Repairing the Damage from Hazardous Abandoned Oil & Gas Wells
A Federal Plan to Grow Jobs in the Ohio River Valley and Beyond

Report Summary:
Over the last several years, there has been growing attention at the state and federal level to address the problems associated with millions of abandoned and orphaned oil and gas wells across the nation. Unplugged or improperly plugged abandoned oil and gas wells are causing extensive environmental damage and imposing health and safety risks because they are leaching pollutants into the air and water. There are also billions in unfunded liabilities associated with the abandoned oil and gas wells scattered across the country.

"Repairing the Damage from Hazardous Abandoned Oil and Gas Wells: A Federal Plan to Grow Jobs in the Ohio River Valley and Beyond" explores the potential benefits of a large-scale federal program to plug abandoned oil and gas wells in the Ohio River Valley states of Kentucky, Ohio, Pennsylvania, and West Virginia.

The report identifies:
- The number of abandoned oil and gas wells that could be plugged and well sites restored in Ohio River Valley states.
- The estimated cost to plug and restore Ohio River Valley wells.
- The jobs that could be created from a large-scale remediation program.
- A large-scale remediation program's potential for reducing greenhouse gases.
- Recommendations for federal programs and structures.

A full version of the report is available at www.ohiorivervalleyinstitute.org.

About Us:
The Ohio River Valley Institute is an independent, nonprofit research and communications center founded in 2020. We equip the region’s residents and decision-makers with the policy research and practical tools they need to advance long-term solutions to Appalachia’s most significant challenges.
Unplugged Abandoned Wells in Ohio River Valley States

OHIO
Estimated abandoned wells: 159,000
Total plugging cost: $13.9 billion

KENTUCKY
Estimated abandoned wells: 103,000
Total plugging cost: $670 million

WEST VIRGINIA
Estimated abandoned wells: 76,000
Total plugging cost: $4.1 billion

PENNSYLVANIA
Estimated abandoned wells: 200,000
Total plugging cost: $6.6 billion

Ohio River Valley Institute

Ohio River Valley States Total
538,000 abandoned wells
$25.3 to $34.5 billion total plugging cost
Large-scale remediation would create jobs and curb harmful greenhouse gas emissions.

Plugging abandoned wells and cleaning up well sites can also improve public safety, health, air quality, property values, and economic development.

**OHIO**
- Jobs per year: 8,331
- Reduction in CO₂ Emissions: 21.3 million metric tons

**KENTUCKY**
- Jobs per year: 403
- Reduction in CO₂ Emissions: 13.9 million metric tons

**WEST VIRGINIA**
- Jobs per year: 2,457
- Reduction in CO₂ Emissions: 10.2 million metric tons

**PENNSYLVANIA**
- Jobs per year: 3,960
- Reduction in CO₂ Emissions: 26.9 million metric tons

**OHIO RIVER VALLEY STATES TOTAL**
- 15,151 jobs per year (over 20 years)
- 72.3 million metric ton reduction in CO₂ emissions (over 100 years)
Program needed to address abandoned wells

In the short-term, Congress could send at least $5 billion to states and tribes to identify, plug, and restore more orphaned and abandoned wells, expand staffing and inspections, and improve monitoring, plugging, and reclamation practices.

Over the long run, a federal program with adequate annual funding from the oil and gas industry is needed. Two possible solutions include the Abandoned Well Act of 2021 or using the Abandoned Mine Land Reclamation Program as a guide.

At the current rate of remediation, it could take nearly 900 years for states to plug the estimated 2.1 million abandoned oil and gas wells in the U.S.

### 2018 Plugging Expenditures Cover Tiny Fraction of Plugging Needs

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Estimated Cost (2018)</th>
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</thead>
<tbody>
<tr>
<td>State plugging/restoration expenditures (2018)</td>
<td>$52.9 million</td>
</tr>
<tr>
<td>Proposed federal funds for plugging wells (S.4642)</td>
<td>$2.25 billion</td>
</tr>
<tr>
<td>Cost to plug 802,000 orphan wells (OGGCC)</td>
<td>$24.1 billion</td>
</tr>
<tr>
<td>Cost to plug 2.1 unplugged abandoned wells (EPA)</td>
<td>$63.8 billion</td>
</tr>
</tbody>
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Policymakers should consider the following:

- A national monitoring and inventory system, including a risk assessment of wells.
- Investments in research and development, staffing, and administration.
- Job and safety training (regional training centers).
- Prevailing wages and local hiring practices that include women and people of color.

The program could be funded by:

- Scaling back or eliminating oil and gas subsidies ($11 billion annually).
- Levying a small per unit fee on crude oil and natural gas production ($3.7 billion annually).