

**TESTIMONY OF REBECCA ERIN SHELTON**  
**BEFORE THE ENERGY AND MINERAL RESOURCES SUBCOMMITTEE**  
**OF THE HOUSE NATURAL RESOURCES COMMITTEE**  
**UNITED STATES HOUSE OF REPRESENTATIVES**

*Benefits of the Legacy Pollution Clean-Up Programs in the Bipartisan Infrastructure Law*

March 31, 2022

Good morning Chairman Lowenthal, Ranking Member Stauber, and members of the Subcommittee, thank you for the opportunity to speak today about the historic investment the *Infrastructure Investment and Jobs Act* (IIJA) made into the abandoned mine land program..

My name is Rebecca Shelton. I am the Director of Policy & Organizing for Appalachian Citizens' Law Center, a small public interest law firm and policy organization in Whitesburg, Kentucky. We represent miners, individuals, families, and community groups affected by black lung disease, mine safety concerns, and issues related to land use and the environmental effects of the coal industry. In my testimony, I draw upon years of collective experience, advocacy, and analyses of a national coalition of organizations, the RECLAIM coalition. Together, our coalition of community-based, regional, and national organizations have advocated for investment to clean up abandoned coal mines.

Coal mining has occurred in Letcher County, Kentucky for over one hundred years. Mining occurred for decades without any reclamation requirements, leaving the landscape covered in dangerous mining features such as unstabilized slopes, highwalls – effectively steep cliffs – and open mine portals. According to the federal abandoned mine land (AML) inventory, it will cost at least \$21.2 million to remediate the 104 AML sites that have been identified and inventoried in Letcher County alone. Across the entire state of Kentucky, the outstanding AML liability skyrockets to over \$933.7 million. Though there is an incredible amount of need in Kentucky alone, our state's liability is just 8% of our country's \$11.6 billion in documented AML costs.<sup>1</sup>

In spite of such tremendous liability, our state has had very little funding for AML cleanup in recent years. The traditional funding formula for the AML program relies both on a state's current coal production and national coal production levels.<sup>2</sup> Revenues for the program come from a severance fee on coal and, as coal production has declined, revenues for the program have also decreased. In each of the last three fiscal years, Kentucky has received, on average,

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<sup>1</sup>These figures were determined by a query submitted to the federal AML inventory on March 28, 2022.

<sup>2</sup> For information on AML fee collection and grant distribution under the regular AML program, see <https://www.osmre.gov/programs/reclaiming-abandoned-mine-lands>

just \$9.8 million in funds.<sup>3</sup> This amount of resources has been incredibly inadequate for addressing the scale of the need.

The Kentucky Division of Abandoned Mine Lands (KY DAML) receives hundreds of calls each year from residents concerned with AML features, but has not had sufficient resources to address all of these problem areas. As stated in the 2019 KY DAML report, "Priority must be determined as AML funds are limited and not all eligible projects may be worked."<sup>4</sup> Typically, only about 10 percent of the sites that KY DAML investigates in response to residents' requests have been eligible for funding in the last several years. This is primarily because the agency must reserve funds to address only the sites that have caused or are likely to cause the most risk to human health and safety.<sup>5</sup> Often, an AML issue has had to escalate to the level of an imminent threat or emergency situation for the division to be able to allocate resources to address it. For example, over a third of the AML sites that the Kentucky division has addressed over the last two years have been dangerous landslides.<sup>6</sup> Stabilization has had to take place reactively, at times only after residents and property have been threatened or damaged, rather than proactively.

The consequences of waiting until an AML problem becomes an emergency can be devastating. In January 2019, Lynn Johnson of Letcher County, Kentucky reported a slide caused by AML issues above her home. The state investigated but did not consider the slide an emergency at that time and did not address the problem.<sup>7</sup> They instead told her to call back if the slide got worse. On February 28, 2021, the Johnsons were awakened by a force hitting the back side of their trailer. As neighbors pounded on their door shouting for them to get out, a second impact hit and completely knocked the family's home off its foundation while the Johnson family was inside. Their trailer was completely destroyed by the slide.<sup>8</sup> DAML investigated once again and determined that the slide was caused by prior mining. DAML determined that the AML landslide was a high priority emergency on March 1, 2021.<sup>9</sup> However,

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<sup>3</sup>Kentucky received the following allocations: \$11,314,447 in FY 2020, \$9,269,507 in FY 2021, and \$8,889,292 in FY 2022.

<sup>4</sup>See KY Division of Abandoned Mine Lands Annual Report, 2019, available at: <https://daml-2019-annual-report-kygis.opendata.arcgis.com/pages/citizen-complaints-and-projects>

<sup>5</sup>See Lexington Field Office, OSMRE 2019 Annual Evaluation Report, at pp. 44-45, available at <https://www.odocs.osmre.gov>

<sup>6</sup>This data comes from an Open Records Request submitted to KY DAML in February 2021. A list of AML projects that were put out for bid during 2020 and 2021 was requested.

<sup>7</sup>The site investigation report from March 3, 2021 indicates that a previous slide occurred in 2019 and that the agency received a complaint about the issue and visited the site. However, it was not determined to be eligible for funds at that time.

<sup>8</sup>See Emily Bennett, *'26 years in one place. It's hard': Letcher County family loses home in mudslide*, WKYT, March 4, 2021, available at: <https://www.wkyt.com/2021/03/05/26-years-in-one-place-its-hard-letcher-county-family-loses-home-in-mudslide/>

<sup>9</sup>The site inquiry response form from March 1, 2021 indicates that the slide was determined to be a high priority issue due to damage to the residents and the property. The inquiry response form also says that Mr. Johnson had previously reported another slide and that they had cleared it themselves with an excavator.

because AML funds cannot be spent to fix damaged or destroyed houses, that determination came too late for the Johnsons, who had already lost their home.

Over the course of the next 15 to 20 years, the IJA will invest more funding in AML remediation efforts than has been invested in the last forty-four years of the program.<sup>10</sup> We are hopeful that the historic investment made through the IJA will be a pivotal point for our state agencies such that they can proactively seek out, inventory, and address AML problems before they cause harm to persons and property.

### **Projected Benefits of the program**

For many families in Appalachia, the coal mining industry has provided good-paying jobs and cleaning up AML sites can help restore job opportunities. However, that wealth has never been evenly distributed in our communities. Many lived only with the burdens of coal extraction, as the industry again and again externalized its costs onto land, waterways, and the health of those in our region. This investment will have economic, environmental, and health and safety benefits for coal communities.

#### *Job Creation and Economic Stimulus for Coal Communities*

This investment will create jobs in communities that have been impacted by the economic downturn in the coal industry. Geographically, there is substantial overlap between the location of AML sites with more recent coal mining. From a state perspective, the three states with the highest identified AML liability are Pennsylvania, West Virginia, and Kentucky. According to data from the Energy Information Administration, between 2015 and 2020 these three states lost 1815, 4072, and 5815 coal mining jobs, respectively.<sup>11</sup>

The AML funds will create construction and operating engineer jobs, design and administration jobs at the state and tribal agencies, and administrative jobs at the Office of Surface Mining Reclamation and Enforcement (OSMRE).<sup>12</sup> A 2020 Political Economy Research Institute analysis found that for each \$1 million in spending on AML clean-up, 13.1 jobs (5.2 direct jobs, 2.9 indirect jobs, and 5 induced jobs) are created.<sup>13</sup> Very similarly, studying the impact of the IJA AML investments in the contexts of West Virginia, Virginia, and Ohio, Downstream Strategies

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<sup>10</sup>For more information on the amount of funds that have been allocated to states and tribes for AML remediation, see <https://www.osmre.gov/programs/reclaiming-abandoned-mine-lands>

<sup>11</sup>Kentucky and West Virginia lost the most coal mining jobs among all states. Pennsylvania was the fourth highest in terms of job loss as Illinois lost 1,971 coal miners, slightly more than Pennsylvania between 2015 and 2020.

<sup>12</sup>Dixon, E. 2021. *Repairing the Damage: Cleaning up the land, air, and water damaged by the coal industry before 1977*. Ohio River Valley Institute. Available at: <https://ohiorivervalleyinstitute.org/wp-content/uploads/2021/04/AML-Report-Dixon-ORVI-V1.1-4.pdf>

<sup>13</sup>Pollin, R. and Chakraborty, S. 2020. *Job Creation Estimates Through Proposed Economic Stimulus Measures*. Political Economy Research Institute. Available at: <https://www.sierraclub.org/sites/www.sierraclub.org/files/PERI-stimulus-jobs.pdf>

found that for each \$1 million in spending 12.4 jobs will be created (5.6 direct jobs, 3 indirect, and 3.8 induced).<sup>14</sup>

Assuming that the AML fee collection will bring in approximately \$1.1 billion over the next thirteen years in addition to the IJJA appropriation, approximately \$11.9 billion will be invested in AML reclamation.<sup>15</sup> Therefore, assuming a program duration of fifteen years, over 10,000 jobs (approximately 4284 direct jobs, 2340 indirect jobs, and 3490 induced jobs) will be created or supported year over year.<sup>16</sup> Not only will many of these jobs be located in or near coal communities, but for the first time these jobs will be required to pay prevailing wages in all states. This requirement, imposed by the IJJA, can be expected to increase earnings, improve safety outcomes for workers, and strengthen apprenticeship opportunities within the field.<sup>17</sup>

### *Environmental Benefits of Remediation*

Remediation of AMLs will have positive environmental impacts both locally and globally. Locally, AML sites contaminate ground and surface waters, are often inadequately vegetated and ultimately cause damage to terrestrial and aquatic ecosystems. Acid mine drainage (AMD) results from water filling and draining from underground mines and coal waste piles. Water, oxygen, and bacteria combine and come into contact with rock and minerals present in coal seams that contain sulfur (i.e. pyrite). The sulfur in the minerals is oxidized and transformed into sulfuric acid. The acidic water then dissolves heavy metals from exposed rock and coal seams which further contaminates rivers and streams.<sup>18</sup> Thousands of miles of streams and rivers are

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<sup>14</sup>James, J. et al. 2021. *Moving forward at warp speed: Abandoned mine reclamation over the coming years*. Downstream Strategies. Available at: <https://www.downstreamstrategies.com/wp-content/uploads/2021/07/Memo-3-Abandoned-mine-reclamation-over-the-coming-years.pdf>

<sup>15</sup>For AML fee projection information see Ohio Valley Resource Institute February 2022 blog post available at: <https://ohiorivervalleyinstitute.org/ijja-aml-explainer/>

<sup>16</sup>I calculated this by averaging the estimations from the Political Economy Research Institute and Downstream Strategies, assuming that for each \$1 million in investment, 5.4 direct jobs, 2.95 indirect jobs, and 4.4 induced jobs would be supported or created. It is likely that these jobs may be spread out over a period of time longer than fifteen years but that will remain unclear until DOI and OSMRE issue program guidance and define expenditure windows. However, either way approximately 151,724 job years will be created or supported through this investment. In addition, the projection of 4284 direct jobs is very similar to the estimates produced by Ohio Valley Resource Institute in a February 2022 blog post available at: <https://ohiorivervalleyinstitute.org/ijja-aml-explainer/>

<sup>17</sup>Manzo, F. et al. 2016. *The Economic, Fiscal, and Social Impacts of State Prevailing Wage Laws: Choosing Between the High Road and the Low Road in the Construction Industry*. Available at: <https://illinoisepi.files.wordpress.com/2017/03/pw-national-impact-study-final2-9-16.pdf>; Li, Z. et al. 2019. The Effect of Prevailing Wage Law Repeals and Enactments on Injuries and Disabilities in the Construction Industry. *Public Works Management & Policy*, 24(4):368-384. doi:[10.1177/1087724X18822600](https://doi.org/10.1177/1087724X18822600); Philips, P. 2014. *Kentucky's Prevailing Wage Law: An Economic Impact Analysis*, available at: <http://www.faircontracting.org/wp-content/uploads/2014/02/Kentucky-Report-2014-Philips.pdf>

<sup>18</sup>Ighalo, J.O. et al. 2022. A review of treatment technologies for the mitigation of the toxic environmental effects of Acid Mine Drainage (AMD). *Process Safety and Environmental Protection*, 157: p 37-58. Available at: [A review of treatment technologies for the mitigation of the toxic environmental effects of acid mine drainage \(AMD\) - ScienceDirect](https://www.sciencedirect.com/science/article/pii/S0950423022000000)

affected by AMD.<sup>19</sup> The acidity of the water and toxicity created by the heavy metals disrupts the chemical, biological, physical, and ecological properties of the affected waters.<sup>20</sup> Currently in the AML inventory, the cost of remediation for known AML sites that are creating water quality issues is over \$4 billion.<sup>21</sup>

In addition to restoring the ecology of affected waterways, investing in clean-up will have quality of life and economic returns. One of the most direct economic impacts of restoring these waterways is the revenue generated from recreation. Due largely to the treatment of AMD, the tributaries of the North Branch Potomac River in Maryland generate an estimated \$3 million annually in angling, whitewater rafting and other recreational activity within a two county region. This revenue is far more than the annual cost to maintain the AMD treatment facilities. In addition, treating AMD has positively impacted the facilities that withdraw and treat water from the river for drinking water.<sup>22</sup> An analysis of the economic impact of AMD treatment on the Stonycreek River in two Pennsylvania counties projected that a decline in water quality would also result in a loss of tens of thousands of dollars in revenue over a ten year period.<sup>23</sup> Additional analyses have projected that for each \$1 million invested in acid mine drainage restoration, there will be over \$1.5 million in economic impact and that for each mile of a stream improved, there is a net gain of \$80,000 per year.<sup>24</sup> These are but a few examples of economic impact analyses that have been conducted to understand the impact of AMD abatement projects and watershed restoration.

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<sup>19</sup>See testimony prepared by the Pennsylvania Fish & Boat Commission in February 2020 for Pennsylvania's Joint Legislative Air and Water Pollution Control and Conservation Committee. In Pennsylvania alone approximately 5,700 miles of streams are impaired by AMD. Available at: <https://dingo.telicon.com/pa/library/2020/20200203TW.PDF>

<sup>20</sup>Ighalo, J.O. et al. 2022. A review of treatment technologies for the mitigation of the toxic environmental effects of Acid Mine Drainage (AMD). *Process Safety and Environmental Protection*, 157: p 37-58. Available at: [A review of treatment technologies for the mitigation of the toxic environmental effects of acid mine drainage \(AMD\) - ScienceDirect](https://doi.org/10.1016/j.psep.2022.03.001); See also <https://appvoices.org/coal-impacts/acid-mine-drainage/> for a series of blogs and videos documenting the impacts of AMD.

<sup>21</sup>This figure was determined by a query submitted to the federal AML inventory on March 28, 2022. The figure reflects the amount of remaining unfunded AML sites categorized as Polluted Water: Human Consumption (PWHC), Polluted Water: Agricultural & Industrial, and Water Problems.

<sup>22</sup>Hansen, E. et al. 2010. *The Benefits of Acid Mine Drainage Remediation on the North Branch Potomac River*. Downstream Strategies, Available at: [https://www.downstreamstrategies.com/documents/reports\\_publication/amd-remediation-nbp\\_downstreamstrategies.pdf](https://www.downstreamstrategies.com/documents/reports_publication/amd-remediation-nbp_downstreamstrategies.pdf)

<sup>23</sup>See a 2018 memo prepared for the Foundation for PA Watersheds that contains the results of an analysis of the negative economic impacts of water quality degradation in the Stonycreek River Watershed, Available at: <http://pennsylvaniawatersheds.org/wp-content/uploads/2018/12/Stonycreek-Economic-Impact-Analysis-Memo.pdf>

<sup>24</sup>See slide 69 of a presentation assessing the economic impact of AMD cleanup in the Little Conemaugh River prepared by 4ward Planning, Inc. for the Foundation for PA Watersheds, Available at: <http://pennsylvaniawatersheds.org/wp-content/uploads/2018/12/Little-Conemaugh-River-AMD-Cleanup-Economic-Impact-Analysis-with-report-1-1.pdf>; See also a report prepared by the Interstate Mining Compact Commission and the National Association of Abandoned Mine Land Programs, Available at: <http://ourworksnotdone.org/wp-content/uploads/2019/02/Final-Revised-AML-Reauthorization-FAQ-Winter-2018.pdf>

In terms of global environmental impacts, AML sites also produce greenhouse gas emissions from mine fires and methane leaks. According to the EPA, abandoned coal mines are the 11th largest source of methane emissions in the US.<sup>25</sup> Thus, remediating these sites contributes not only to investing in communities that will be impacted by the nation's efforts to reduce greenhouse gas emissions, but remediation itself is also an emissions mitigation strategy.

### *Remediation of Hazards to Address Community Health and Safety*

The AML program has eliminated thousands of open mine portals, reclaimed hundreds of miles of dangerous high walls and hundreds of thousands of acres of mine sites, restored water supplies to many residents of coalfield communities, and protected millions of people from other hazards such as landslides and subsidence. Millions of people across the country have been protected from these hazards since the beginning of the AML program,<sup>26</sup> but a 2016 study found that, in Appalachian states alone, over 5.5 million people still live within a mile of an abandoned mine land.<sup>27</sup> Failure to address AMLs can result in death and injury to residents in coalfield communities. In today's AML inventory, states and tribes have identified over \$11.6 billion in outstanding AML liability and the majority of those sites have been documented as a threat to human health and safety.

### *This Investment in AML is the first of its kind, but it should not be the last*

According to OSMRE, it will cost at least \$11.6 billion to reclaim the remaining inventoried AML sites across the country. However, this is a very conservative figure, as it does not account for design, engineering, or administrative costs, nor does it account for inflation. The current inventory is also incomplete. Undocumented AML sites are identified and added to the inventory each year and, as \$25 million in funds have been set-aside through the IIJA to improve and update the inventory and as state and tribal agencies have increased capacity through the new AML funds, we should only expect the inventory to increase – both in terms of the number of AMLs and the cost to remediate each. Further, the longer we delay cleaning up these sites, the more expensive they will become. Increased precipitation driven by climate change will lead to increased flooding and erosion, increasing restoration costs. A recent analysis from the Ohio River Valley Institute found that, at minimum, the actual costs to clean up AML sites is closer to \$21 billion – nearly double current inventory estimates.<sup>28</sup>

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<sup>25</sup>Environmental Protection Agency. 2020. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2018 | US EPA. Available at:

<https://www.epa.gov/sites/default/files/2020-04/documents/us-ghg-inventory-2020-main-text.pdf>

<sup>26</sup>The Interstate Mining Compact Commission and National Association of Abandoned Mine Land Programs reported that, based on 2017 e-AMLIS data, more than 7.2 million people nationwide had been protected from abandoned mine hazards since the commencement of the program. See <http://ourworksnotdone.org/wp-content/uploads/2019/02/Final-Revised-AML-Reauthorization-FAQ-Winter-2018.pdf>

<sup>27</sup>See report by C.M. Mayne, available at:

<https://static1.squarespace.com/static/564cc14be4b0f1c73e2cb294/t/57520e3907eaa0e9cd835a74/1464995405606/AML+Report>

<sup>28</sup>Dixon, E. 2021. *Repairing the Damage: Cleaning up the land, air, and water damaged by the coal industry before 1977*. Ohio River Valley Institute. Available at:

<https://ohiorivervalleyinstitute.org/wp-content/uploads/2021/04/AML-Report-Dixon-ORVI-V1.1-4.pdf>

## Recommendations for Maximizing the Benefits of this Investment

### *Acid Mine Drainage (AMD) Set-Aside Accounts*

As explained above, AMD is an environmental and economic problem that must be addressed for coal communities to thrive. Already, the AML program has restored thousands of miles of streams affected by acid mine drainage (AMD).<sup>29</sup> OSMRE has made clear that the IIJA funds can be used to design, build, operate and maintain AMD treatment systems.<sup>30</sup> However, AMD treatment is perpetual and requires a dedicated long-term funding mechanism. That type of long-term funding requires a set-aside account. The IIJA does not allow states and tribes to put a portion of their funds into AMD set-aside accounts. Under the existing AML program, states and tribes are permitted to set-aside up to 30% of their annual allocations into an interest-bearing account to cover the long-term maintenance and operation costs of AMD treatment facilities. We urge Congress to consider a legislative change that would allow these important long-term investments in AMD treatment.

AMD treatment facilities have to be maintained and operated forever and it is necessary to have a future funding source secured for that purpose.<sup>31</sup> If there is no guarantee that there will be funds for the continuous operation of the facilities, we are committing only to remediate these environmental and public health hazards for the next 15 to 20 years. In the past, when the AML fee and program has been in need of renewal, communities have worried that without the continuation of the program that the investments made in AMD treatment, and the corresponding millions in economic revenue, would be undone. It is imperative to secure funding for the long-term treatment of AMD.

### *Program Implementation Recommendations*

We, in collaboration with members of the RECLAIM coalition, prepared program implementation recommendations that we shared with the Department of Interior (DOI) and OSMRE in January of this year. I have provided the full recommendations document as Attachment 1.<sup>32</sup>

We recommended that the administration develop program guidance that would ensure funds are directed to where they are needed most to remediate coal AMLs. We recommended that states/tribes should not continue to receive annual allocations from the program based on their

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<sup>29</sup>See report prepared by the Interstate Mining Compact Commission and the National Association of Abandoned Mine Land Programs, Available at:<http://ourworksnottodone.org/wp-content/uploads/2019/02/Final-Revised-AML-Reauthorization-FAQ-Winter-2018.pdf>

<sup>30</sup>See OSMRE webpage "What does the Bipartisan Infrastructure Law mean for OSMRE's AML Program?" Available at: <https://www.osmre.gov/bil>

<sup>31</sup>For a review of different forms of AMD treatment methods see: Kefeni, KK, et al. 2017. Acid mine drainage: Prevention, treatment options, and resource recovery: A review, *Journal of Cleaner Production*,, doi: 10.1016/j.jclepro.2017.03.082

<sup>32</sup>These recommendations are also available online at: [https://static1.squarespace.com/static/5da75e8578e3be27cc68f60f/t/61f813234cc5327fe8e2f8a1/1643647779173/IIJA+AML+Implementation+Recommendations+January+2022\\_V2.pdf](https://static1.squarespace.com/static/5da75e8578e3be27cc68f60f/t/61f813234cc5327fe8e2f8a1/1643647779173/IIJA+AML+Implementation+Recommendations+January+2022_V2.pdf). For more in-depth recommendations concerning workforce and the creation of good jobs, also see: <https://ohiorivervalleyinstitute.org/wp-content/uploads/2022/03/AML-Labor-Policy-Recommendations-March-2022.pdf>

historical coal production percentage if the unfunded priority 1, 2, and 3 sites and water line supply replacement projects in their inventory is equal to \$0. The distribution formula in the legislation that guides annual allocations is based on historic coal production percentages. However, it does not provide clear guidance on allocation adjustments if/when a state or tribe has completed all eligible projects. We recommend that the remainder of the funds for which a state/tribe is eligible be distributed to other states/tribes with remaining eligible unfunded projects in the inventory.

In general, the language in the legislation concerning expenditure windows and reallocation is vague. We recommended a five year expenditure window for each annual allocation to ensure timely and effective implementation. We also suggested language to guide the reallocation of uncommitted funds. Specifically, we recommended that language for reallocation be modeled off of the RECLAIM Act (H.R. 1733) as that legislative language was developed over many years with broad stakeholder input and bipartisan support.

The legislation provides two opportunities to make the AML program more efficient and successful over time. It provides resources to update the AML inventory and requires DOI to conduct and issue a report in year six of the program. These pieces of the legislation are important for ensuring equitable distribution of the AML funds over time. Given the known cost estimation flaws in the current AML inventory, it is difficult to project which states and tribes – if they were to receive the same annual allocation as received in FY2022 for each subsequent year of the program – might receive more funds than needed, but there are certainly programs that will receive less than is needed.

The DOI report due six years after commencement of the program will be a mechanism through which to understand progress as well as provide an opportunity to re-evaluate funding allocations. In addition to describing the progress on the inventory update, the report should include an analysis of the impact of the IJA funding on environmental remediation and workforce impacts, evaluate funding allocations, and examine alternative distribution formulas that could be used to better target funds to address outstanding reclamation needs. By that time, the agency and Congress will have more accurate information regarding the distribution of AML liability due to the inventory updates.

At minimum, the scope of the inventory updates should include additions to and validation of existing inventoried sites, the inclusion of priority 3 sites, the recalculation of existing cost entries to account for inflation and to incorporate estimates of design and administrative costs for each project. This inventory update is critical as the hazards presented by AML features may have changed over time as features degrade, as population centers move, or as new recreational activity or developments have moved closer. In addition to these updates, with the remaining funds we recommended that the inventory also be updated to include information about methane emissions, that funds be made available for community programming to educate the public about AML sites, and that a portion of the resources be used to increase the accuracy of AMD treatment cost estimates in the inventory.

### *Workforce Recommendations*

In addition to the recommendations above, Ohio River Valley Institute in collaboration with ReImagine Appalachia, Appalachian Citizens' Law Center and other partners, has developed a set of recommendations specifically pertaining to the creation of decent and living-wage jobs. We shared these recommendations with DOI and OSMRE in Mid-March.<sup>33</sup> Historically, the implementation of the AML program has not prioritized workforce impacts. We think the time has come for a shift in the AML program to include the AML workforce as a key stakeholder in implementation, and to prioritize job quality and other workforce components of AML reclamation as core to the program.

The IJA legislation requires prevailing wages, allows states and tribes to bundle smaller AML projects into larger contracts, and also gives preference for the hiring of former coal workers. Both the provision that requires prevailing wages as well as that which allows for the aggregation of AML projects are likely to be important for expanding the AML workforce and increasing program and spending efficiency. Bundling contracts to include multiple AML projects of the same problem type in a similar geographic area could achieve cost savings through economies of scale, as has been achieved by other agencies such as the Department of Transportation.<sup>34</sup> In addition, union contractors are likely to be able to submit competitive bids with these program changes. This will increase the number of contractors that are interested in and able to take on these projects as union density in this sector is currently low.

To further expand the workforce and produce skilled workers, we recommended that OSMRE and the state/tribal agencies do all that they can to support apprenticeship programs. Though there is often some classroom-based learning, apprenticeships are primarily work-based learning programs and apprentices are paid, productive employees. As a paid form of training, apprenticeships may be a more accessible training model for low-income or other individuals that cannot afford to work without pay or pay tuition. In addition, research has found that individuals that participate in apprenticeship programs earn more over the long-term compared to similar nonparticipants.<sup>35</sup> To further increase the quality of reclamation, the safety of job sites, and the opportunity for local hiring, OSMRE should also encourage the use of Responsible Bidder criteria and Project Labor Agreements for AML contracts.<sup>36</sup>

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<sup>33</sup>These recommendations are available online at:

<https://ohiorivervalleyinstitute.org/wp-content/uploads/2022/03/AML-Labor-Policy-Recommendations-March-2022.pdf>

<sup>34</sup>See [https://www.fhwa.dot.gov/ipd/alternative\\_project\\_delivery/defined/bundled\\_facilities/](https://www.fhwa.dot.gov/ipd/alternative_project_delivery/defined/bundled_facilities/)

<sup>35</sup>Reed, D.A. et al. 2012. *An Effectiveness Assessment and Cost-Benefit Analysis of Registered Apprenticeships in 10 States*. Mathematica Policy Research, Available at: [https://wdr.doleta.gov/research/FullText\\_Documents/ETAOP\\_2012\\_10.pdf](https://wdr.doleta.gov/research/FullText_Documents/ETAOP_2012_10.pdf)

<sup>36</sup>For more in-depth information, see Ohio River Valley Institute, Appalachian Citizens' Law Center, and ReImagine Appalachia discussion brief *Workforce Matters and Abandoned Mine Cleanup (AML) in the IJA*, Available at: <https://ohiorivervalleyinstitute.org/wp-content/uploads/2022/03/AML-Labor-Policy-Recommendations-March-2022.pdf>

### *Nominate a Director for OSMRE*

Today is day 435 of the Biden Administration and OSMRE, an agency critical to the successful implementation of the AML program, is still without a director. The nomination and confirmation of an OSMRE director is critical to the ability of the agency to successfully implement this program. Not only is a director needed to oversee the successful implementation of the AML program, but also to take on the many other responsibilities and challenges associated with regulatory oversight and enforcement of reclamation on active, post-1977 mine sites. In June 2021, this committee conducted a hearing titled “Environmental Justice for Coal Country: Supporting Communities through the Energy Transition.” All that was expressed by community stakeholders during that hearing concerning the actions that OSMRE should take to protect coalfield communities from the threats posed by modern-era, post-1977 coal mines that have not yet been reclaimed remains true today. In nearly a year’s time little, if anything, has changed.<sup>37</sup> While we understand the new challenges posed by the administration of these new funds, those increased responsibilities in no way decrease the agency’s duties under Title V of the Surface Mining Control and Reclamation Act.

### **Conclusion**

In conclusion, thank you for the opportunity to provide testimony on this critical program. To say that we are supportive of this investment to remediate abandoned mine lands is an understatement. We have a tremendous opportunity before us to make our communities safer, healthier places to live and to create thousands of good jobs while doing so. However, we must remain committed to ensuring these outcomes. We must take steps, now, to ensure that funds are available for the long-term treatment of AMD and that the administrative infrastructure exists to diligently monitor program impacts and adapt to challenges. We must all work together to achieve the economic and community benefits that have long been envisioned by organizations and residents across coal communities.

Thank you.

*Rebecca E Shelton*

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<sup>37</sup>Testimony from witnesses at the House Natural Resources Energy & Minerals subcommittee hearing on June 15, 2021 can be found here:

<https://naturalresources.house.gov/hearings/environmental-justice-for-coal-country-supporting-communities-through-the-energy-transition>

### IIJA AML Implementation Recommendations

Communities from West Virginia to Colorado are working to build a bright economic future as we cope with the realities of a changing energy landscape. Despite the current challenges, these communities are home to rich assets, including our land, water, heritage, people, and many of our organizations and local governments are working to leverage these assets as we diversify and strengthen our local economies.

Our communities are excited to see these historic investments in abandoned mine lands (AML). However, we must ensure that these funds have maximum economic and environmental impact in our hard hit communities. The AML program is unquestionably one of the most successful environmental clean up programs in our nation's history. However, despite many incredible strides, in many states implementation of the program has not yet reached its full potential. Now is the time to look carefully at the lessons we have learned throughout the history of this program to ensure that we can maximize benefits for communities and workers.

The shift in America's energy use has resulted in massive job losses in many of these communities and has left local economies struggling. Our groups have two key goals - the first is to help ensure that quality mine reclamation occurs where it's needed most to eliminate hazards and restore the environment. It is critical that these funds be distributed in a way that allows for the clean-up of dangerous, high priority sites. However, given the amount of investment, these funds should also support communities in addressing AML sites that affect water quality and thus quality of life and recreational potential of those waters. The second is to examine how these new funds can be best leveraged to help support communities in economic transition. Historically, implementation of the AML program has not prioritized workforce impacts. We think the time has come for a shift in the AML program to include the AML workforce as a key stakeholder in implementation, and to prioritize job quality and other workforce components of AML reclamation as core to the program.

We, members of the RECLAIM coalition, recommend that the following be incorporated into program guidance for the AML funds allocated through the Infrastructure Investment and Jobs Act (IIJA).<sup>1</sup>

**First, we urge you to provide program guidance that makes clear that funds are to be distributed to maximize coal AML remediation across the country. To support that intent we urge you to clarify that:**

1. The intent of Congress was to limit spending of these funds to AML clean-up and water supply replacement projects. Though certified states/tribes are eligible to receive these funds based on their historic coal production, we strongly recommend that program guidance make clear that states/tribes that have made a certification under subsection (a)

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<sup>1</sup>See last page of document for additional recommendations to Congress as not all of our coalition's priorities are likely to be achieved through program guidance.

of section 411 of that Act (30 U.S.C. 1240a) may not use funds for non-coal mine cleanup, public facilities, and public utilities.

2. If the funding that certified states/tribes receive for annual mandatory AML program distributions exceeds the unfunded costs of priority sites and water line replacement projects listed in their inventories, then those states/tribes should not receive additional funding from the IJJA allocation. The Surface Mining Control and Reclamation Act of 1977 requires certified states/tribes to prioritize the use of their annual grants from the treasury on coal-related reclamation projects. However, in 2017, the Office of Inspector General in the Department of Interior conducted an audit to ensure that certified states (it did not examine tribes) were using funds in such a way that met the intent and requirement of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The audit concluded that states were using funds improperly in that they did not give coal-related reclamation projects top priority over non-coal projects, or failed to complete any reclamation projects in spite of having existing, inventoried coal AML liability. Without creating this limitation on funding allocations, it is probable that certified states/tribes will be incentivized to completely stop using their annual treasury distributions for AML clean-up and, instead, use funds from the IJJA for coal remediation projects while treasury distributions are used for other types of projects. If unaddressed, this loophole created inadvertently by the IJJA would undermine the intent of SMCRA.
3. In general, states/tribes will not continue to receive funds from this program based on their historical coal production percentage if the unfunded priority 1, 2, and 3 sites and water line supply replacement projects in their inventory is \$0. The distribution formula in the legislation is based on historic coal production percentage but it does not provide clear guidance on funding adjustments if/when a state or tribe has completed all eligible projects. We recommend that the remainder of the funds for which a state/tribe is eligible be distributed to other states/tribes with remaining eligible unfunded projects in the inventory.

**Second, to support program administration we ask you to provide guidance that provides clear parameters and timelines for allocation amounts, expenditure windows, and unused funds including that which clarifies:**

4. The \$20 million minimum allocation is the minimum *total* allocation over the course of 15 years and *not* a minimum annual allocation. This clarification is needed since the current AML program has a mechanism that provides a minimum annual allocation. We recommend that funds for those states and tribes that qualify for additional funding needed to meet the \$20 million minimum be distributed over an equal annual basis.

5. The funding from this program is distributed at the same time as funds from the regular AML program and that the window for expending the funds is five years. The legislation makes only one explicit reference to redistribution of funds at year 20, which is five years after the 15 years of annual allocations. This appears to imply that the intent of Congress was to allow for five year expenditure windows.
6. Funds that are unused and uncommitted at the end of the five-year expenditure window will be returned to the AML fund. To further develop program guidance, we recommend that the language included in the RECLAIM Act (H.R. 1733) concerning reallocation of uncommitted funds be used as it was developed over many years with broad stakeholder input and bipartisan support. Specifically, we recommend that:
  - a. ‘Committed’ be defined as funds that have been received by states or tribes that have been exclusively applied to or reserved for a specific project and therefore are not available for any other purpose or have been expended or designated by the State or Indian tribe for the completion of a project.
  - b. Any uncommitted funds be returned to the AML fund and be reallocated, to the extent practicable, based on the proportion of unreclaimed eligible lands and waters the State or Indian tribe has in the inventory maintained under section 403(c). Funds reallocated based on this criteria will be in addition to annual distributions made based on historic coal production percentages. The RECLAIM Act has two other criteria that are also to be considered alongside the proportion of unreclaimed lands and waters: the proportion of AML fees that a state/tribe pays on average and the amount of coal employment loss experienced by a state/tribe on average. However, the criteria of the proportion of AML fees that a state/tribe pays is inappropriate in this context as these are treasury funds rather than a fund derived from AML fees. The amount of coal employment loss may be an additional criteria that OSMRE could take into consideration when reallocating funds.

**Third, we ask that program guidance prioritize the creation of decent and living-wage jobs in coal communities and for coal miners. Ideally, the reclamation work that is funded by this allocation should prioritize the employment of existing skilled workforce and local coal miners, contracts that offer prevailing wages, aggregating projects to attract union bids on contracts, and partnerships with nonprofits that have the expertise to support reclamation projects through administrative and program capabilities. To begin to achieve those goals, we urge you to issue program guidance that supports the following:**

7. Davis-Bacon Act wage requirements apply to all federal, state, and tribal AML contracts.
8. Aggregation of AML contracts, when practicable, is not just permitted but is preferred.

9. The IIIJA mandates that coal AML remediation projects that employ current and former members of the coal industry be prioritized. In order to support the intent of the legislation, we recommend:
  - a. That OSMRE work with the Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization to identify AML projects that are located in counties that overlap heavily with counties that have lost coal mining jobs over the last ten years and urge that those projects be prioritized for funding as long as those projects are not funded in place of hazardous priority 1 sites.
  - b. That OSMRE, in partnership with state and tribal officials, conduct a study to identify workforce needs and gaps for program implementation and use that study as the basis for partnering with the Economic Development Administration or the Appalachian Regional Commission to fund AML workforce training and business development projects in areas with insufficient workforce capacity to remediate those sites. Alternatively, beyond a simple funding partnership, OSMRE could lead the creation of a working group consisting of state/tribal AML agencies, federal agencies such as the ARC and EDA, unions, community colleges, and non-profit organizations that could work in coordination to develop a skilled workforce for these AML investments.

**Last, the legislation provides two opportunities to make the AML program more efficient and successful over time. It provides resources to update the AML inventory and a report in year 6 of the program. Pertaining to these two opportunities, we recommend that:**

10. At minimum, the scope of the inventory updates should include additions to and validation of existing inventoried sites, the inclusion of priority 3 sites, the recalculation of existing cost entries to account for inflation and to incorporate estimates of design and administrative costs for each project. This inventory update is critical to better understand the severity of AML issues that plague coal communities. Many AML sites that might have once been considered and inventoried as a low priority site, may now pose a greater risk to those who live nearby. The hazards presented by an AML feature may change over time as features degrade, as population centers move, or as new recreational activity or developments have moved closure. In addition to these updates, with the remaining funds we recommend that you consider the following uses:
  - a. to develop guidance for states/tribes on how to quantify methane emissions from AML sites and update the categorization of sites that are emitting methane to high priority 1 sites. We base this recommendation on the finding that methane and

other greenhouse gas emissions threaten the public health and welfare of future generations.<sup>2</sup>

- b. to make available a portion of the funds for states/tribes to conduct, in partnership with community organizations, public education programming about AML sites and what community members can do if there is an AML site affecting them or their community.
  - c. that a portion of these resources be used to increase the accuracy of acid mine drainage (AMD) treatment cost estimates in the inventory. Specifically, some funds should be made available for state/tribal programs to purchase and deploy instrumentation to measure flows and monitor water quality to estimate the cost of AMD in conjunction with the AMD Treat software tool. We also recommend that when state/tribal programs are updating their inventories and cost estimates, that some portion of this funding be made available for feasibility, planning, or design studies on AMD projects to better delineate mine pool boundaries such that the extent of the area and the volume of water that requires treatment can be more accurately documented.
  - d. to migrate e-AMLIS over to a "real time" ArcGIS Online Integrated Mapping System (IMS) that can incorporate the projects, funding allocations, problem areas, pads, point features (AMD, shafts, slopes, etc.) and related attributes in a uniform national database. New attributes could also be added such as summary payroll data for completed projects and sociodemographic data on nearby populations.
11. The DOI report due six years after commencement of the program will be a mechanism through which to understand progress as well as provide an opportunity to re-evaluate funding allocations. We ask that you consider the following to design and prepare for this report.
- a. In addition to describing the progress on the inventory update, the report should evaluate funding allocations, to date, and alternative distribution formulas that could be used to better target funds to address outstanding reclamation needs. Our funding projections (attached) show that there are nine state/tribal programs that are projected to receive less than the amount they need as determined by their current inventory numbers and fifteen programs that receive more than their projected needs determined by the current inventory. This should include an examination of formulas that rely at least in part on the inventory, given that \$25

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<sup>2</sup> See: [Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202\(a\) of the Clean Air Act | US EPA](#)

million will be invested in updating and improving it, rather than solely historic coal production tonnage.

- b. That the report include an analysis of spending by project type in terms of priority level and the proportion of funds that are being spent on coal AML reclamation projects compared to water line replacement projects.
- c. That the report include an analysis of the impact of the IIJA funding on environmental remediation and workforce impacts. For example, an analysis of the community and economic impact of remediation projects and workforce metrics associated with AML projects such as wage rates, union participation, and local hiring. In order to achieve a more equitable transition for coal communities, these components of the AML program are critical. We encourage you to identify, now, what metrics can be used to track this impact and to begin to assess impact annually in preparation for the report. For example, OSMRE could require states and tribes to include workforce data (i.e. summary payroll data, data on local and coal sector hiring) in project proposals and/or reports to OSMRE. This will enable OSMRE, Congress, and the public to understand, through transparent reporting, the workforce impacts of AML clean-up.

### **Recommendations to Congress**

The IIJA did not make explicit whether or not funds would be made available for acid mine drainage (AMD) set-aside accounts. Our coalition had initially recommended that up to 30% of annual allocations from the IIJA funding be permitted for use in AMD set-aside accounts. However, recent guidance<sup>3</sup> from the OSMRE has indicated that funds cannot be placed in set-aside accounts. We urge Congress to consider a legislative change that would allow these important long-term investments in AMD treatment. AMD treatment facilities have to be maintained and operated forever and it is necessary to have a future funding source secured for that purpose. If there is no guarantee that there will be funds for continuous operation of the facilities, we are committing only to remediate these environmental and public health hazards only for the next 20 years. For more resources on AMD see: [Acid Mine Drainage – Appalachian Voices \(appvoices.org\)](https://www.appvoices.org)

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<sup>3</sup> See: <https://www.osmre.gov/bil>