

Statement of Eric Cavazza, Director of the Bureau of Abandoned Mine Reclamation within the Pennsylvania Department of Environmental Protection on behalf of the Interstate Mining Compact Commission (IMCC) and National Association of Abandoned Mine Land Programs (NAAML) Re. a Legislative Hearing titled, “Abandoned Mine Land Reclamation: Innovative Approaches and Economic Development Opportunities”, before the House Subcommittee on Energy and Mineral Resources – March 28, 2019

Introduction

Good Morning Mr. Chairman and Members of the Committee. My name is Eric Cavazza and I serve as Director of the Bureau of Abandoned Mine Reclamation within the Pennsylvania Department of Environmental Protection. I am appearing today on behalf of the Interstate Mining Compact Commission (IMCC) and the National Association of Abandoned Mine Land Programs (NAAML).

IMCC and NAAML are multi-state governmental organizations that represent the natural resource and environmental protection interests of their 30 member states (and in the case of NAAML, three Indian Tribes). As the state and tribal agencies with primary responsibility for implementing the Surface Mining Control and Reclamation Act (SMCRA) Title IV Abandoned Mine Land (AML) Program within their respective borders, we appreciate the opportunity to share our perspectives, particularly on the importance of the AML Program for the well-being of coalfield communities.

As the 116th Congress commences, the SMCRA AML Program approaches a crossroads. The fee on which the program relies is set to expire in 2021. Meanwhile, in an era of increasing economic hardship for coalfield communities, the state AML programs’ work has become more important than ever. This fact is evidenced by the widespread discussions in recent years surrounding innovative approaches to accomplishing AML work, especially in enhancing partnerships and economic outcomes such as through the Community Reclamation Partnerships Act (CRPA), the Abandoned Mine Land Reclamation Economic Development Pilot Program (AML Pilot program), and the Revitalizing the Economy of Coal Communities by Leveraging Local Activities and Investing More Act (RECLAIM Act). Each of these legislative measures has enjoyed significant bi-partisan support – showing recognition on both sides of the aisle of the fundamental role AML work plays in protecting human and environmental health and creating conditions for economic growth. The AML program is the basis for meeting all of these quality of life necessities in the coalfields, as well as for innovative approaches to economic revitalization. Extension of the fee that supports the program is therefore imperative to fulfilling Congress’ goals in these regions. It is our hope that by bringing the states’ and tribes’ experience to bear in providing Congress with the information it needs to fully appreciate the role of the AML program, its multi-faceted benefits can be maintained and promoted now and into the future.

Progress with Abandoned Mine Land Reclamation under SMCRA Title IV

Throughout our country's history and up until the passage of SMCRA in 1977, coal mining was not comprehensively regulated at the federal level. As a result, some coal mining operations were left inadequately reclaimed, particularly prior to modern advancements in responsible mining techniques and the adoption of robust state and federal regulatory programs. Legacy coal mining sites spanning over two hundred years of our country's history have enduring impacts today; but because the mining occurred so long ago and the coal companies that conducted that mining are long since defunct, no known party exists with reclamation obligations for these sites under any state or federal law. Put simply: abandoned mines are everyone's problem but no one's responsibility.

Over the forty years since the passage of SMCRA, the AML fee paid by the modern coal mining industry has made a significant contribution in enabling the state AML programs to address the impacts of past mining. As the AML inventory clearly shows, great strides have been made in addressing AML-related public health and safety hazards and environmental impacts. Examples of common types of AML projects include:

- Closing mine openings to prevent accidental injuries and deaths
- Extinguishing coal mine fires and coal refuse pile fires, improving air quality and eliminating safety hazards
- Backfilling dangerous highwalls and returning lands to productive condition
- Stabilizing underground mines to prevent mine subsidence and restoring homes, businesses, and community infrastructure effected by subsidence
- Restoring water quality and aquatic life to mine-drainage impacted streams, stimulating environmental health and economic opportunities
- Providing potable water supplies to coalfield residents whose individual water supplies were impacted by past mining

In the course of this work, the equivalent of over 858,900¹ acres have been reclaimed and restored; that's more acreage than is contained in the entirety of Yosemite National Park or nearly 19 times the footprint of Washington, D.C.

All of the states and tribes involved in the AML program, spanning from east to west, have ongoing need for the AML program. Due to the way that regional circumstances differ throughout the country and the variety of AML impacts, AML programs are adapted to serve their citizens in the ways needed most. In order to help demonstrate the impacts of the AML program in different parts of the country, the state and tribal AML programs have come together, led by Wyoming and Pennsylvania, to develop a website that showcases the real and personal effect that the AML programs have on the lives of their respective citizens. The

¹ As of September 30, 2018

OurWorksNotDone.org website now contains information from eighteen AML programs scattered across the east, mid-west, and western regions. It includes statistics from those programs on the accomplishments that have had the greatest impact for each state or tribe, as well as a collection of news articles, video documentaries and testimonials showing the first-hand impact of AML work and what it means to their communities.

The OurWorksNotDone project helps tell the story of what experiences with abandoned mines look like from the perspective of citizens and communities whose lives are shaped by their presence:

- A woman whose home is repaired after facing a desperate situation as the mine beneath her home collapses, cracking the foundation;
- An AML contractor who has found a living sealing abandoned historic mines after the mine he worked for closed down;
- A group of local fishermen fighting back tears as they behold their local stream, which had been orange and lifeless as long as they could remember, now clean and full of fish.

From these stories and the many like them, it is clear what a difference the AML program is making – and all of this is made possible by the state and tribal grant funding derived from the AML fee.

How States and Tribes Use AML Grant Funding

According to a pie chart on AML grant funding produced by the federal Office of Surface Mining Reclamation and Enforcement (OSMRE), approximately \$5.5 billion was distributed in grants derived from the AML fee to state and tribal AML programs between FY1977 and FY2016. Of that amount, \$3.48 billion has been spent directly on construction of AML projects, meaning that \$3 has been spent on construction for every \$1 spent on other AML program activities.²

Wise management of program funds requires careful planning of each AML project. AML projects are designed by engineers with the assistance of other technical personnel with special expertise to ensure that the projects achieve their intended benefit. OSMRE reports that

² The pie chart was provided by OSMRE to the Subcommittee on Energy and Mineral Resources immediately following the June 7, 2017 oversight hearing regarding the AML Program. This was accompanied by a request to correct the record regarding Acting Director Owens mistaken affirmation of the suggestion that only 1 in 3 AML grant dollars have been spent on construction of AML projects, Ms. Owens correction states the following: "*I misunderstood Congressman Pearce's question regarding the ratio of construction to non-construction costs for AML projects. I am requesting that the record reflect the accurate ratio of AML construction costs, which is approximately 1:3 non-construction to construction.*"

\$1.02 billion has been spent by state and tribal AML programs on planning, designing, permitting and managing the construction of AML reclamation projects.³

While the AML programs take great care in their work, the process of identifying, designing and completing projects has been well honed over time. AML programs pay careful attention to efficiency in order to ensure that their limited funding goes as far as it can. According to OSMRE information, administrative costs for state and tribal AML programs, which includes staffing as well as inventorying AML sites, and coordinating with federal agencies, has been held to a mere 8% of total costs⁴. The OSMRE pie chart referenced here has been submitted for the hearing record along with a background information document developed by IMCC to provide further explanation of how AML grant funding is used and managed.

The AML programs are proud of their good stewardship of AML funding⁵ and the enormous social benefits that have been leveraged through its efficient, effective use. The fact remains however, that the funding resources and time provided to the AML programs in SMCRA's first forty years do not approach the scale of the two-centuries-in-the-making coal AML problem.

How Much Work is Left to be Done – The AML Inventory

While significant progress has been made since the passage of SMCRA in 1977, it is clear that our work is not done: approximately 998,000⁶ acres of high-priority AML sites remain throughout the country. According to OSMRE's federal Abandoned Mine Land Inventory System (e-AMLIS), these sites represent \$10 billion in remaining construction costs.

It is widely believed that the true remaining costs of remaining AML work are much greater than currently indicated by the AML inventory. The primary purpose of the AML inventory system is to track the location, classification, and priority level of known AML sites as well as their reclamation status, and it serves these purposes very well. The cost estimate information in the inventory is also helpful in that it provides a general picture of the resources required for a given site, but there are a variety of reasons that maintaining comprehensively up-to-date, accurate cost estimates in the inventory is impractical, meaning that true costs are typically higher than what is recorded in the AML inventory.

³ In OSMRE's budget justification documents, it has only included figures for "on-the-ground" construction costs. Design costs, which are an essential element of the cost of a successful construction project are not included in its figures.

⁴ \$0.48 billion of the total \$5.5 billion distributed to State and Tribal AML programs

⁵ Of the remaining \$0.52 billion of the total \$5.5 billion in state and tribal grant funding not noted as being spent on construction, design, or administration: \$0.29 billion has been spent on AMD set-aside for the future operation and maintenance needs of water treatment systems; and \$.026 billion has been spent on "undelivered orders," funding that remains available for the states and tribes but has not yet been drawn from federal accounts with regard to already approved projects.

⁶ As of September 30, 2018

Identifying and categorizing AML sites was among the first objectives for the AML program at its outset, and many of the cost estimates contained in the federal e-AMLIS inventory were developed when the sites were initially inventoried in the early to mid 1980s. With time, the scale and depth of the AML problem has become better understood. However, it is in the nature of AML that previously unknown sites will continue to manifest (particularly those associated with abandoned underground mines) and that known sites will continue to degrade, both of which increase the number of sites and total cost to complete remaining AML reclamation work. With advancements in technology, the collection of more complete maps and mining records, and increased awareness and identification of these sites by local residents, many additional AML hazards have been identified and added to the AML inventory in the last few decades. As communities in AML-impacted regions expand outward, once isolated AML sites become higher priority as the danger they pose to public health and safety increases. Additionally, as remaining unreclaimed AML sites are periodically surveyed, cost estimates will generally increase due to inflation and updated understanding of reclamation requirements. Furthermore, estimating costs for water treatment projects is especially problematic due to the long-term requirements for the operation and maintenance of treatment systems constructed by AML programs. For all of these reasons, the AML inventory must be understood as a dynamic account of the AML problem in America. Based on the AML programs' experience with the AML inventory, we estimate that the true cost of remaining AML work may be as much as twice what is currently indicated. Based on Pennsylvania's own inventory of AML sites within our borders, we estimate that the cost of reclamation in Pennsylvania alone will be over \$5 billion.

The bottom line is that the impacts of AML are still extensive despite the progress that has been made. Significant additional funding is required for the AML programs' ongoing effort to contend with the wide variety of AML impacts and the adverse effect they have on coalfield communities.

Types of AML work

Health and safety hazards and water pollution from abandoned mines continue to be a part of life for coalfield citizens through the country. Congress intended that AML programs be equipped to contend with the full range of land and water impacts from abandoned mines, and accordingly, the AML programs are engaged in many different types of reclamation and restoration work.

The first priority for AML programs is to protect local citizens from direct threats to their health and safety. Safety hazards associated with abandoned mines account for numerous injuries and deaths each year. These sites are designated as "priority 1" or "priority 2" based on the immediacy of the danger represented by the hazard. That designation carries the requirement that AML programs focus their attention and funding on these sites first and foremost, and this system has worked well. Over three quarters of

the existing AML inventory, representing over \$7.5 billion in estimated reclamation costs, is classified as priority 1 or 2.

The AML programs also engage in a significant amount of important “priority 3” work, which is generally defined to include any environmentally impacted site without a particularly high risk to public health and safety. Examples include: conservation and development of soil, woodlands, fish and wildlife impacts, and preserving recreational resources and agricultural productivity. The most prominent environmental impact of abandoned mines is by far water pollution. Hundreds of miles of streams and wetlands have been restored due to the AML programs’ efforts. While these types of projects are considered to be of “lower priority” than immediate dangers to human health and safety, this is not an indication that these projects are unimportant. On the contrary, restoring the health of watersheds in the historic coalfields, some of which have been impaired as long as anyone living there can remember, is among the most impactful of the AML programs’ contributions – and of highest importance to local citizens.

Health and Safety Hazards at Abandoned Mines

The most common types of high priority AML health and safety projects are dangerous highwalls, mine shafts and portals, and subsidence events:

Highwalls: the most prominent remnant of abandoned surface mines are vertical or near vertical rock faces created as the surface is excavated. These hazards cause deaths and injuries each year, generally as a result of citizens falling from or driving over the highwall or being struck with falling debris. Reclamation of highwalls enhances economic opportunity by returning sites to a more productive condition. To date, the AML Programs have reclaimed more than 929 miles of highwall (roughly the driving distance from New York City to Jacksonville, Florida).

Mine shafts and portals: left over from underground mining, these hazards dot the countryside throughout historic coal mining regions. Shafts and portals are often difficult to see and can be quite lethal, especially where there is risk of unsuspecting or overly adventurous citizens falling into deep underground chasms. Adventurous people or children entering abandoned mines via these openings can encounter a variety of potentially hazardous mine gases which can cause them to become ill or even die. Hazards associated with more than 46,000 open mine shafts and portals have been abated by the AML programs.

Mine subsidence events: the hidden danger that remains from the vast legacy of underground mining throughout the country. Collapse of the unsupported underground voids results in openings (often called caveholes or sinkholes) or depressions that form at the surface which can buckle streets and sidewalks, damage underground utilities, or damage or destroy homes and other structures built above the abandoned mine. In Pennsylvania, over 9% of the state’s total land area is underlain by abandoned underground coal mines. A recent GIS analysis done in Allegheny County, Pennsylvania

(where the City of Pittsburgh is located) found that there were 537,668 buildings within the county boundary, of which, 229,025 buildings (42.6%) are at risk of mine subsidence due to their location over confirmed underground mining sites. In the City of Pittsburgh alone, there are 114,517 buildings within the city boundary, of which, 41,841 buildings (36.5%) are at risk of mine subsidence. To date the AML Program has reclaimed more than 9,800 acres of subsidence prone areas stabilizing many 1000s of homes, buildings and other infrastructure. These concealed hazards are often un-inventoried until a problem emerges, at which point they become either a “new” high priority site, or an “AML emergency”.

Emergencies at Abandoned Mines

Addressing AML emergencies is one of the AML Programs’ most important functions. These suddenly-occurring problems pose an extreme danger to citizens’ health, safety and general welfare. For example, these sites may include mine subsidence that damages homes, roads, utilities, or other improved property; burning coal refuse or underground mine fires; mine shafts and portals which have become accessible to the public; mine gas migration into homes; mine water blow outs and other mine drainage problems; or AML-related landslides.

For instance, a January 2017 mine subsidence event in Pennsylvania resulted in the complete destruction of a home in Latrobe, some 40 miles east of Pittsburgh. The event occurred during the night while the owner slept. She awoke to find the shifting of her home so severe she could not escape her bedroom. Rescue services were able to assist the homeowner in this case. While she was fortunate to have mine subsidence insurance to pay for the value of the damage to her home, the insurance does not pay to stabilize the mine, meaning she could not rebuild on her property. Fortunately, in such cases, the AML program is able to stabilize the ground, halting the immediate threat, protecting adjacent homes, and providing homeowners with some assurance that they can safely rebuild.

The Jeanesville Mine fire in Pennsylvania is another example of a common type of AML emergency. This underground mine fire was discovered in 2015 and threatened to burn under the villages of Jeanesville and Tresckow. These areas could have faced a similar fate to those affected by the most famous Pennsylvania mine fire in Centralia, where the entire town had to be evacuated and relocated due to the hazards associated with this still burning underground mine fire. Through an AML emergency project, Pennsylvania has been working to isolate the Jeanesville mine fire first to contain it with a cutoff trench, and then to excavate and extinguish the fire. The project began in the spring of 2016 and due to the enormity of and depth of the fire, the isolation trench was just recently completed successfully, protecting all of the residences in both villages.

Emergencies like these are a common occurrence for communities that live nearby abandoned mines. The impact is felt especially deeply in the historic coal fields of Appalachia in the states of Pennsylvania, West Virginia, and Kentucky, each of which

spends between \$4-5 million per year on AML emergencies alone. However, the problem is not at all confined to these states – a recent informal survey conducted by IMCC of the Title IV AML programs indicates that approximately 250-300 emergency projects are conducted each year throughout the country, with an annual total cost of roughly \$15-20 million. The SMCRA Title IV AML Program is generally the only source of significant funding available to address these devastating events. The AML emergency programs, funded by the AML fees, are critical to bringing coalfield communities the security and peace of mind they deserve.

Impacts to Water Resources from Abandoned Mines

Water pollution caused by abandoned mines is perhaps the costliest of the impacts coalfield communities experience. In Pennsylvania alone, there are over 5,500 documented miles of streams impaired by AMD⁷, representing a severe impediment not only to the environment but to intricately related health and economic conditions. Clean water is a fundamental resource needed for human health as well as for support of any kind of economic activity. Its absence is a great hardship for coalfield residents and constrains redevelopment in coalfield communities.

Streams that run orange from mine drainage are common place for citizens of historic coalfields. When water flowing through abandoned underground mines or runoff from abandoned coal refuse and spoil piles comes into contact with pyrite or acid forming materials associated with coal seams and the overlying strata , it often results in the formation of iron-laden, highly acidic water known more commonly as acid mine drainage, abandoned mine drainage, or AMD. This AMD can dissolve other minerals such as aluminum and/or manganese which can further degrade the AMD discharge. AMD often finds its way into the local groundwater or flows into nearby streams and waterways. In these instances, water resources are commonly polluted to the point that they no longer support aquatic life and are unsuitable for recreation, drinking water supplies, or industrial and agricultural uses.

SMCRA Title IV provides that state and tribal AML programs may designate a certain percentage of their annual AML grants for application to these types of long-term water treatment projects.⁸ A single mine drainage treatment system constructed by an AML program can have a very real impact for local ecosystems and communities; and the aggregate impact of many such treatment systems can bring entire watersheds back to life. The network of pollution-reducing treatment systems constructed by watershed groups and the Pennsylvania AML Program under this program has achieved great strides in restoring AMD-impacted watersheds, as well as watershed-dependent community health and livelihoods.

⁷ 2018 Pennsylvania Integrated Water Quality Monitoring and Assessment Report

⁸ These set-aside accounts are not accounted for by e-AMLIS until those moneys are actually spent on completion or treatment of a certain AML or AMD project.

Due to the impact AMD pollution often has on drinking water supplies, AML programs are authorized to undertake “water supply replacement projects”, which are another key source of assistance to coalfield citizens provided through the AML program. The states and tribes often utilize Title IV AML funding to provide access to water for communities and households whose water sources have been diminished, lost or polluted due to pre-SMCRA coal mining operations. In economically depressed regions of the country, AML water supply replacement projects are often the only available economically viable source of potable water, meaning that these communities are quite literally dependent on the AML program to maintain basic standards of living. Through waterline replacement projects in Pennsylvania, over 2,500 households have gained access to potable water.

With Title IV AML funding as a base, AML programs are making real progress in battling the impacts of AMD water pollution. Hundreds of miles of streams have been restored nationwide by the states and tribes through AML funding, but without the support of the AML fee, the substantial gains derived from these remediation efforts and treatment systems would be very quickly lost. Unfortunately, AMD water pollution is among the least likely environmental problems to be addressed via extra-governmental work due the difficulties in taking responsibility for the care and maintenance of the sites (which is discussed further below). The Title IV AML programs are therefore generally a primary source of meaningful assistance for AMD water treatment, and in many states, they are the only source. The AML fee is foundational to the states’ and tribes’ mine drainage treatment efforts as well as to leveraging the efforts of third-party groups - and every source of help is needed to contend with the great challenge AMD water pollution presents.

The Community Reclamation Partnerships Act

In recognition of the need to garner as much assistance as possible for AML reclamation efforts, there has been much public and Congressional discussion about how to enhance cooperation between government and non-government organizations. This is especially true with respect to the massive and severely intractable problem of AMD water pollution. With such difficult work needed to address this issue and such relatively limited funding, there has been widespread acknowledgement that resources from third-party groups like watershed and wildlife conservation NGOs could be extremely beneficial in extending the impact and progress of existing AML program efforts.

Pennsylvania is a prime example of a place with extensive opportunities for partnerships between the state and charitable third-parties, often called “Good Samaritans”, which include individuals, advocacy groups, private philanthropic foundations, and even businesses, In fact, Pennsylvania provides an excellent demonstration of the good that can and has already been achieved through these types of partnership efforts. Pennsylvania NGOs operate over 300 mine drainage treatment systems and have undertaken thousands of other environmental conservation efforts, often with significant coordination with state personnel. Still, there is much more that

could be done both by the state and by their potential Good Samaritan partners were it not for significant legal impediments to their work.

IMCC and NAAMLPP believe that allowing the state AML programs to more effectively fulfill their role in treating water impacted by abandoned mines, as well as enabling the resources and passion available from potential partners, is critical for the future of coalfield communities. To achieve this end, it is widely accepted that some form of legislative solution is necessary.

In attempt to provide a solution for coal AML sites, Representative LaHood has once again introduced the Community Reclamation Partnerships Act (H.R. 315), which would work through the existing SMCRA Title IV AML program to institute a new approach for cooperation between states and their reclamation partners. Our organizations commend Rep. LaHood for his ongoing commitment to facilitate AML water treatment and for his willingness to consider novel approaches to providing the necessary relief from the legal complications that unfortunately make that work more difficult than it need be.

Federal environmental laws, particularly the Clean Water Act, are intentionally very strict in the restrictions placed on and the penalties assessed against those who impact our Nation's water resources. As an unintended consequence of that strict design, and in particular its purposefully stringent and inflexible standards for water treatment, Clean Water Act requirements do not comport well with the realities of AMD treatment, and ironically, do significant harm to water treatment efforts.

The crux of the problem is that the federal statutory paradigm for treating AMD-impacted water is not well-suited to the unique characteristics of AMD sites as compared to more typical instances of water pollution. The fundamental difference with AMD treatment is that impacted waterways are by definition already impaired, and in the case of abandoned mines, the originators of the pollution have long since gone out of business. Even so, due to potential liability under the Clean Water Act, any party who re-affects an AMD-impacted site risks being held *permanently* responsible for fully eliminating the *entire* pollutional load from the existing discharge as if they were the original polluter of the site. This is true even where the pollution is the result of legacy coal mining, the project is significantly improving water quality, the party in question has no connection to the pollution, and no recklessness or negligence is exhibited.

These unintended obstacles to improvement of AMD-impacted water have significantly slowed progress with such projects throughout the country. Efforts to rectify the issue have been underway for over 20 years, but have so far failed to achieve success. While the need for resolution of this issue has been widely agreed upon for some time, the specifics of the ideal solution have long been debated - and it is clear that debate is stalling water treatment work that our coalfield communities desperately need.

The solution put forward by the CRPA would build on the proven program in SMCRA Title IV, take the lessons of the successful state-level Environmental Good Samaritan Program in Pennsylvania, and responsibly confer with relevant federal

authorities to establish a distinct process for these unnecessarily marginalized Good Samaritan groups to work with the state AML programs as partners. Most importantly, this approach would put clear, achievable expectations for water treatment at AML sites into place, allowing states and their partners to undertake these projects without the fear of undeserved liability for pre-existing pollution. Our organizations believe that this approach displays merit and should be seriously considered as a possible approach to Good Samaritan relief for coal AML.

The bottom-line is that if the lingering effects of abandoned coal mines are to be eliminated, and in particular the impairment of our communities' water resources, every available tool and every source of help is needed. Congress clearly intended the mission of the SMCRA AML program to encompass mine drainage-impacted water treatment work⁹, but under current circumstances, many potential projects are left sitting on the shelf, and many of the states' potential partners are left sitting on the sideline. With congressional attention to this issue, the overall goals of federal environmental law can be more effectively achieved; and with it, real gains could be made in coalfield water quality. AMD impaired streams and associated aquatic ecosystems can be restored, creating a healthier environment and more opportunities for economic development.

Creating Healthy Economic Conditions through AML Work

While the AML programs' primary mission is reclamation, their work has other far-reaching benefits, some of which are not always obvious. The AML program has become a central part of discussions around improving economic conditions in historic coalfields, and for good reason. The degradation of public health and safety as well as environmental resources caused by abandoned mines greatly suppresses economic opportunities in these regions. Such communities are often under more general economic distress, and AML work has emerged as an important means of relief.

The AML program's vital role in improving economic well-being in AML impacted communities is most directly realized by reducing the drag on economic development caused by the AML hazards and environmental impacts. Economic benefits accrue from the AML programs' conventional work, for example responding to and constraining constant damage to infrastructure stability caused by subsidence events and landslides. The water treatment work conducted by the AML programs is particularly impactful on economic conditions by providing access to clean water and restoring opportunities for tourism and recreation. AML projects make fundamental contributions to establishing the conditions needed for AML-impacted communities to thrive and to attract economic investment.

The AML programs' work also results in thousands of direct as well as indirect jobs. Consistently conducted AML projects spur additional economic activity in turn, providing support for other industries. In a time when coal mining job losses are being felt more than ever, the employment opportunities stemming from AML work have

⁹ Surface Mining Control and Reclamation Act of 1977, Section 101(h)

become all the more important, especially where AML work requires similarly-skilled workers. AML projects typically utilize construction contractors who were very often former mine operators themselves and who in turn employ many former miners and other local workers in depressed coalfield communities.

The contribution the AML Program makes to building up economic value and employment is further multiplied when newly reclaimed sites once again become suitable for development. AML sites are often prime locations for new business ventures and/or tourist attractions, creating new space for rebuilding communities to grow economically. Restored water resources also breed new opportunities and growth, for example by restoring recreational streams and lakes and ensuring access to clean water for human and industrial uses. It is estimated that through the effects of AML work, every dollar of AML funding spent returns \$1.61 to local economies¹⁰; and for every mile of stream improved, there is a net gain of \$106,000 per year to local economies ¹¹.

A study by the Appalachian Citizen's Law Center in 2015 found that "In FY2013, the AML program made a total economic impact of \$778 million, a net impact of \$450 million on US GDP, and supported 4,761 jobs through AML reclamation work. Central Appalachian states saw a total economic impact of \$182 million, a value added impact of \$102 million, and 1,317 jobs supported by the AML Program. As demonstrated by a national FY2013 value-added (net) impact of nearly half a billion dollars, the program delivers a substantial contribution to the American economy on an annual basis. For its environmental and economic impacts, the AML Program demonstrates a forty-year long, highly successful proof of concept and is absolutely crucial to the future of coalfield communities in the United States."¹²

Clearly, the AML programs are key contributors to economic conditions. It is no surprise that the AML program has taken on such importance in discussions around facilitating economic revitalization in depressed coalfield regions.

The RECLAIM Act

As noted above, particular attention has been paid in recent years to exploring means of enhancing the extensive economic benefits of AML work. The Revitalizing the Economy of Coal Country by Leveraging Local Activities and Investing More (RECLAIM) Act is perhaps the most prominent example of such an effort.

The RECLAIM Act would bring an unprecedented level of accelerated AML funding to bear on the massive inventory of legacy coal AML-impacted sites remaining

¹⁰ Trout Unlimited, "Cleaning Up Abandoned Mine Drainage in the West Branch Susquehanna Watershed." July 2009

¹¹ Pennsylvania Fish and Boat Commission, "Recreational Use Loss Estimates for Pennsylvania Streams Degraded by AMD for base year 1989 adjusted to 2015"

¹² Dixon, Eric and Kendall Bilbrey, Abandoned Mine Land Program: A Policy Analysis for Central Appalachia and the Nation. Report: AML Policy Priorities Group, Appalachian Citizens' Law Center, The Alliance for Appalachia. 8 July 2015.

throughout the country. As has been discussed thoroughly in this statement, that funding is critically important in protecting and restoring the health and safety of our historic coalfield citizens and their environment, as well as improving their too-long-distressed economies and quality of life. The AML programs commend the supporters of the RECLAIM Act for their recognition of the fundamental importance of the AML program for economic revitalization, and we will gladly continue to discuss such ideas about how the AML program's impact can be enhanced.

It is important to note, however, that drawing \$1 billion from the AML Fund over the next 5 years (as anticipated by the RECLAIM Act) will have a pronounced impact on the future course of the AML Program as originally envisioned by Congress in 2006. To accelerate funding from the AML Trust Fund now means that less funding will be available for future reclamation needs. With the AML fee set to expire in 2021, the future of AML funding is currently unclear. Whatever the future holds, the preservation and continuation of the AML program's contributions, including to economic revitalization efforts, cannot be sustained without the AML fee. IMCC and NAAMLPP therefore recommend that, in order for the RECLAIM Act to achieve its goals in the long-term, the continuation of the AML program through extension of the AML fee must also be considered an utmost priority.

Making Reauthorization of the AML Fee a Priority

Reauthorization of SMCRA Title IV fee collection authority is the top AML legislative priority for IMCC and NAAMLPP. As has been noted several times, the AML fee on which the state and tribal programs rely for the vast majority of funding is set to expire in 2021. Without this source of funding, the AML programs will be unable to continue operating for long. In essence, to extend the AML fee is to extend the AML Program itself. As expiration of Title IV fee collection authority approaches, one thing is abundantly clear: the AML programs have made great progress, but our work is not done; and the remaining work far exceeds available resources.

Based on expected AML fee collections between now and the end of 2021, added to the amounts currently remaining in the AML Fund, OSMRE projects that approximately \$3.5 billion¹³ in AML grants will be distributed to the states and tribes in total over the remaining life of the Program. That amount represents only a third of what is needed as compared to the current OSMRE estimate of roughly \$10 billion in construction costs for remaining AML work. This means that without reauthorization of the AML fee, over \$7 billion in construction costs currently listed in the AML inventory will remain.¹⁴

¹³ "Abandoned Mine Land (AML) Grant Funding Projections 2018-2032"

¹⁴ Taking into consideration the additional non-construction costs necessary to plan and design these projects and the currently unaccounted for impact of annual inflation, the funding shortfall is much wider. If the AML programs are to complete their work, reauthorization of the AML fee will be necessary.

While the AML fee's expiration in 2021 is still a few years away, legislative deliberations of this scale take a significant amount of time; the process leading up to the final 2006 SMCRA amendments took more than ten years to complete. IMCC and NAAMLPL have developed recommendations for AML policy priorities based on the experience of the state and tribal AML programs and stand prepared to inform Congressional and public deliberation surrounding the Program's future.

We appreciate the attention paid by Chairman Lowenthal and the Subcommittee to the enduring importance of the AML Program in the hearing today.

Conclusion

The legacy of abandoned mines still looms large in historic coalfield communities throughout the country, and their well-being remains deeply reliant on funding from the AML Program. Unfortunately, these storied communities whose generations of courageous, hardworking coal miners contributed so much to the development of our country are left with the debilitating health and economic impacts of historic mining. Innovative approaches to enhancing the benefits of AML work by building partnerships and facilitating economic growth hold great promise for the AML program's place in the future of coalfield communities. In view of the clear continuing role for the AML programs, and the immense remaining AML inventory, it must be recognized that if the long-term health, safety, environment, and economic livelihoods of these most deserving communities are truly to be protected and restored, it is imperative that the continuing need for AML work be kept firmly in mind. In order to bring a bright economic future back to coal country, a future for the AML programs must be ensured.