48th Annual Taxation Conference
APPRaisal for AD VAloREM TAXATION
of Communications, Energy and Transportation Properties
July 29 – August 2, 2018

2018 Update: Certifying & Claiming Pollution Control Exemptions for U.S. Pipelines

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2018 Update: Certifying and Claiming PC Tax Benefits for U.S. Pipelines

- Colonial Pipeline (Keith’s company) started a project to review Pollution Control (“PC”) opportunities on the Colonial Pipeline (the “Pipeline”) 48 months ago.

- In 2016, Keith:
  - Reported that Pipeline fixed asset records were incomplete to support a solid PC analysis.
  - Presented at Wichita on status of U.S. Oil and Gas Pipeline PC potential across state statues.
  - Engaged Duff & Phelps to assist with a project to identify PC through alternative options.
    - Duff & Phelps has identified and has applied for PC in seven (7) States on Colonials Pipeline’s behalf.

- As of 2018, we have the following to report:
  - Project Pipeline work order expenditures allow for PC installation identification;
  - Success in certifying PC in certain states outlined in the 2016 presentation; and
  - In-process regulatory and legal reviews of PC claims in other states.
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Reminder: Pipelines are More than Pipes!

Section 1
Pipeline System PC Installations: Process Review

Identifying PC property: Find it in a process review

- Identify PC property through location of industry facilities and equipment
- Can review for multi-jurisdiction tax benefit purposes
- Begin gathering costs; to be detailed by cost elements (labor, materials, equipment, indirects, etc.)

Source: EIA
Pipeline System PC Installations: Process Review by System Type

Gas Pipeline System Assets
- Producing Wellheads
- Gathering Lines
- Underground Storage
- Compressor Station
- Compression Lines
- Processing Plant
- Distribution Lines
- Electricity Generating Station
- Commercial Customers
- Residential Customers

Source: Safe Seal Valve System

Liquid Pipeline System Assets
- Crude Oil Production
- Crude Storage Tanks
- Crude Oil Transmission Line
- Crude Oil Service Station
- Crude Oil Pump Station
- Crude Oil Gathering Lines
- Crude Oil Crude Oil Refinery
- Crude Oil Storage
- Crude Oil Diesel Storage
- Crude Oil Gasoline Storage
- Crude Oil Tanker Trucks
- Crude Oil Marketing Terminal

Source: Safe Seal Valve System
Natural Gas Marketed Production by State

Source: EIA 2018
Field Production of Crude Oil by State

Field Production of Crude Oil (Thousand Barrels per Day)

Source: EIA 2018
Pipeline System PC Property: Fundamentals

Property Tax benefits: available for eligible PC property in certain states

- Incentivize industry to *install* PC property
- Provide tax breaks for owners of federally- or state-mandated PC property

- Tax Treatments provide *annual expense* savings over property life.

Who grants PC exemptions/special tax treatment?
- State Regulated Environmental Organizations
- Local/Central Assessing Authorities
- Review and Inclusion in Annual Rendition
Pipeline System PC Property: Fundamentals, cont.

How do Property Tax PC Benefits work?

- **May take the form of:**
  - Exemptions
  - Special value treatments (i.e., salvage value)
  - Depreciation benefits (i.e., shorter life for PC)

- **Typically claimed through certification and/or claims process**
  - Pre-certification by state environmental agency
  - Pre-approved PC equipment lists
  - Applications to State Tax and/or Revenue Departments
**PC Property: The Latest for Natural Gas Pipeline Systems**

**Natural Gas: What has historically qualified as PC Property for Industry Capex?**

<table>
<thead>
<tr>
<th>Natural Gas Pipelines (6-12%)</th>
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<tbody>
<tr>
<td>Pipeline Integrity Costs</td>
<td>(50-60%)</td>
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<tr>
<td>Stormwater Controls</td>
<td>(40-50%)</td>
</tr>
<tr>
<td>Compressor Emission Controls</td>
<td>(0-5%)</td>
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<table>
<thead>
<tr>
<th>Natural Gas Storage Facilities (0-5%)</th>
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<td>Air Emissions Controls</td>
<td>(70-80%)</td>
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<td>Stormwater Controls</td>
<td>(0-5%)</td>
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<table>
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<tr>
<th>Natural Gas Processing Facilities (8-12%)</th>
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<tr>
<td>Air Emissions Controls</td>
<td>(75-80%)</td>
</tr>
<tr>
<td>Wastewater Handling &amp; Controls</td>
<td>(10-15%)</td>
</tr>
<tr>
<td>Stormwater Controls</td>
<td>(5-10%)</td>
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</tbody>
</table>
## PC Property: The Latest for Gas Pipeline Systems

### Liquids: What has historically qualified as PC Property for Industry Capex?

<table>
<thead>
<tr>
<th>Liquids Pipelines (6-12%)</th>
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</thead>
<tbody>
<tr>
<td>• Pipeline Integrity Costs</td>
<td>(50-60%)</td>
</tr>
<tr>
<td>• Stormwater Controls</td>
<td>(40-50%)</td>
</tr>
<tr>
<td>• Pump Station Emission Controls</td>
<td>(0-5%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liquids Processing Facilities (8-12%)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Air Emissions Controls</td>
<td>(75-80%)</td>
</tr>
<tr>
<td>• Wastewater Handling &amp; Controls</td>
<td>(10-15%)</td>
</tr>
<tr>
<td>• Stormwater Controls</td>
<td>(5-10%)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Terminal Facilities (0-5%)</th>
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</thead>
<tbody>
<tr>
<td>• Air Emissions Controls</td>
<td>(40-50%)</td>
</tr>
<tr>
<td>• Leak Prevention/Protection</td>
<td>(35-45%)</td>
</tr>
<tr>
<td>• Stormwater Controls</td>
<td>(5-10%)</td>
</tr>
</tbody>
</table>
Maximizing Eligible Colonial Pipeline System Costs

Section 2
Maximizing Eligible Colonial Pipeline System PC Costs

**State-Specific Research**
- PC tax benefit and/or exemption statute?
- How do state-specific environmental definitions read?
- PC Certification History – Cross Industry?

See Appendix A: Pollution Control Matrix

**State-Specific Opportunity Mapping**
- By Pipeline System Component
- By Construction vs. Operations Periods
- By Environmental Media
- By Statutory Justification for State/Federal Requirements

See Appendix B: “Appendix B Example”

**Fast Facts:**
- 5,500 mi of 36-40” dia. Pipeline
- Product: Petroleum Products
- In Service: 1962

Source: Colonial Pipeline
Focus: Identifying & Certifying Pipeline System PC

Identify PC Tax Benefit Opportunity Exists
- Recognize pipeline system investment possesses major PC Property
- Develop process for existing pipeline system PC identification
- Begin value negotiation planning to include new PC property tax status

Quantify PC Property accurately
- Determine pipeline profile, mileage, and taxing jurisdictions
- Quantify tax savings opportunity to project/tax team through annual review or during CWIP
- Utilize multiple project/EPC contractor cost sources to quantify eligible costs

Certify PC Property
- Timely submit/certify PC Property tax benefit/exemption claims
- Educate and Negotiate with certifying authorities on pipeline system PC
- Collect PC Property approvals/certifications for value discussions

Prepare for Pipeline Value Negotiations
- Know the value of the PC Property tax benefits/exemptions in relation to pipeline system
- Confirm assessors recognize and value tax benefits/exemptions appropriately
Identifying PC property: It starts with the statutes

- Often limited by Property Type (Real vs. Personal Property)

- Pollution Control Definitions
  - Definition of PC Property eligibility determined by:
    - Tax authority (federal, state and local taxes)
    - State-specific jurisdiction (Property, Sales/Use Tax, etc.)

- Definitions Limit or Enhance PC Property Classification
  - Use of “Exclusive” vs. “Primarily” in PC activities
  - Use of “Abate/Control” pollution vs. “Prevent” pollution

The statutory term “Pollution Prevention” expands tax benefit potential
Our Mission: Maximizing Eligible Colonial Pipeline System PC Costs

Statutory Review
Statutory Use of Key Words - by Pipeline System Component

- Pipeline Opportunities
  - “Prevent”
- Tank Farms/Storage Facilities
  - “Abate, Control, Reduce, & Eliminate”
- Pumping Stations
  - “Abate, Control, Reduce, & Eliminate”

Fast Facts:
- 5,500 mi of 36-40” dia. Pipeline
- Product: Petroleum Products
- In Service: 1962

Source: Colonial Pipeline
PC Facility Analysis: Pipelines – Statutory Review (cont.)

Identifying PC Property: Defining the available tax benefit opportunities

North Carolina: “Real and personal property that is used or, if under construction, is to be used exclusively for air cleaning or waste disposal or to abate, reduce, or prevent the pollution of air or water…” N.C. Gen. Stat. §105-275(8)(a).

Wyoming: “facilities, installations, machinery or equipment attached or unattached to real property and designed, installed and utilized primarily for the elimination, control or prevention of air, water or land pollution…” Wyo. Stat. § 35-11-1103

Texas: “land that is acquired after January 1, 1994, or any structure, building, installation, excavation, machinery, equipment, or device, and any attachment or addition to or reconstruction, replacement, or improvement of that property, that is used, constructed, acquired, or installed wholly or partly to meet or exceed rules or regulations adopted by any environmental protection agency of the United States, this state, or a political subdivision of this state for the prevention, monitoring, control, or reduction of air, water, or land pollution.” Texas Tax Code §11.31(b)
Our Mission: Maximizing Eligible Colonial Pipeline System PC Costs

PC identification in Company Records
PC Key Words by Pipeline System Component

- Pipeline
  - Pipeline Integrity Installations
- Terminal
  - Internal Floating Roofs
- Tank Integrity Installations
- Secondary Containment
- Pumping Stations
- Secondary Containment

Source: Colonial Pipeline
PC Property Analysis: **Existing Pipeline System – Cost Review**

- **Fixed Asset Review**
  - Discussion with Operations Personnel
  - Identify PC through key-word searches through the Fixed Asset Records
  - Use of Authorization for Expenditure ("AFE") scopes of work to determine Pollution Control eligibility
  - Tie-Back AFE Number to Fixed Asset Listings
  - Use trended/adjusted cost data to estimate costs for pollution control assets, if needed

- **AFE Review (Tied to Fixed Assets)**
  - Accounting
  - Project Knowledge
  - Process Knowledge
  - EHS
  - FERC
  - GAAP
  - MACRS

- **Cost Build Ups, if needed**
  - Accounting
  - Project Knowledge
  - Process Knowledge
  - EHS

- **Work Order Review**
  - Identify PC through key-word searches through the Fixed Asset Records
  - Use of Authorization for Expenditure ("AFE") scopes of work to determine Pollution Control eligibility
  - Tie-Back AFE Number to Fixed Asset Listings
  - Use trended/adjusted cost data to estimate costs for pollution control assets, if needed
PC Property Analysis: **New Pipeline System – Cost Review**

Quantifying PC property costs: Use multiple pipeline cost sources

- **Engineering – Business Case/AFE Budgets**
- **Procurement – Procurement/Purchase Orders**
- **Classification Allocation to Fixed Assets**
- **Construction/Repowering – Cost Actuals**

**Direct Costs**
- Equipment Costs
- Labor Costs to Install Equipment
- Subcontractor support Costs

**Indirect Costs**
- Construction-Related Indirect Costs
- Project-Related Indirect Costs

\[ \text{Total Eligible Installed Costs of PC Property} = \text{Direct Costs} + \text{Indirect Costs} \]
Getting Results: Filing and Educating with Certifying Agencies

Educate and Negotiate
- Pre-Filing Calls
- Application Preparation Filing
- Presentation of Additional Detail to Certifying Authorities
2016 - Current: Additional Case Studies and Success Stories

**New Pipeline System: Construction Cost Actuals**

- Certified >$12M in PC Value; **$900K in Y-1 Tax Savings** for three (3) OH/WV Pipelines in 2016/2017;
- Secured >$2.6M in **TX Y-1 Tax Savings** 2014-2018 in Gas Plant and Pipeline PC for a Midstream Company; and
- Exempted >$14M in Facility historical cost; newly installed TX Condensate Splitter in 2017.

**Existing Pipeline System: Fixed Asset Review or Work Order Review Costs**

- Secured approximately $514K in **Y-1 Tax Savings** in Pipeline PC retrofits; **Colonial Pipeline[^1];**
- Certified >$85M in PC Cost retrofits; **$991K in Y1 Tax Savings** for a 4,000 mile TX Pipeline in 2016; and
- Achieved Y-1 tax savings >$846K for terminal clients in IL & TX in last five years.

[^1]: ~$700K in pending Pollution Control Savings under review in SC & VA
Current Status of PC States

Section 3
2016 Questions: Updates and Maps

• Which states do not offer pollution control exemptions at all?
• Which states offer them but not to pipelines?
• Which states potentially allow pipelines to claim pollution control exemptions?
  • What are the steps for tax exemption/special tax treatment approval?
# No PC Exemptions/Special Tax Treatment

<table>
<thead>
<tr>
<th>Wichita 2016</th>
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</thead>
<tbody>
<tr>
<td>Arkansas</td>
</tr>
<tr>
<td>Delaware</td>
</tr>
<tr>
<td>Missouri</td>
</tr>
<tr>
<td>Nebraska</td>
</tr>
<tr>
<td>Rhode Island</td>
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</table>

<table>
<thead>
<tr>
<th>2018 Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
</tr>
<tr>
<td>Delaware</td>
</tr>
<tr>
<td>Oklahoma</td>
</tr>
</tbody>
</table>

9 of 50 states offer **No PC Exemptions/Special Tax Treatment**

3 of 9 are Real Property Only (DE, NE, & PA)
PC Property: **NO** U.S. Property Tax Benefits/Opportunities

See Appendix A for Detail
PC Exemption/Special Tax Treatment, but Not for PL Systems

<table>
<thead>
<tr>
<th>Wichita 2016</th>
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<tbody>
<tr>
<td>Colorado</td>
<td>Florida</td>
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<td>Iowa</td>
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</tr>
<tr>
<td>Maryland</td>
<td>New Mexico</td>
</tr>
<tr>
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<td>Oregon</td>
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<tr>
<td>Vermont</td>
<td>Washington</td>
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<tr>
<td>West Virginia</td>
<td>Wyoming</td>
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</table>

<table>
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<tr>
<th>2018 Update</th>
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<tr>
<td>Colorado</td>
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<tr>
<td>Louisiana</td>
<td>Maryland</td>
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<tr>
<td>North Dakota</td>
<td>Oregon</td>
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<tr>
<td>Washington</td>
<td>Wisconsin</td>
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</table>

11 of 50 states Offer PC Exemption/Special Tax Treatment, but Not for Pipeline Systems
PC Property: U.S. Property Tax Benefits/Opportunities for Others

See Appendix A for Detail
### PC Exemptions/Special Tax Treatment for Pipeline Systems

#### Wichita 2016

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<th>State</th>
<th>State</th>
<th>State</th>
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<td>Alaska</td>
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<tr>
<td>Idaho</td>
<td>Kentucky</td>
<td>Massachusetts</td>
<td>Maine (D&amp;P 2009)</td>
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<td>Michigan</td>
<td>Minnesota</td>
<td>New Hampshire</td>
<td>New Jersey</td>
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<tr>
<td>South Carolina</td>
<td>Tennessee</td>
<td>Texas (D&amp;P 2006-Present)</td>
<td>Virginia</td>
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#### 2018 Update

<table>
<thead>
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<th>State</th>
<th>State</th>
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<td>West Virginia</td>
<td>Wyoming</td>
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</table>

30 of 50 states Offer PC Exemptions/Special Tax Treatment for Pipeline Systems

**Key: Success; Under Review**
PC Property: Potential U.S. Property Tax Benefits/Opportunities for Pipeline Systems

- **No PC Property Tax Exemptions and/or Special Value Granted**
- **No PL PC Property Tax Exemptions and/or Special Value Granted**
- **PL PC Property Tax Exemptions and/or Special Value Granted**

See Appendix A for Detail
2018: Case Studies for Pipeline System Assets – Water PC

Successes

- **Texas**
  - Stormwater Controls
  - Pipeline Integrity Installations Successes
    - Pipeline Coatings & Cathodic Protection
  - Leak Detection/Prevention Successes
    - Nondestructive Testing
    - Automatic Shut-Off Valves
    - Intelligent PIG Launchers/Receivers

- **West Virginia**
  - Stormwater Controls listed on the Pollution Abatement Preapproved List

- **Wyoming**
  - Stormwater Controls: Pollution Exemption Application Form
2018: Case Studies for Pipeline System Assets – Air PC

**Successes**

- Texas
  - VOC Controls at:
    - Processing Plants; Terminals and Compressor Stations
  - NO\textsubscript{x} Controls at:
    - Compressor Stations
  - Fugitive Dust Emission Controls:
    - Processing Plants; Terminals and Compressor Stations
- North Carolina
  - VOC Controls at:
    - Pumping Stations
- West Virginia
  - NO\textsubscript{x} Controls at:
    - Compressor Stations
- Wyoming
  - VOC Controls at:
    - Processing Plants

Source: ENR.com

Source: ECORI
2018: Case Studies for Pipeline System Assets – Water PC

Jury’s Out

- Tennessee
  - Cathodic Protection and Pipeline Coatings – Regulatory Education in Process: Under Legal Review at Environmental Regulatory Authority

- South Carolina
  - Cathodic Protection and Pipeline Coatings – Hesitation from Assessing Authority: Under Legal Review at Environmental Regulatory Authority

- Virginia
  - Cathodic Protection and Pipeline Coatings – Jurisdictional Authority Problems
South Carolina: “There shall be exempt from ad valorem taxation:….. all facilities or equipment of industrial plants which are designed for the elimination, mitigation, prevention, treatment, abatement or control of water, air or noise pollution…” Constitution of S.C. § 3

Virginia: “Certified pollution control equipment and facilities, as defined herein, are hereby declared to be a separate class of property and shall constitute a classification for local taxation separate from other such classification of real or personal property and such property. Certified pollution control equipment and facilities shall be exempt from state and local taxation pursuant to Article X, Section 6 (d) of the Constitution of Virginia…Certified pollution control equipment and facilities” shall mean any property, including real or personal property, equipment, facilities, or devices, used primarily for the purpose of abating or preventing pollution of the atmosphere or waters of the Commonwealth and which the state certifying authority having jurisdiction with respect to such property has certified to the Department of Taxation as having been constructed, reconstructed, erected, or acquired in conformity with the state program or requirements for abatement or control of water or atmospheric pollution or contamination…” Va. Code Ann. § 58.1-3660
2018: Case Studies for Pipeline System Assets – Water PC

**States with Major Push Back**

- **Ohio – Water Pollution Control**
  - Disallowed all Stormwater and Pipeline Integrity Installations
  - Sediment-laden Stormwater not considered an “Industrial Waste”
  - Key Item: No “Prevention” reference in tax statute

- **Georgia – Water Pollution Control**
  - Temporary Nature of Stormwater Controls – Disqualified
  - Tax Statute Language excludes eligibility for Pipeline Integrity Installations
  - Key Item: No “Prevention” reference in tax statute
Ohio: “…any of the facilities defined in division (B), (D), (F), (I), (K), or (L) of this section for which an exempt facility certificate is issued pursuant to section 5709.21 or for which a certificate remains valid under section 5709.201 of the Revised Code”… (L) ‘Industrial water pollution control facility’ means any property designed, constructed, or installed for the primary purpose of collecting or conducting industrial waste to a point of disposal or treatment; reducing, controlling, or eliminating water pollution caused by industrial waste; or reducing, controlling, or eliminating the discharge into a disposal system of industrial waste or what would be industrial waste if discharged into the waters of this state. This division applies only to property related to an industrial water pollution control facility placed into operation or initially capable of operation after December 31, 1965, and installed pursuant to the approval of the environmental protection agency, department of natural resources, or any other governmental agency having authority to approve the installation of industrial water pollution control facilities. The definitions in section 6111.01 of the Revised Code, as applicable, apply to the terms used in this division.” Ohio Rev. Code Ann. §5709.20

Georgia: “All property used in or which is a part of any facility which has been installed or constructed at any time for the primary purpose of eliminating or reducing air or water pollution if such facilities have been certified by the Department of Natural Resources as necessary and adequate for the purposes intended;” Ga. Code Ann. § 48-5-41
Moving Forward: What’s Left to Do?

Section 4
Moving Forward: What’s Left to Do?

Texas

- History of Success
- Wealth of Opportunities
  - Natural Gas
    - > 45,000 miles of interstate natural gas pipelines
    - More natural gas market hubs in TX than any other state
  - Liquids
    - Holds more than one-fourth of the nation's 100 largest oil fields by reserves
    - Produces more than one-third of the nation's crude oil
    - Three-tenths of the nation’s crude oil refining capacity is located in Texas

Source: https://www.eia.gov/state/analysis.php?sid=TX
Moving Forward: What’s Left to Do?

Wyoming

- Strong Statutory Language for Pipeline PC
- Wealth of Opportunities
  - Natural Gas
    - Top 5 state with the most natural gas reserves
    - 16 of the largest U.S. natural gas fields
    - Most natural gas produced in the state is shipped out through interstate pipelines
  - Liquids
    - Crossroads for pipelines bringing Canadian and Rocky Mountain crude oil to refineries in the Rocky Mountain states and the Midwest and for pipelines shipping refined products to markets in those regions
    - Five operating crude oil refineries providing one-fourth of the refining capacity in the Rocky Mountain region

Source: Wyoming Public Media

Source: https://www.eia.gov/state/analysis.php?sid=WY
Moving Forward: What’s Left to Do?

Ohio/West Virginia

- Push Back from Jurisdictional and Environmental with PC
- Jurisdictional and Environmental arguments against PC not strong
- **Litigation may be only option to ensure success in these states**
- Opportunities
  - Ohio
    - Several interstate natural gas pipelines cross Ohio
    - Ohio is among the top 10 oil-refining states in the nation
  - West Virginia
    - Crude oil production in West Virginia, almost all of it from the Marcellus shale, has nearly tripled since 2012
    - West Virginia is the ninth-largest natural gas-producing state in the nation
Pollution Control Matrix

Appendix A
<table>
<thead>
<tr>
<th>No.</th>
<th>State</th>
<th>Taxability</th>
<th>Pollution Control Exemption</th>
<th>Special Tax Treatment</th>
<th>P/L System Pollution Control Benefit Applicable</th>
<th>P/L System Pollution Control Application Status</th>
<th>Notes</th>
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<td>1</td>
<td>Alabama</td>
<td>Both</td>
<td>Yes</td>
<td>N/A</td>
<td>Yes</td>
<td>Success</td>
<td>All Pipeline PC Successful</td>
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<tr>
<td>2</td>
<td>Florida</td>
<td>Both</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Success</td>
<td>Salvage Value of 5%</td>
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<td>Illinois</td>
<td>RP Only</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Success</td>
<td>PC Valued at 33-1/3%</td>
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<tr>
<td>4</td>
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Source: Duff & Phelps
North Carolina Pipeline System PC Property Tax Special Tax Treatment/Exemption Considerations

Appendix B
North Carolina Pipeline System PC Property Tax Special Tax Treatment/Exemption Considerations

For Client Discussion ONLY

<table>
<thead>
<tr>
<th>Pollutant Control Property</th>
<th>POP Applicable Language</th>
<th>POP Applicable Term</th>
<th>POP Applicability</th>
<th>Tax Statute for POP Allows for Federal or State Environmental Purpose</th>
<th>Applicable Federal Statutes &amp; Regulations</th>
<th>Applicable State Statutes &amp; Regulations</th>
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<tbody>
<tr>
<td>A. Facilities Used During Construction</td>
<td></td>
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<td>1. Water Pollution Control - Sedimentation &amp; Erosion Controls</td>
<td>Equipment</td>
<td>Exclusively</td>
<td>Abate/ Reduce/ Prevent</td>
<td>Yes</td>
<td>Silent</td>
<td>Environmental controls, etc. are installed in the form of perimeter barriers for sediment and runoff control at the edge of disturbed areas; include/ reduce and prevent stormwater runoff from mining activities and contaminating surface waters of the State.</td>
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<td>2. Water Pollution Control - Inadvertent Effluent Release Protection</td>
<td>Non-Destructive Testing</td>
<td>Equipment</td>
<td>Exclusively</td>
<td>Abate/ Reduce/ Prevent</td>
<td>Silent</td>
<td>Non-Destructive Testing is performed on pipeline welds to inspect the welds for potential defects which may lead to inadvertent leakage from the pipeline during operation. Non-destructive testing includes/ reduce and prevent the risk of an unintentional release of petroleum products into ground waters or surface waters of the State.</td>
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<td>B. Facilities Used During Operation</td>
<td>Cathodic Protection</td>
<td>Equipment</td>
<td>Exclusively</td>
<td>Abate/ Reduce/ Prevent</td>
<td>Silent</td>
<td>Cathodic Protection (consisting of sacrificial anodes and dielectric coatings) applied to the pipes. Cathodic protection maintains pipeline integrity, abatement/ reducing, preventing the risk of releasing petroleum products into ground waters or surface waters of the State.</td>
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<td>C. Facilities Used During Operation</td>
<td>Pipe Coating</td>
<td>Equipment</td>
<td>Exclusively</td>
<td>Abate/ Reduce/ Prevent</td>
<td>Silent</td>
<td>Pipe coating applied to the pipelines for the control of degradation of metal piping, include/ reduce and prevent the risk of releasing petroleum products into ground waters or surface waters of the State.</td>
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<td>D. Facilities Used During Operation</td>
<td>Smart Pig Launchers/Receivers</td>
<td>Equipment</td>
<td>Exclusively</td>
<td>Abate/ Reduce/ Prevent</td>
<td>Silent</td>
<td>Intelligent Pipeline Inspection Gauge (PIG) Launchers and Receivers are used in the inspection of pipelines for integrity and to detect leaks in the pipeline. Abatement/ reducing, prevents the risk of release of hydrocarbons to the ground waters or surface waters of the State.</td>
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<td>E. Automatic Shut-Off Valves</td>
<td>Equipment</td>
<td>Exclusively</td>
<td>Abate/ Reduce/ Prevent</td>
<td>Silent</td>
<td>Automatic Shut-Off valve installed to include/ reduce and prevent an inadvertent Natural Gas release which may cause adverse impacts to the atmosphere of the State.</td>
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</table>

Source: Duff & Phelps

*No Corresponding State Statute*