March 30, 2022
Comments on the Department of Interior's Orphaned Well Program

The BlueGreen Alliance unites America's largest labor unions and environmental organizations to solve today's environmental challenges in ways that create and maintain quality jobs and build a stronger, fairer economy. Our partnership is firm in its belief that Americans don't have to choose between a good job and a clean environment—we can and must have both. We appreciate the opportunity to inform the Department of Interior's (DOI) implementation of the state and federal orphaned well program established in the Infrastructure Investment and Jobs Act (IIJA).

Orphaned Well Cleanup Will Reduce Pollution and Create Jobs

Cleaning up orphaned wells in the U.S. is a great example of how America's environmental challenges can also be economic opportunities. In communities across the country, these wells pose significant public health and environmental hazards, often leaking methane gas, contaminating surface and groundwater, and degrading ecosystems. Orphaned wells (and pollution from leaking wells and associated infrastructure) are widespread in states where BGA works, especially in Appalachia and the southern midcontinent. This pollution harms the health of nearby communities, livestock and wildlife, while jeopardizing economies dependent upon outdoor recreation industries, farming and ranching. [i]

Reclamation not only remediates the host of environmental and health problems associated with these sites but also frees up land for new, more sustainable economic development opportunities in industry sectors like agriculture, recreational tourism, manufacturing, and even clean energy production. Cleaning up these wells can also create immediate job opportunities. A recent BlueGreen Alliance analysis found that the IIJA's $21 billion investment in the remediation of Superfund, Brownfield, mine, and orphaned wells would create more than 150,000 jobs (direct, indirect and induced) over the next 10 years. Orphaned well cleanup could create over 33,000 of those jobs.

However, we have heard from our labor partners that many companies able to do well reclamation work simply don't bid on the work, recognizing that the work of well reclamation, as currently structured, is not a profitable endeavor for many companies. Ensuring that cleanup funds target the full range of work required, not just plugging wells, will change this dynamic, making cleanup work more attractive to contractors and producing better outcomes for surrounding communities and the workers themselves. Besides plugging, reclamation work may include the removal of production equipment and debris, investigation and remediation of soil and groundwater impacts, reclamation of well pads, cleanup of remote production areas and access roads, and installation of safety equipment. Full cleanup of these sites doesn't just

matter for companies, it matters for the workers that live in these regions and deserve clean water, air, land and working conditions.

In a 2021 analysis from Resources for the Future (RFF), researchers found that the median cost of plugging and reclaiming a well was $76,000; a figure that can vary widely depending on the age, location, and depth of the well. While the estimated range for plugging a well starts at $20,000, going beyond this initial step to reclaim and restore the site surface can lead to additional ecosystem benefits such as agricultural use and CO2 sequestration. [ii]

Encouraging the aggregation of bids could also increase the profitability of undertaking reclamation work while attracting more union firms. We did not see any emphasis on project aggregation within DOI's draft guidance[iii], but recent RFF analysis of almost 4,000 contracts found that contracting in bulk could reduce per-well costs by over 3% per well, meaning that aggregation of contacts would not only reduce costs, but could also attract union firms with a highly-skilled and trained workforce to ensure the reclamation is properly completed.[iv] The area-based closure program, a collaborative initiative in Alberta, Canada, encourages oil and gas companies to work together to close, reclaim, and restore inactive sites. In 2019, this program increased closure activity by 19%, while reducing closure activity costs by 40%. [v]

We appreciate that DOI's draft guidance included training programs and registered apprenticeships within the recommended elements of a successful orphaned well program. [vi]The quality control piece of this is enormously important for a number of reasons, not least to ensure that the methane emission reduction goal of the title of the IIJA under which this program is authorized – which is called Methane Reduction Infrastructure–is actually realized. If wells are not properly sealed by workers with the right skills, we will not see the climate and health benefits that are at the core of this program. Reducing the large amounts of methane emissions leaking from orphaned wells by properly plugging and restoring well sites will protect workers and communities, reduce pollution, and reap economic benefits for workers and communities across the country.

In addition to ensuring a high quality of work, it is important that the state agencies implementing plugging and remediation activities through the state plugging program are sufficiently funded and staffed to complete proper oversight and administration of the program. Proper staffing will also be crucial for states to access the performance grants available under the IIJA, which are available to states that strengthen their technical plugging standards and procedures.

Program Structure and Reporting

States with existing orphan well plugging and remediation programs generally prioritize well closure based on their risk to public health and the environment. The Abandoned Mine Land (AML) Program—created by Congress through the Surface Mining Control and Reclamation Act

(SMCRA) in 1977—can serve as a model for how DOI might think through prioritization of wells for reclamation on federal lands, for states that do not already have prioritization schemas, and when considering the prioritization used by states applying for formula grants. Through SMCRA, States and Tribes reclaim coal mine sites abandoned pre-1977. The AML program has reclaimed nearly 800,000 acres of damaged land and water across the country. [vii]Over the course of its first 40 years, it eliminated over 46,000 open mine portals, reclaimed over 1,000 miles of dangerous highwalls, and protected 7.2 million people nationwide from AML hazards. [viii]

States and Tribes in the AML program rank AML sites on a priority scale of 1 to 3; with priority 1 and priority 2 sites completed first. Priority 1 sites are those impacting the environment that pose "extreme danger" to public health and safety, and priority 2 sites are those that pose "adverse effects" to public health and safety. [ix]

Because orphaned well sites are leaking methane and volatile organic compounds (VOCs) and threatening public health, prioritizing well sites that are causing the highest levels of public harm and environmental degradation through a priority designation similar to that within the AML program would ensure the most harmful, unsafe, and/or highest emitting well sites are remediated first. One major constraint of this approach is its inability to prioritize projects that are also linked with long-term economic development and job creation efforts, given the AML program's strong focus on remediating the most harmful sites first.

The RECLAIM Act (H.R.1733/S.1455) offers a potential model to follow, providing $1 billion to AML states and tribes to strategically reclaim sites that are linked to future economic or community development opportunities. The bill prioritizes projects in communities that have suffered from a decline in the coal economy and requires local stakeholder collaboration in development goals and planning.

DOI may expand the benefits of a new orphaned well program to rural and disadvantaged economies by including prioritization metrics that evaluate economic conditions, local development plans, and considers the demographic makeup of the community. For example, communities that have experienced a decline in oil & gas development may benefit - and have sufficient local labor available to do the work - by prioritizing reclamation in those regions.[x]

Additionally, if communities have identified that reclamation work is an important local economic development initiative, DOI may be a valuable partner in achieving local goals by prioritizing cleanup in those regions. Finally, because DOI is investing significant revenue toward cleanup, tracking and reporting numbers of jobs, average wages, and total investment in cleanup at each well site will assist local agencies, states, and stakeholders to recognize the economic impacts of reclamation (as in the RECLAIM Act we mentioned above).

It is also imperative that DOI consult with environmental justice and frontline groups as much as possible during the implementation of this program, as these communities often endure the

brunt of pollution and contamination from oil and gas operations,[xi] and we were glad to see that equity incorporations were included in DOI's draft guidance[xii].

Analysis from the Environmental Defense Fund (EDF) found that an estimated 9 million Americans live within one mile of an orphaned well, which includes 4.3 million people of color and 550,000 children under the age of 5[xiii]. Because of the negative environmental and health effects of orphaned wells and their close proximity to communities across the country, DOI and BLM should update its orphaned well inventory to better reflect the number, size, and type of orphaned wells under its management. This information should be stored as a publicly available database that citizens, state agencies, and communities can easily access.

Because methane emissions from orphaned well sites have been underestimated in the past, emissions monitoring (at the well site, through remote sensing technology, or other means) may be helpful to soliciting feedback from stakeholders, establishing cleanup priorities, and understanding the climate impact of the plugging and remediation work. Similar to monitoring utilized in the Abandoned Mine Land (AML) program, this monitoring would serve to support states in identifying well sites with the highest amount of methane emissions and prioritize them for cleanup.

Full well site cleanup is necessary to mitigate damages to the environment and people and ensure that well sites are properly plugged by a skilled workforce. However, the increased cost of full cleanup will likely be more than IIJA funds. Identifying any and all other programs across agencies that can be leveraged to complete cleanup may be a way to maximize IIJA funding. Identifying complementary funding to complete cleanups ahead of time will ensure seamless continuation of the cleanup project. Ensuring that projects utilizing different funding sources can be completed at once will be more cost effective overall, and avoid potential administrative and cost delays. While the IIJA funding may get contractors interested in bidding on work, additional available funding will allow for more site cleanup without hiring delays and long gaps between projects. More funding will be needed to fully address the scope of the problem.

By supporting a cleanup prioritization process that incorporates local stakeholder guidance, the program can be sure to fully clean up the most problematic sites first. In addition, incorporating local stakeholder and community guidance in decision-making can lead to other economic opportunities after the well site has been properly plugged and reclaimed. For example, while AML funds are used exclusively for reclamation of pre-1977 abandoned coal mines, reclaimed mine lands and the areas surrounding them have great potential to be reused as sites for new economic endeavors. Across the country, abandoned mine sites have been leveraged to create jobs through sustained revitalization efforts, wildlife habitat and restoration, and water quality improvement and spur new economic opportunities in these communities.[xiv] However, for any sites where funding isn't available for full cleanup, it will be important for DOI and BLM to harness, improve, and expand existing databases, so that future federal funding can pick up where IIJA funding leaves off.

Finally, in addition to creating high-quality jobs completing reclamation and remediation of orphaned well sites, it is imperative that the materials purchased and utilized for this program support American manufacturing, and workers and communities at home. We applaud DOI's inclusion of strong domestic content preferences and Davis Bacon prevailing wage provisions within the draft guidance and recommend robust enforcement of these provisions to ensure the promise of high-quality job creation in reclamation and remediation work is realized[xv].

Conclusion

We welcome the creation of the BLM's orphaned well remediation program and appreciate the opportunity to provide further comments on how that program can be implemented in ways that create high-quality, family-sustaining jobs, reduce methane emissions and pollution, and leave behind healthier and cleaner communities.

[i] Quinton, S. July 9, 2018. Why 'Orphan' Oil and Gas Wells are a Growing Problem for States. Pew Trusts. Available online: https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2018/07/09/why-orphan-oil-and-gas-wells-are-a-growing-problem-for-states

[ii] Raimi, D., Krupnick, A., Shah, J., and A. Thompson. 2021. Decommissioning Orphaned and Abandoned Oil and Gas Wells: New Estimates and Cost Drivers. Environmental Science and Technology 55: 10224-10230. Available online: https://pubs.acs.org/doi/pdf/10.1021/acs.est.1c02234

[iii] Department of Interior. March 17, 2022. FY 2022 State Initial Grant Guidance. Available online: https://www.doi.gov/sites/doi.gov/files/state-initial-grant-guidance-bil.pdf

[iv] Ibid.

[v] Area-Based Closure Program: 2019 highlights; Available online: https://static.aer.ca/prd/documents/reports/AreaBasedClosureProgram_Report.pdf

[vi] Department of Interior. March 17, 2022. FY 2022 State Initial Grant Guidance, pg.7. Available online: https://www.doi.gov/sites/doi.gov/files/state-initial-grant-guidance-bil.pdf

[vii] Appalachian Citizens Law Center, Abandoned Mine Land Program: A Policy Analysis for Central Appalachia and the Nation, July 8, 2015. Available online: https://appalachiancitizenslaw.files.wordpress.com/2015/07/exec-summary-abandonded-minereclamation.pdf

[viii] Pennsylvania Department of Environmental Protection, "AML Program Information: Abandoned Mine Reclamation in Pennsylvania." Available online: https://www.dep.pa.gov/Business/Land/Mining/AbandonedMineReclamation/AMLProgramInformation/Pages/default.aspx

[ix] Natural Resources Revenue Data. Abandoned Mine Land Reclamation Program. Available online: https://revenuedata.doi.gov/how-revenue-works/aml-reclamation-program/

[x] Columbia Center on Global Energy Policy and Resources for the Future. July 20, 2020. Green Stimulus for Oil and Gas Workers: Considering a Major Federal Effort to Plug Orphaned and Abandoned Wells. Available online: https://www.energypolicy.columbia.edu/sites/default/files/file-uploads/OrphanWells_CGEP-Report_071620.pdf

[xi] Ibid.

[xii] Department of Interior. March 17, 2022. FY 2022 State Initial Grant Guidance, pg.7.Available online: https://www.doi.gov/sites/doi.gov/files/state-initial-grant-guidance-bil.pdf

[xiii] Joselow, M. October 15, 2021. Abandoned wells are a huge climate problem. Washington Post. Available online: https://www.washingtonpost.com/politics/2021/10/15/abandoned-wells-are-huge-climate-problem/

[xiv] Appalachian Citizens Law Center, Abandoned Mine Land Program: A Policy Analysis for Central Appalachia and the Nation. July 8, 2015. Available online: https://appalachiancitizenslaw.files.wordpress.com/2015/07/exec-summary-abandonded-minereclamation.pdf

[xv] Department of Interior. March 17, 2022. FY 2022 State Initial Grant Guidance, pgs. 12-13. Available online: https://www.doi.gov/sites/doi.gov/files/state-initial-grant-guidance-bil.pdf