

Rocky Mountain EHS Peer Group

Jan. 18, 2018



BLM Onshore Orders 3, 4, & 5

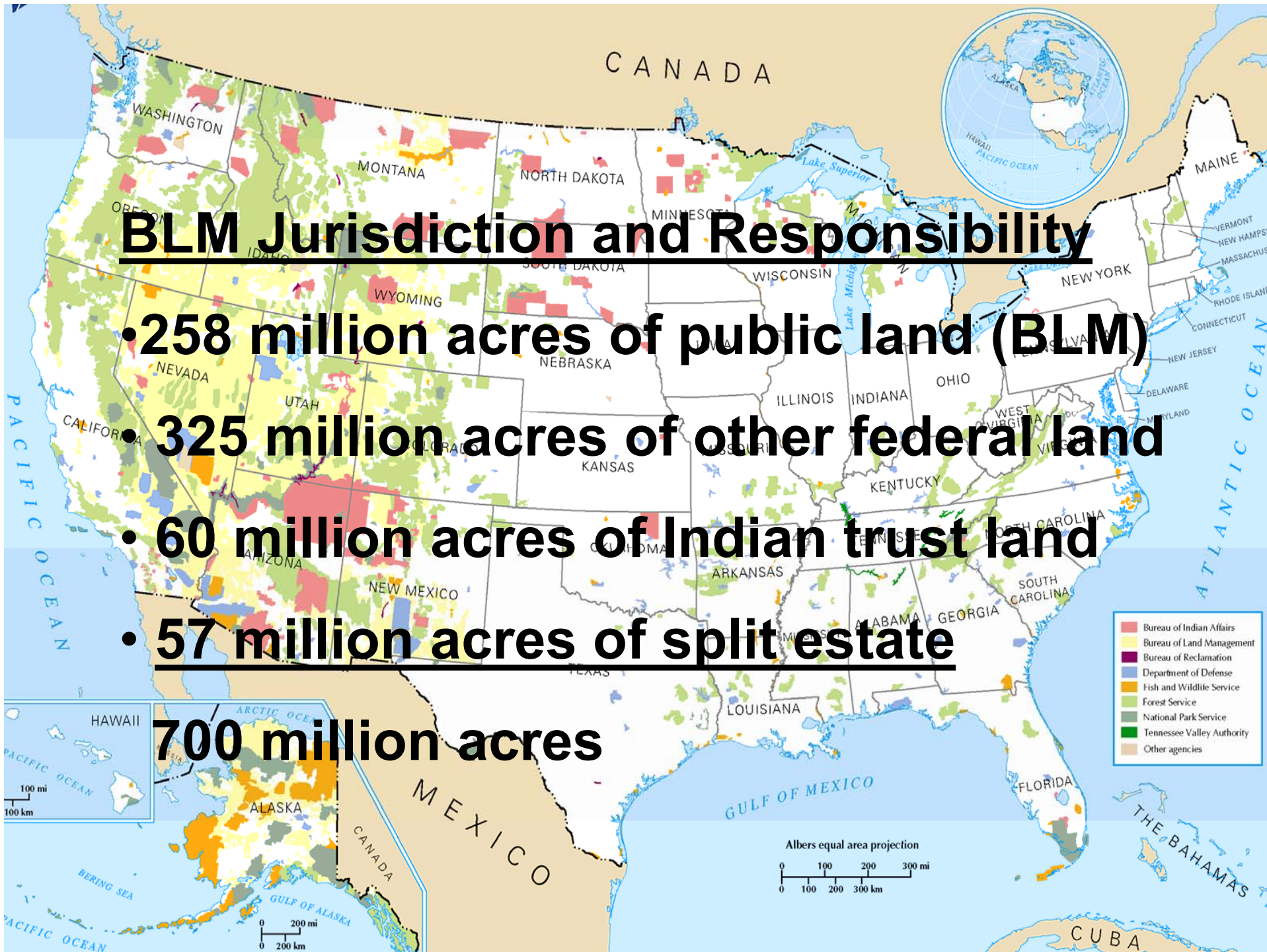
Rich Estabrook, BLM

Washington Office (Ukiah, California)

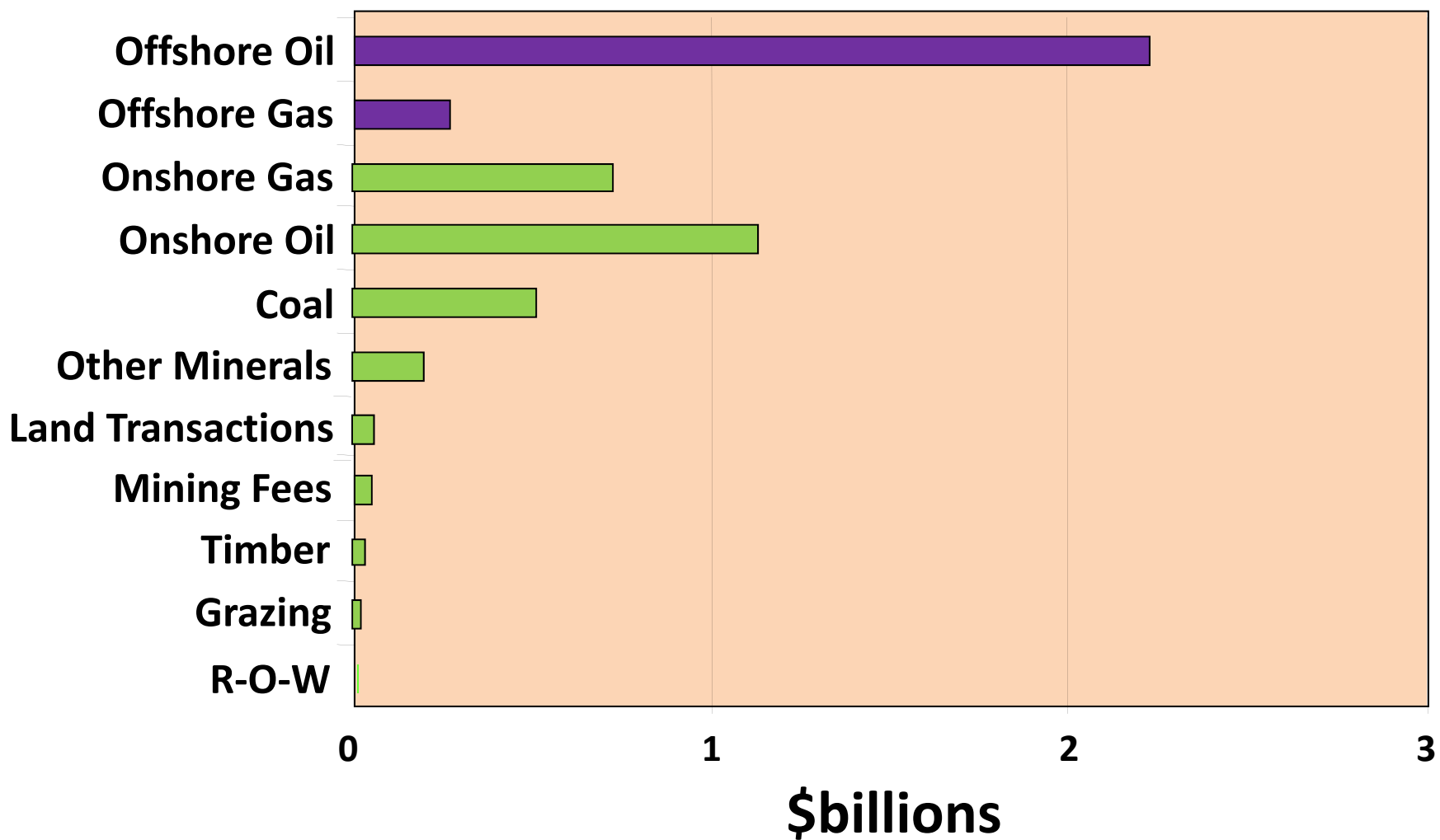
BLM Jurisdiction and Responsibility

- 258 million acres of public land (BLM)
- 325 million acres of other federal land
- 60 million acres of Indian trust land
- 57 million acres of split estate

700 million acres



Public/Indian Land Revenues, FY2016



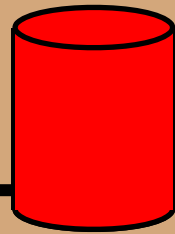
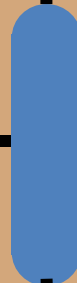
Mineral Leasing Act of 1920 (as amended)

Royalty is due on the amount or volume of oil and gas removed or sold from the lease [CA or PA]

NMN-16114

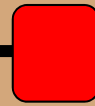
November, 2017

1-2

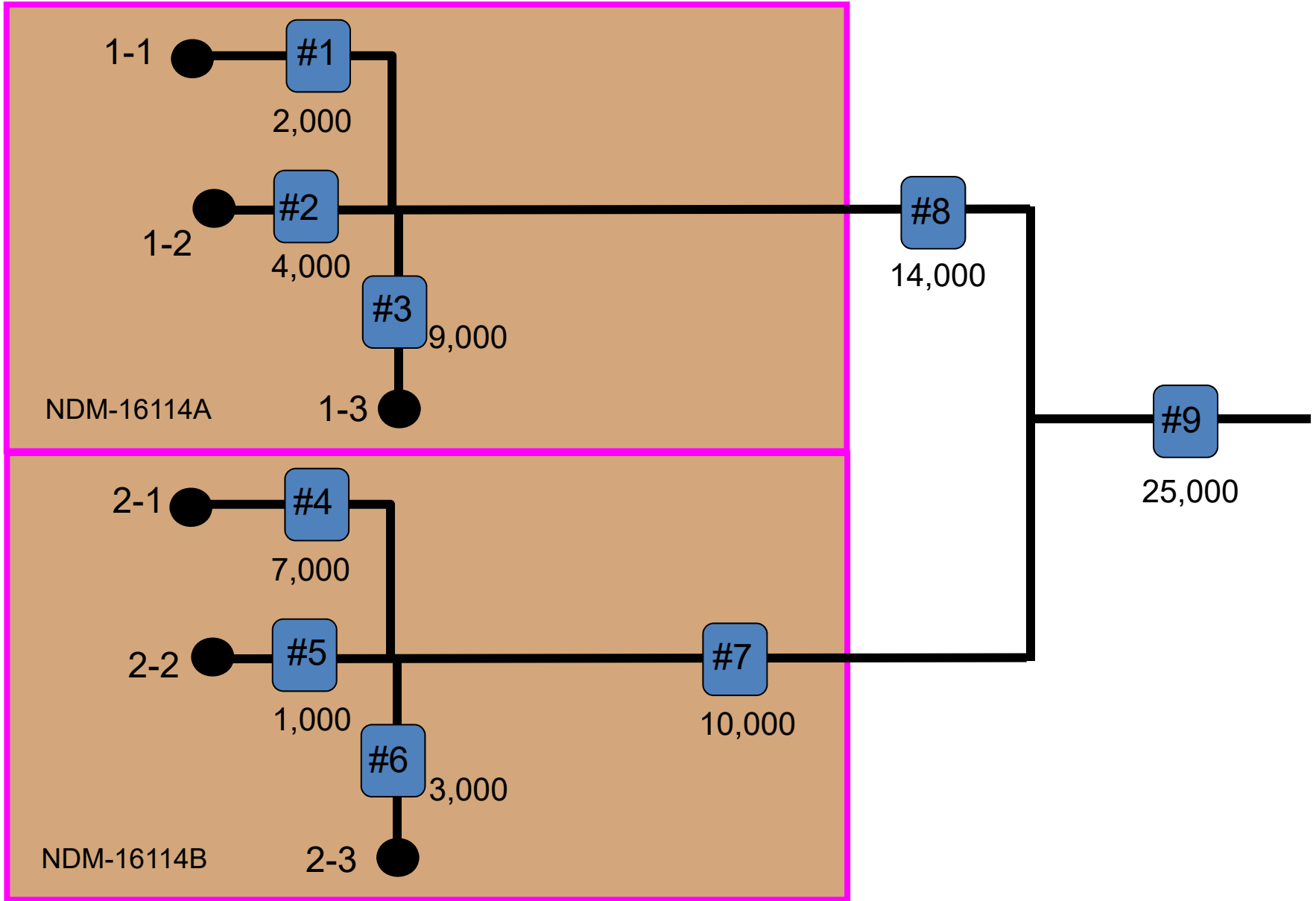


113 bbls

4,567 Mcf



Month of: June 2017









Lease Automatic Custody Transfer (LACT)

Orifice Meter (Primary Device)

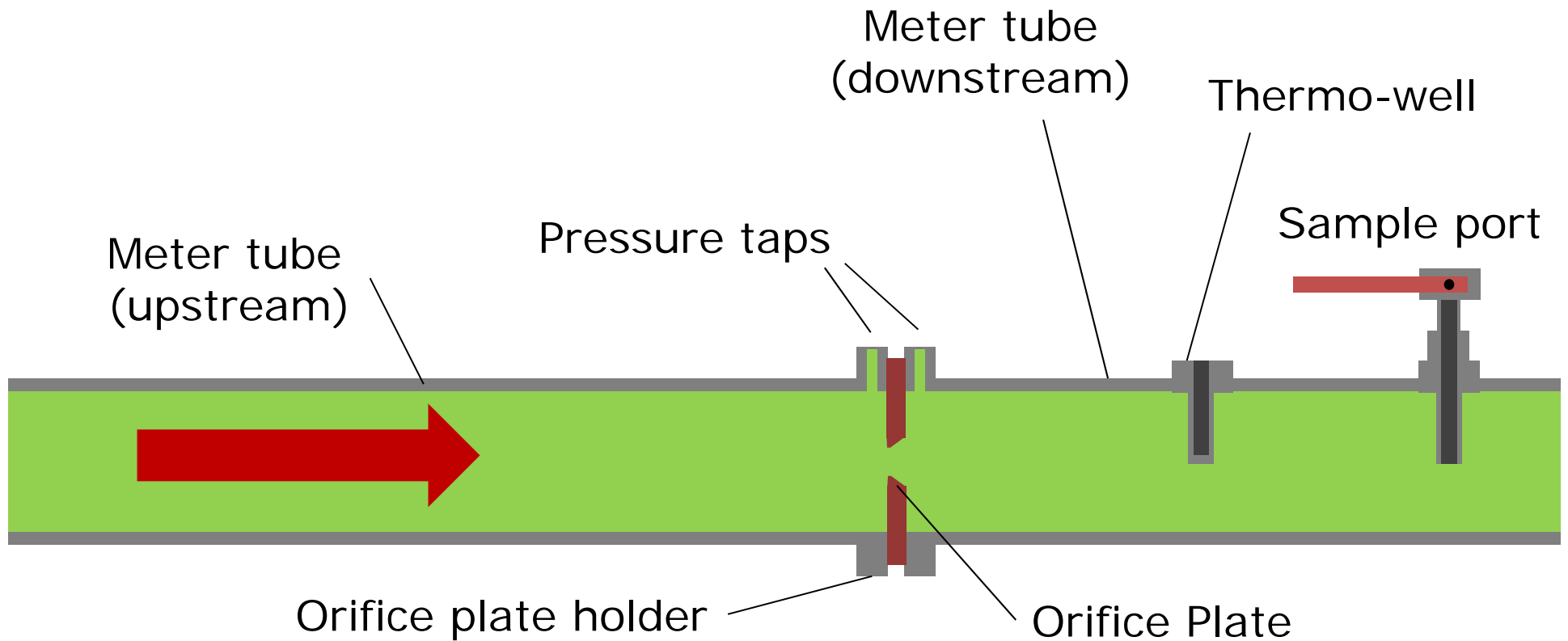
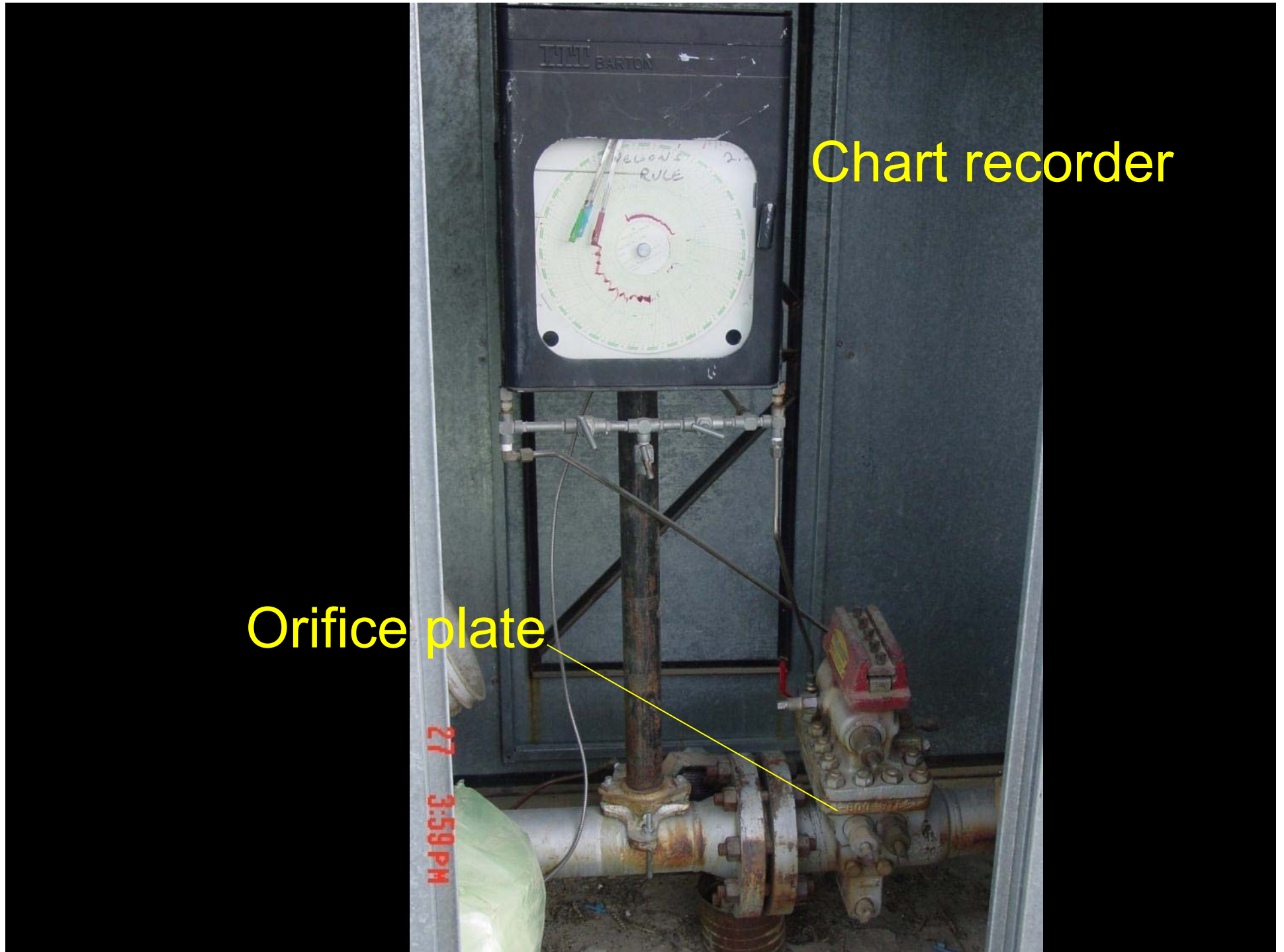


Chart recorder

Orifice plate

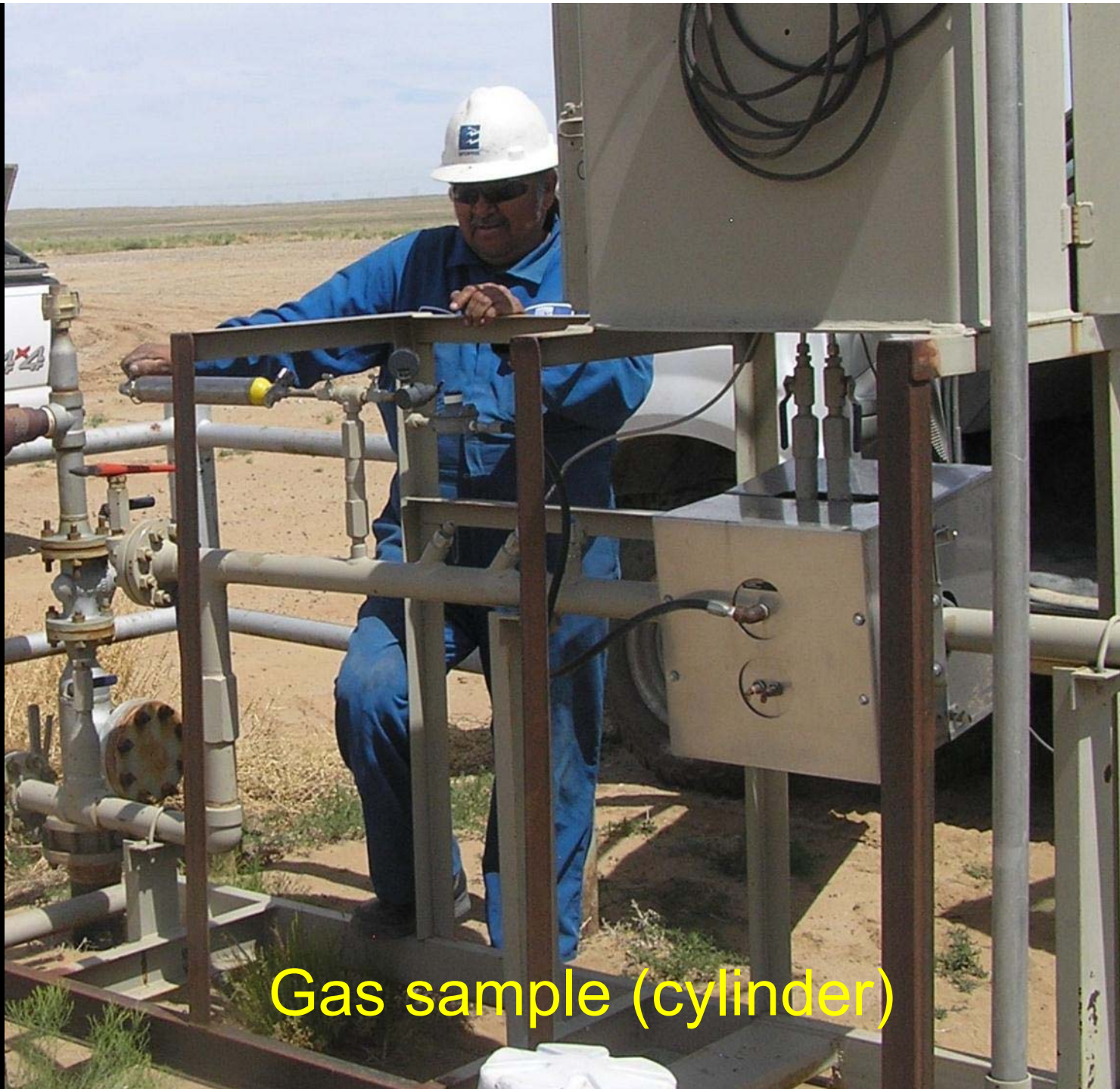
27
3:59 PM



The image shows a complex industrial gas measurement system installed in a room with silver-insulated walls. Two horizontal pipes are visible. The upper pipe has a circular electronic gas meter mounted on it. Below this pipe, a vertical manifold contains an orifice plate. A yellow arrow points from the text 'Orifice plate' to this manifold. Various valves, gauges, and electrical conduits are connected to the system. The lower pipe also has a circular meter on its left side.

Electronic Gas
Measurement
System

Orifice plate



Gas sample (cylinder)



Gas sample
(portable GC)

What is Department of Interior's role?

Ensure that the American public, Indian tribes, and Indian allottees receive a fair royalty in exchange for the production of our/their oil and gas

What is the BLM's role?

Ensure the quantity and quality of oil and gas removed or sold from Federal and Indian leases is accurately measured and properly reported

What is ONRR's role?

- **Ensure that value of oil and gas removed or sold from Federal and Indian leases used for royalty determination represents a fair market value**
- **Collect and distribute royalty**

Onshore Orders 3, 4, and 5

- **Published in 1989**
- **Incorporated industry standards in place in 1989**
- **“Cookbook” requirements for old technology**
- **No process for approving new technology**
- **No performance standards**
- **Gaps**
- **OIG, GAO, RPC**

In the old days... (1989-2016)

Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA)

Regulations (43 CFR subpart 3162.7)

- Measurement on lease (unit, CA), unless approved
- Approval required for commingling
- **Gas**: orifice meters, unless otherwise approved
- **Oil**: tank gauge or PD meter, unless otherwise approved

In the old days... (1989-2016)

*Federal Oil and Gas Royalty Management
Act of 1982 (FOGRMA)*

Regulations (43 CFR Part 3160)

Onshore Order 3 (Site Security)

Onshore Order 4 (Oil Measurement)

Onshore Order 5 (Gas Measurement)

As of January 17, 2017...

Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA)

Regulations (43 CFR Part 3170)

Subpart 3170 (overall definitions,
recordkeeping, variances)

Subpart 3173 (site security, commingling,
FMP, off-lease measurement)

Subpart 3174 (oil measurement)

Subpart 3175 (gas measurement)

As of January 17, 2017...

*Federal Oil and Gas Royalty Management
Act of 1982 (FOGRMA)*

Regulations (43 CFR Part 3170)

Subpart 3178 (Royalty-free use)

Subpart 3179 (Waste prevention)

Notices to Lessees (NTL)

Written Orders

Variations, Conditions of Approval

Onshore Order 3 vs 3173

Onshore Order 3

Seal requirements
Site facility diagrams

3173

Seal requirements
Site facility diagrams
FMPs
Commingling
Off-lease measurement
Hot oiling and water draining
End of month inventory

Onshore Order 4 vs 3174

Onshore Order 4

Applies to sales and allocation
Incorporates pre-1989 stds.
Manual tank gauging
LACT with PD meter
Proving
ATG/ATC required
Variance for new tech.

3174

Applies to FMPs
Incorporates latest stds.
Manual tank gauging
LACT with PD meter
Proving
Temperature averager
1-time approval for new tech.
Automatic tank gauging
LACT with Coriolis
Stand-alone Coriolis
Performance goals
BLM-approved equipment

Onshore Order 5 vs 3175

Onshore Order 5

Applies to sales and allocation
Incorporates AGA 3 (1985)
Exemptions for <100 Mcf/day
Orifice plates only
Chart recorders
Calibration/verification
EFCs under State NTLs
1 requirement for Btu
Variance for new tech.

3175

Applies to FMPs
Incorporates latest stds.
4 tiers of requirements
Orifice plates
Charts (< 200 Mcf/day)
Calibration/verification
EGMs
Entire section on Btu
1-time approval for new tech.
Testing protocols
Performance goals
BLM-approved equipment

Changes to Enforcement Regulations

- BLM can now take enforcement action against “any person”, rather than just an operator
- “Any person” includes purchasers and transporters (recordkeeping only) and contractors
- BLM does not have the ability to implement this change currently
- Immediate assessments for specific violations

Implementation and Timing

- Rules became final on November 17, 2016
- Rules became effective on January 17, 2017
- Any FMP that was installed after January 17, 2017 must comply with 3173, 3174, and 3175 upon installation
- For oil measurement facilities in place before January 17, 2017:
 - 1 to 3-year phase in period based on average oil and gas production from the lease, CA, or PA
 - Phase-in start date delayed until FMP application software is complete

Implementation and Timing

- For gas measurement facilities in place before January 17, 2017:
 - 1 to 3-year phase in based on 3175 “category”:
 - High and very-high volume: Jan. 17, 2018
 - Low volume: January 17, 2019
 - Very-low volume: January 17, 2020
 - Some grandfathering (meter tubes and flow computer software)