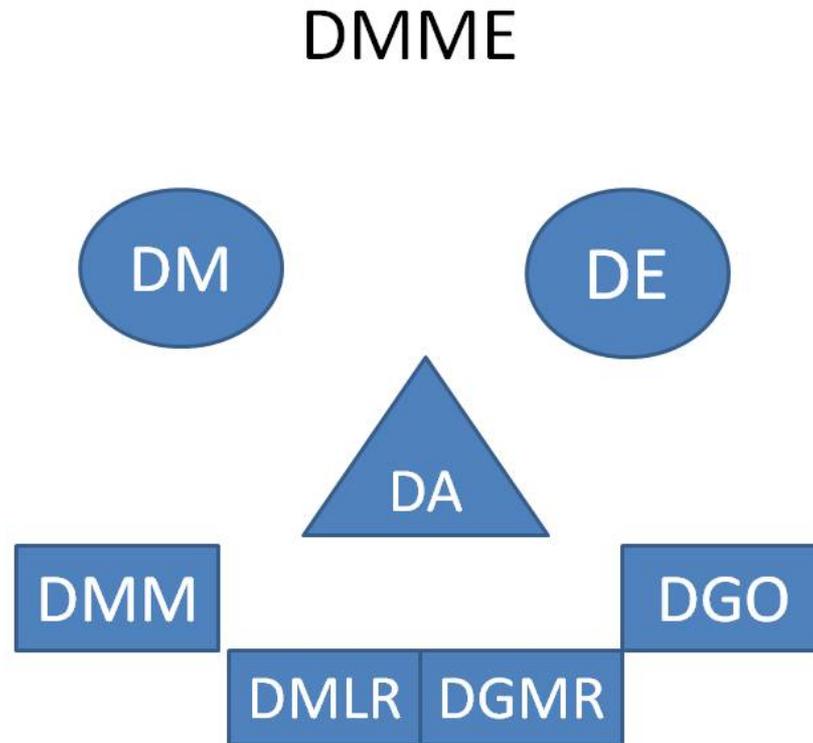


# DMME STRATEGIC PLAN

- ▶ Goal 1:
  - Provide for safe and environmentally sound mineral and fossil fuel extraction.
- ▶ Goal 2:
  - Encourage economic development through our customers' wise management of Virginia's resources.
- ▶ Goal 3:
  - Enable DMME personnel to perform at their full potential.



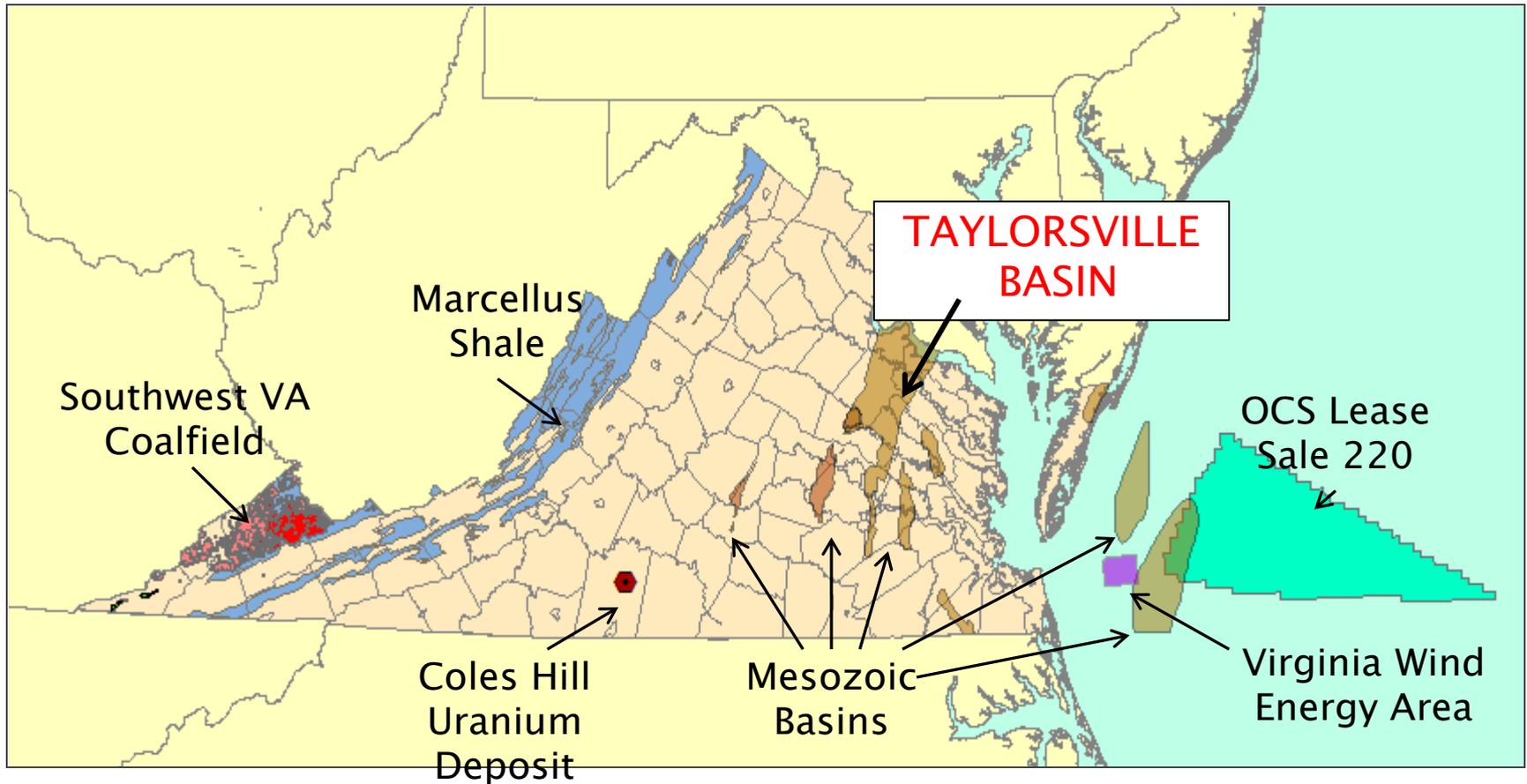
# ORGANIZATIONAL CHART



DA = Administration  
DE = Energy  
DGMR = Geology  
DGO = Gas & Oil  
DM = Mine Safety  
DMM = Mineral Mining  
DMLR = Mined Land Reclamation

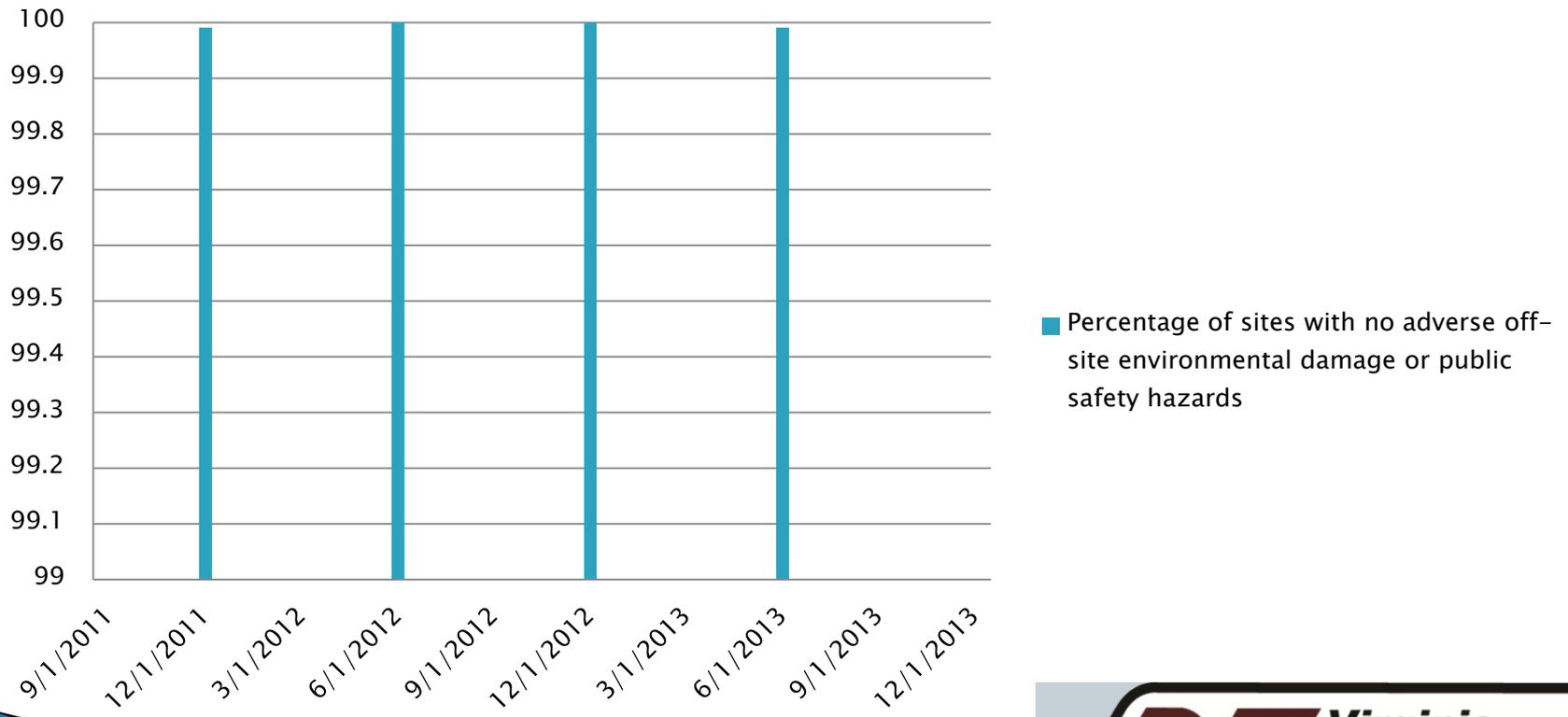


# Virginia's Energy Resources



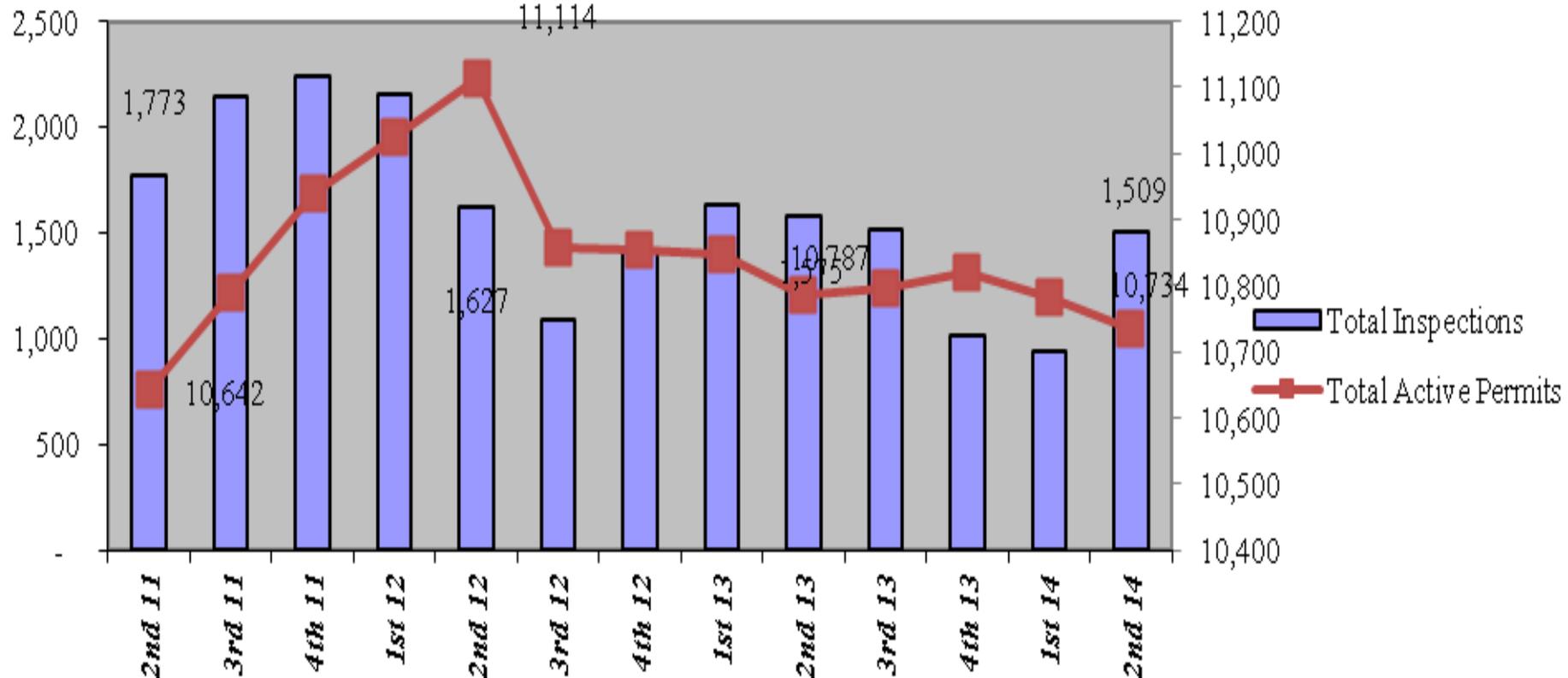
# DMME PERFORMANCE MEASURES

## Percentage of sites with no adverse off-site environmental damage or public safety hazards



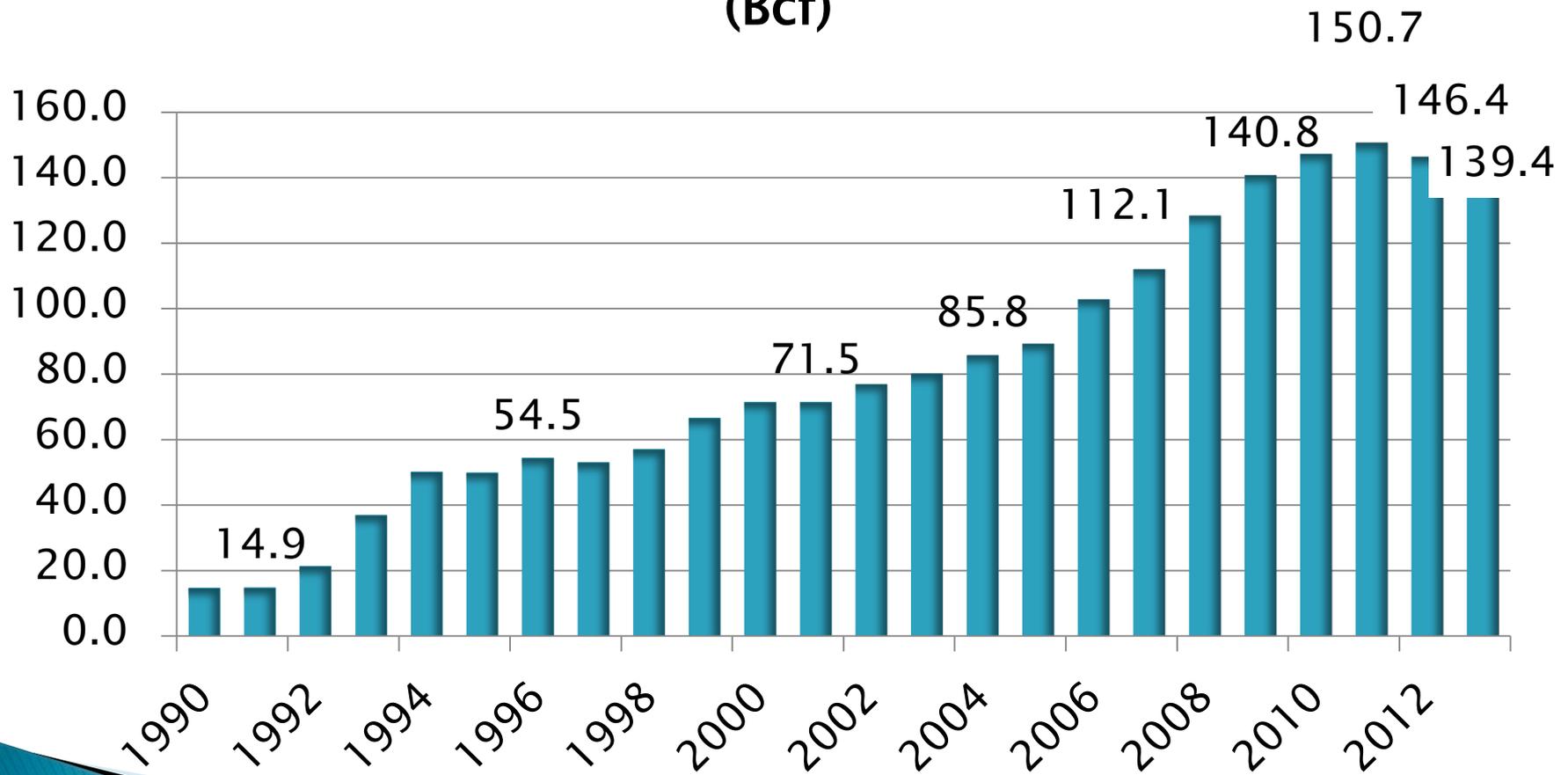
# DGO INSPECTION DATA

## TOTAL INSPECTIONS



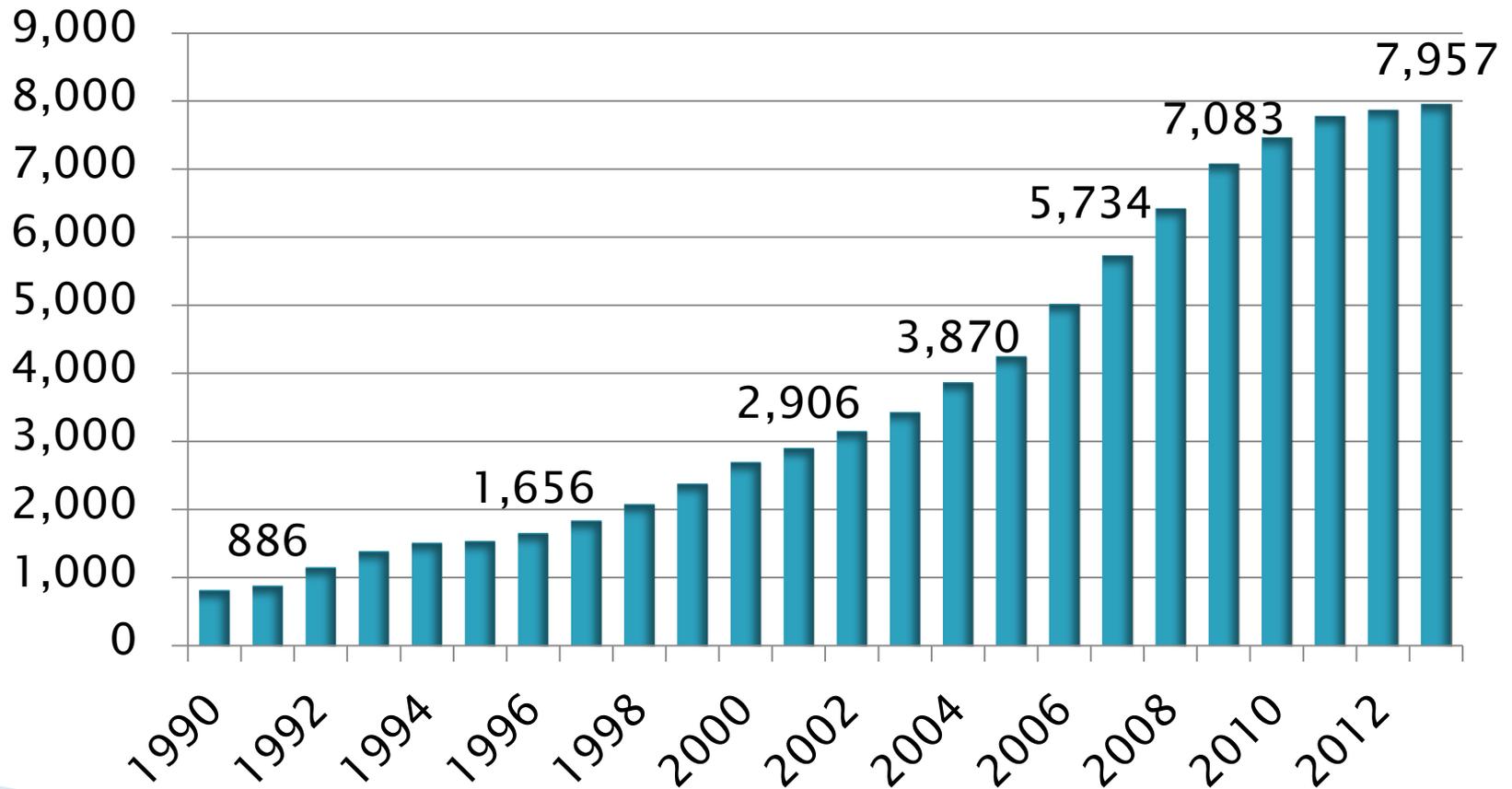
# 2013 Gas Production in Virginia

## Annual Gas Production Trend (Bcf)

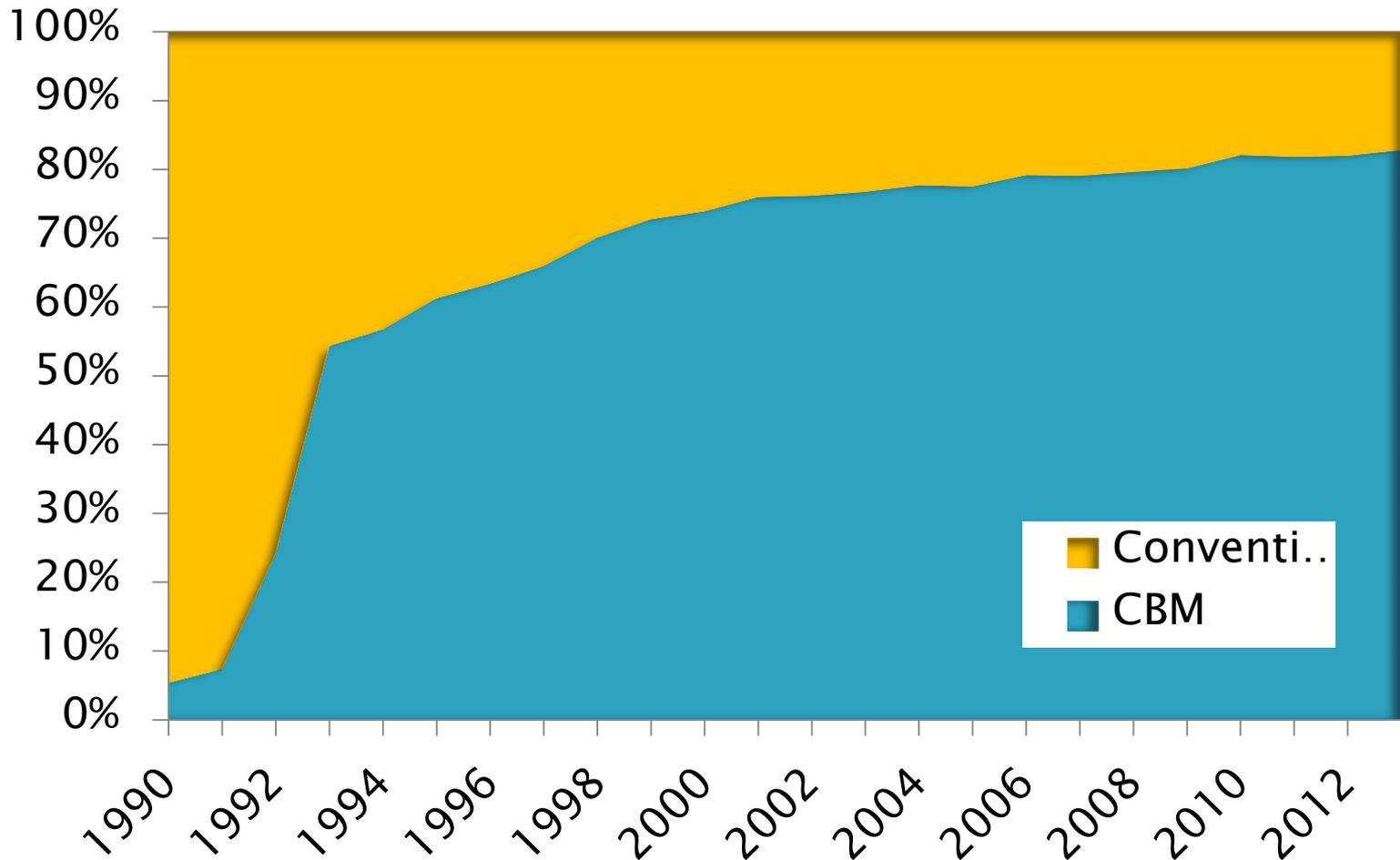


# 2013 Producing Gas Wells in Virginia

## Producing Wells

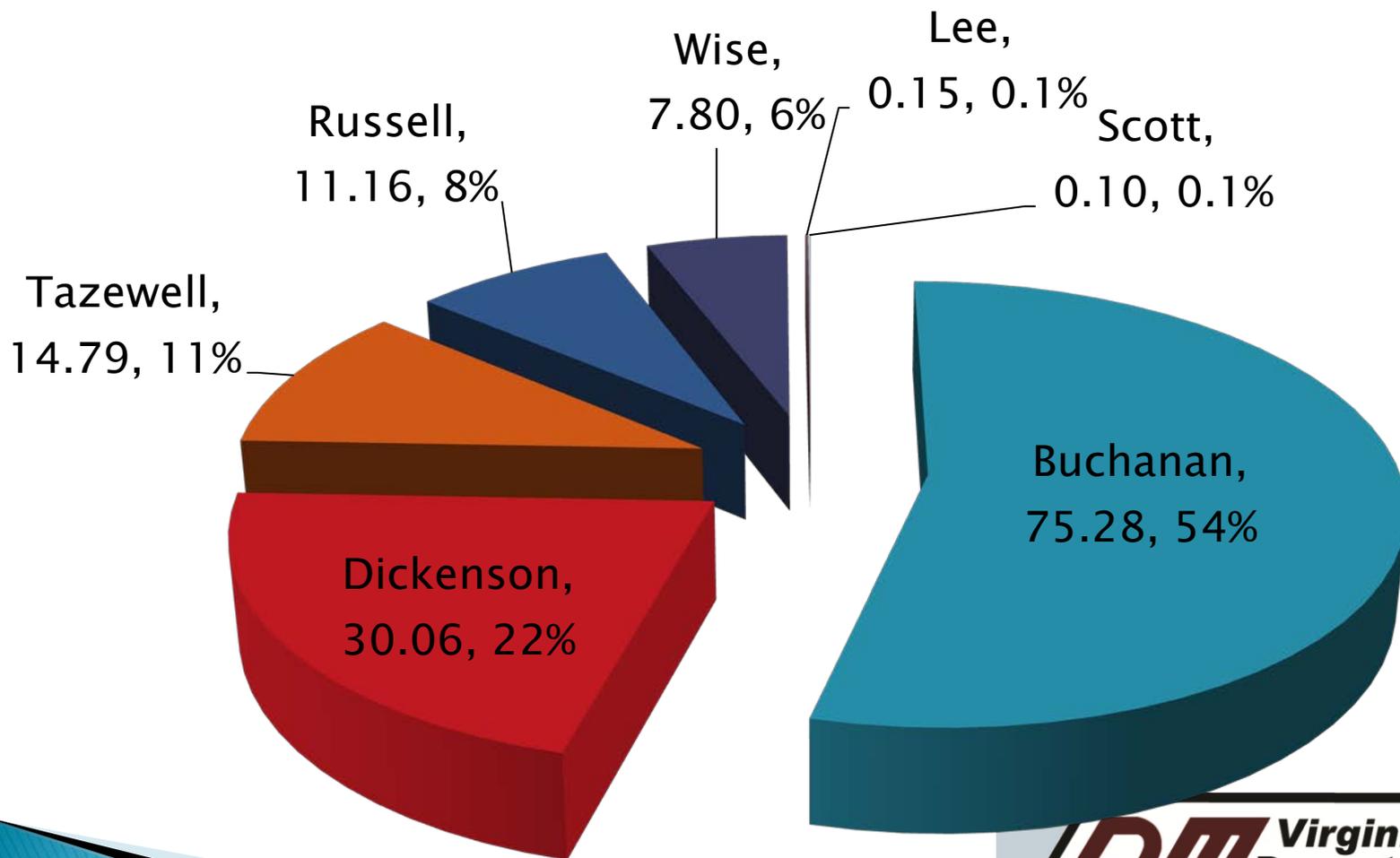


# TOTAL GAS PRODUCTION TREND BY WELL TYPE (Bcf) 1990 - 2013



# TOTAL PRODUCTION BY COUNTY

(Bcf)  
2013



# DIVISION OF GAS AND OIL

- ▶ The following information can be found on the DGO page of the DMME website:
  - Listing of current laws and regulations
  - Pending Application Listings
  - Permitted Applications
  - Drilling Reports
  - Completion Reports



# DIVISION OF GAS AND OIL

- ▶ The following information can be found on the DGO page of the DMME website:
  - Production Statistics
  - Maps of wells
  - Final Orders of the Gas and Oil Board
  - Transcripts of Board Meetings
  - Royalty information



# FRACKING IN VIRGINIA

- ▶ Technique has been utilized in the Commonwealth since the 1960s.
- ▶ Over 8,000 wells have been fracked in Southwest Virginia.
- ▶ There have been no documented instances of surface or groundwater degradation from fracking in Virginia.

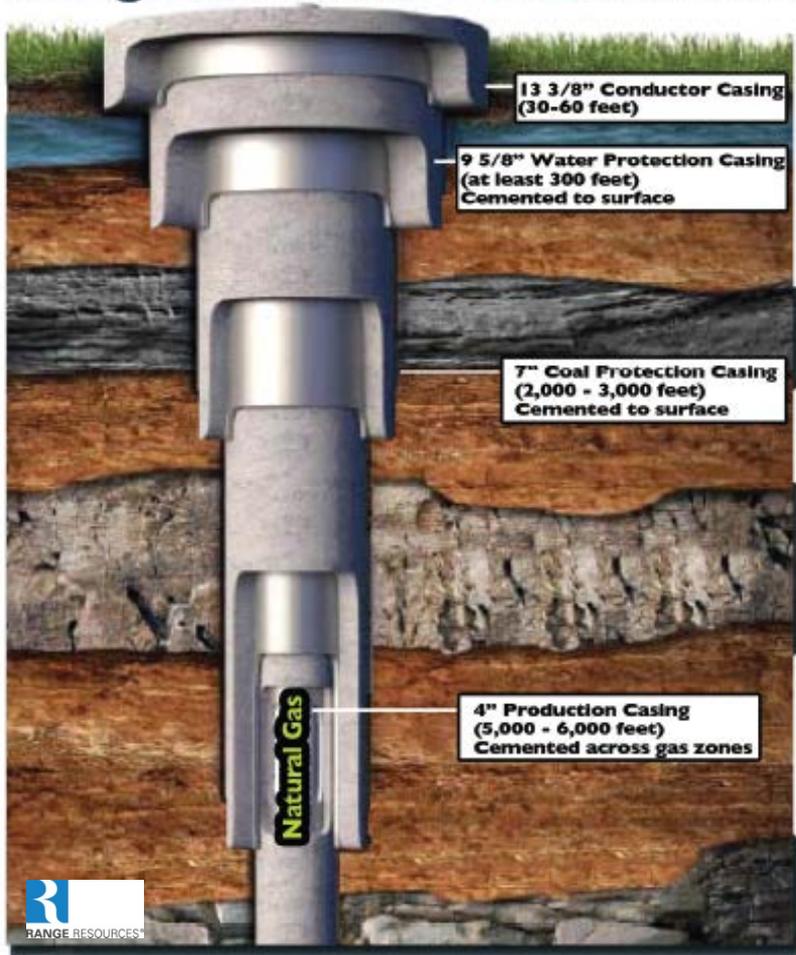


# FRACKING IN VIRGINIA

- ▶ Hydraulically fracked wells in Virginia typically require 0–300,000 gallons of water.
- ▶ Increasingly, operators are utilizing nitrogen-based foam to frack wells.
- ▶ By contrast, fracked wells in the Marcellus shale can use 4–5 million gallons of water.

# Typical Casing Design

## Casing Schematic - Not to Scale



Rock Formations containing natural gas are several thousand feet deep. Multiple casings are cemented to surface to protect water resources.



# PROGRAM REQUIREMENTS

- ▶ All operators must comply with:
  - The Virginia Gas and Oil Act of 1990
  - Virginia Gas and Oil Regulation
  - Virginia Gas and Oil Board Regulations
  - State Water Control Law
  - Virginia Pollution Discharge Elimination System Regulations
  - Additional requirements for the Tidewater Region



# PERMIT REQUIREMENTS

- ▶ Applicants are required to notify parties who may be directly affected by the proposed operation, including surface and mineral owners.
- ▶ These parties have the right to object to permits on specific grounds that are outlined in the law.



# PERMIT REQUIREMENTS

- ▶ Applicants also must inform localities and publish notices in at least one newspaper of general circulation which is published in the locality where the well is proposed.
- ▶ Applications must contain operations plans that detail necessary construction, erosion and sediment control, drilling and stimulation plans, etc.



# PROGRAM REQUIREMENTS

- ▶ The Gas and Oil Act allows operators access to private water wells within 750 feet of a gas well operation for sampling purposes.
- ▶ The law requires operators to replace water supplies if water wells are contaminated or their supply is interrupted by a gas well operation within 750 feet.



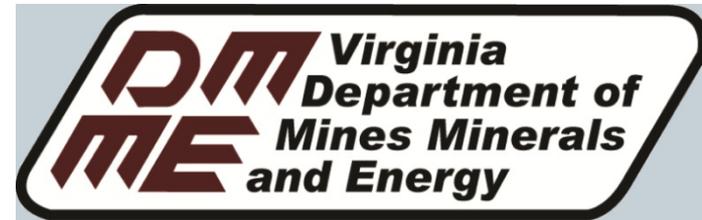
# REGULATORY FRAMEWORK

- ▶ 4 VAC 25-150
- ▶ Sets out requirements for:
  - Permit applications
  - Hearing process for objections
  - Technical requirements
  - Reporting requirements
  - Enforcement procedures



# THE REGULATORY PROCESS

- ▶ A typical regulatory action in Virginia consists of three stages:
  - 1. Notice of Intended Regulatory Action (NOIRA)
  - 2. Proposed Stage
  - 3. Final Stage
- ▶ 180 day requirement of Executive Order 17



# NOIRA STAGE

- ▶ Last fall, DMME initiated a regulatory action to review its requirements for drilling.
  - Chemical disclosure requirements
  - Review of selected industry best practices
  - Review to determine if additional requirements are necessary for different regions of the Commonwealth



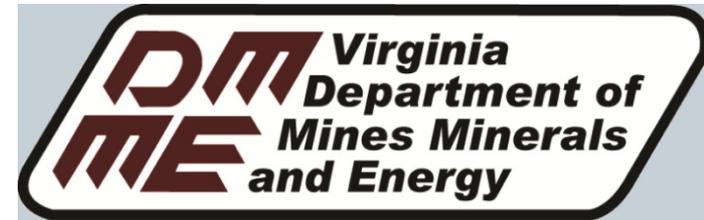
# NOIRA STAGE

- ▶ The Notice of Intended Regulatory Action was published on January 13, 2014.
- ▶ DMME received over 200 comments during the 30 day public comment period.
- ▶ These comments supported disclosure of ingredients used in fracturing process.



# PETITION FOR RULEMAKING

- ▶ On January 27, 2014, a Petition from the Virginia Oil and Gas Association was published in the Virginia Register of Regulations.
- ▶ The petition requested DMME require all operators to disclose ingredients used in fracking by participating in the FracFocus website.



# PUBLIC/STAKEHOLDER INVOLVEMENT

- ▶ DMME formed a Regulatory Advisory Panel (RAP) to offer recommendations in selected areas over the course of a handful of meetings.
- ▶ Panel meetings have been and will continue to be open to the public.
- ▶ DMME maintains an e-mail distribution list and a page on its website to keep the public informed.



# PANEL'S PROGRESS

- ▶ Two meetings held in Richmond on June 4 and July 2.
- ▶ Meetings focused on chemical disclosure.
- ▶ Panel reached consensus and offered recommendations.



# PANEL'S PROGRESS

## ▶ Recommendations:

- Disclosure of ingredients should be required.
- Operators should be required to use Frac Focus.
- Virginia should maintain a separate registry.



# PANEL'S PROGRESS

## ▶ Recommendations:

- Operators should provide a list of anticipated ingredients before fracking takes place.
- Operators should submit all information related to fracking to DMME and DMME should determine what information should be protected as a trade secret.



# NEXT STEPS

- ▶ After RAP meetings conclude, DMME will review all recommendations.
- ▶ As the regulatory agency, DMME makes the final determination on panel recommendations.
- ▶ DMME will draft proposed regulations, incorporating recommendations as appropriate.



# PROPOSED STAGE

- ▶ Once proposed regulations are drafted and adopted by the agency, they are reviewed by:
  - The Office of the Attorney General
    - No formal deadline
  - The Department of Planning and Budget
    - Policy Analysis (Confidential Gov's Working Papers)
    - Economic Impact Analysis
      - 45 days per the Administrative Process Act



# PROPOSED STAGE

- ▶ Once proposed regulations are drafted and adopted by the agency, they are reviewed by:
  - Secretary of Commerce and Trade
    - 14 days per Executive Order 17
  - The Office of the Governor
    - No formal deadline



# PROPOSED STAGE

- ▶ Once approved by the Governor's Office, the proposed regulations are published online in the Virginia Register of Regulations.
- ▶ 60 day public comment period.
- ▶ During this period, DMME will hold at least one public hearing to receive comment on the proposed regulations.



# FINAL STAGE

- ▶ At the final stage, regulations must again go through executive branch review.
  - Office of the Attorney General (if any change with substantial impact is made)
    - No formal deadline
  - The Department of Planning and Budget
    - 14 days per Executive Order 17



# FINAL STAGE

- ▶ At the final stage, regulations must again go through executive branch review.
  - Secretary of Commerce and Trade
    - 14 days per Executive Order 17
  - The Office of the Governor
    - No formal deadline



# FINAL STAGE

- ▶ Once approved by the Governor's Office, the final regulation is published in the Register.
- ▶ Becomes effective after a 30 day final adoption period.
- ▶ Visit the Regulatory Town Hall website for more information.
- ▶ [www.townhall.virginia.gov](http://www.townhall.virginia.gov)



# Thank You!

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