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Legislative Hearing: Coal Community Protection and Revitalization

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Though regulations requiring reclamation bonding were supposed to ensure that coal mines in the United States would no longer be left unreclaimed, inadequate bonding and lax enforcement of reclamation standards are creating a new wave of mine reclamation problems. These mines, permitted after the passage of the Surface Mining Control and Reclamation Act of 1977, are not eligible for funding from the Abandoned Mine Land (AML) program. While several waves of coal company bankruptcies are already creating serious reclamation problems in some states, there is still much that can be done to address the situation.

The Office of Surface Mining Reclamation and Enforcement should disallow alternative bonding practices like pool bonding and self-bonding, and more stringently enforce permitting and reclamation requirements. Congress should also address bonding and reclamation issues directly. The Coal Cleanup Taxpayer Protection Act (H.R. 2505) would strengthen coal reclamation bonding by disallowing the use of highly risky self-bonds. The 'Revitalize, Enhance, and Nurture in Expanded Ways Our Abandoned Mine Land Act (RENEW Act, H.R. 7937) would provide funding for mine reclamation when reclamation bonds do not cover the actual cost of reclamation.

Introduction

For more than a century, coal-bearing communities provided fossil fuels that have generated the electricity and steel that have built our country. Over that time, many coal company owners and executives enjoyed large profit margins, while miners and nearby communities more often weathered boom and bust cycles. Communities also bore the burden of environmental repercussions, including acid mine drainage, groundwater contamination, air pollution from ultrafine particulate matter, flooding, and landslides. Now, as the coal industry declines, we owe not just our gratitude to coal mining communities, but also our support — through funding and through policy — in transitioning to a new, healthy, and just economy.

Though coal production has dropped dramatically in the last decade, coal companies are still mining and still applying for new permits for mountaintop removal mines and other surface mines. As profit margins tighten, the incentives to cut corners both in environmental and safety regulations increase. For every new mine permit that is issued and every mine that is producing coal, many more are sitting idle, without federally required reclamation work being completed. Often using the justification of "market conditions," coal companies are delaying reclamation. It is imperative that a director be nominated soon and confirmed to the Office of Surface Mining Reclamation and Enforcement (OSMRE). The new director will not only need to continue important work in the oversight of state mining agencies and mine permitting, but will also need to think creatively about this transitional time for coal communities and how the OSMRE can facilitate a just transition.

It has become clear that the current regulatory system will not actually ensure all coal mines are reclaimed. The Surface Mining Control and Reclamation Act of 1977 (SMCRA) was passed to address the negative impacts of coal mining, to clean up mines abandoned prior to passage of the act, and to prevent the future abandonment of mines. The law established the Abandoned Mine Land (AML) Fund, which has enabled the reclamation of many AML sites over the last 50 years and has just received \$11 billion of funding through the Infrastructure Investment and Jobs Act. *But funding for that program is only available for mines established prior to the passage of SMCRA*.

The act also attempted to ensure mine reclamation of new mines by requiring coal companies to secure reclamation bonds prior to being granted a mining permit. The bonds are used by the regulatory agencies to perform reclamation if the coal company fails to complete the reclamation. However, the OSMRE has given states significant leeway in designing bonding programs. As a result, states have implemented bonding mechanisms that are not sufficiently secure and have estimated bond amounts that may not cover actual reclamation costs.

SMCRA was also not designed to function in a declining industry. The law primarily relies on punitive measures such as preventing coal companies from obtaining new permits or mining more coal. As the industry contracts, failing companies are not deterred by these enforcement mechanisms. Compounding the problem, as more companies declare bankruptcy or otherwise exit the coal industry, fewer companies remain to take over existing mining permits in need of reclamation. Regulatory agencies are reluctant to utilize all available enforcement options and risk pushing coal companies into insolvency.¹ We do not yet know how many mines will be left unreclaimed, or what the overall bonding shortfall will be, but we are already seeing a new wave of underfunded abandoned mines.

Some improvements were made to state bonding programs following a wave of coal company bankruptcies starting in 2015. Many states discontinued the practice of self-bonding, where coal companies only provide their word that reclamation will be funded but do not provide actual money set aside via a third party. But some existing self-bonds were grandfathered in. Other

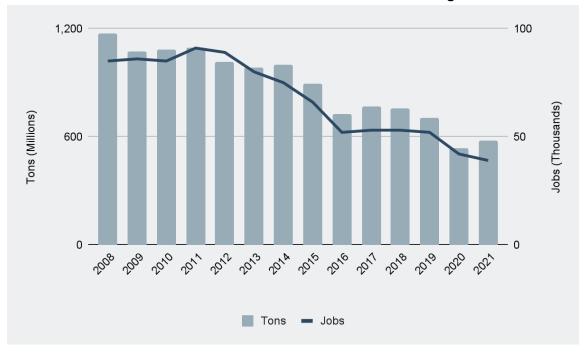
¹ https://spectrumnews1.com/ky/louisville/news/2022/06/01/idled-coal-mine-violations

states reviewed and raised bond amounts. But these adjustments did not address all of the inadequacies.

At this point, it is difficult to significantly change bonds for existing mines, because coal companies typically do not have extra cash for new certificates of deposit, and third party surety companies are reluctant to take on additional bonds. To ensure that bonding shortfalls and the impacts of unreclaimed mines do not fall to nearby communities, Appalachian Voices and many partner organizations suggest a combined approach of improving state-level enforcement and bonding requirements (especially for new permits), as well as the creation of a federal program that would provide funding to states for mine reclamation in cases where the existing bond is insufficient to complete reclamation. Representative Lamb's RENEW Act would create that program.

State of the coal industry

Coal production nationwide has been declining since 2008, and has taken a particularly steep dive in Eastern states in recent years. Many factors have contributed to the decline, including competition from natural gas, declining mine productivity as coal reserves dwindle, improvements in renewable energy technology, and regulations to internalize the external costs of coal mining. Coal production has increased slightly in 2021, due to the easing of COVID restrictions, and geopolitical factors increasing demand for both thermal and metallurgical coal. But overall, the decline has been predictable and is not likely to reverse.



Nationwide Coal Production From Both Surface and Underground Mines²

² Mine Safety and Health Administration. Accident, Illness and Injury and Employment SelfExtracting Files (Part 50 Data). https://arlweb.msha.gov/stats/part50/p50y2k/p50y2k.htm

SMCRA requires contemporaneous reclamation — coal companies are supposed to reclaim mines as mining progresses. But "contemporaneous" is not well defined, and companies are given significant leeway by regulatory agencies to idle mines for long periods. In addition, reclamation often depends on perpetual mining. In many cases, additional mining provides the necessary money and/or fill material to reclaim previously mined areas. This creates an obvious problem as coal mining declines — the last remaining mines may be left with insufficient funding, material, equipment, and/or workers to complete reclamation. This situation will lead to increased bond forfeiture.

According to West Virginia Department of Environmental Protection GIS data, only 188 mine permits (including both surface and underground) are classified as "actively moving coal" or "possibly moving coal" at this time. Almost equal numbers are classified as inactive or in reclamation-only status (156 and 192 permit respectively). The remainder of the approximately 1,300 permits in West Virginia are in various stages of reclamation. Similarly in Kentucky, only 51 permits are listed as actively producing coal, and additional 400 permits are being mined (but presumably not yet producing coal), while 100 permits are listed as temporarily idled.³ Nearly half of the roughly 1,100 permits are in some phase of reclamation. What these numbers do not necessarily accurately represent is the number of mines that are languishing with very little actual mining or reclamation activity being completed, regardless of the current classification of the permit.

Nearly 50 coal companies declared bankruptcy between 2012 and 2015.⁴ At least 18 more declared bankruptcy between 2016 and 2020.⁵ Companies are using bankruptcy to shed reclamation and other liabilities. From 2012 to 2017, four large coal companies — Patriot Coal, Alpha Natural Resources, Arch Coal, and Peabody Energy — shed almost \$5.2 billion of environmental and retiree liabilities.⁶ In most of these earlier bankruptcies, companies shed their environmental liability by selling mines to smaller, less well-capitalized companies. Mines were often sold for little to no money.⁷ Now fewer companies are available to take on mines, so as the companies that assumed those liabilities also declare bankruptcy, they have begun forfeiting permits to the regulatory agencies for cleanup.

 ³ Both data sets are from Appalachian Voices analysis of publicly available state mining agency GIS data.
⁴ Kuykendall, T. Roster of US coal companies turning to bankruptcy continues to swell. SNL. June 4, 2015. https://www.snl.com/interactiveX/Article.aspx?cdid=A-32872208-12845&FreeAccess=1

⁵ Saul, J. and Doherty, K. U.S. Bankruptcy Tracker: Coal's a Canary in the Mine for Energy. Bloomberg. December 8, 2020.

https://www.bloomberg.com/news/articles/2020-12-08/u-s-bankruptcytracker-coal-s-a-canary-in-the-mine-for-energy

⁶ Macey, J. and Salovaara, J. Bankruptcy as Bailout: Coal Company Insolvency and the Erosion of Federal Law. Stanford Law Review. April 2019.

⁷ Alpha Metallurgical Resources. Contura Subsidiaries Sell Powder River Basin Assets. December 11,

^{2017.} https://alphametresources.com/news_articles/contura-subsidiaries-sell-powder-riverbasin-assets/

New Permitting

Though the overall trends in the coal industry indicate decreased coal production, a decreased rate of reclamation, and decreased new permitting, new surface coal mine permits are still being granted. According to reports from OSMRE, in 2020, 25 permits for new surface mines were granted in the Central Appalachian states of West Virginia, Virginia, and Kentucky.⁸ No new permits were granted in Tennessee. This included 560 acres of new mining in Virginia and 1,860 acres in West Virginia. Reports for 2021 are not yet available.

These new permits include permits for mountaintop removal in Central Appalachia. As an example, the Turkeyfoot permit (state permit id S301419) is a pending permit in Raleigh County, West Virginia. This mine, proposed by Alpha Metallurgical Resources, would disturb approximately 1,085 acres of land that is currently native forest land. The mine would use area mining, including mining across several ridge tops, which will cause significant disturbance. The mine plan proposes mining within 300 feet of occupied dwellings. The mine also includes four spoil disposal valley fills and 34 wastewater outlets. These outfalls would discharge into Workman Creek, Stovers Fork, and Wingrove Branch. All of these streams are tributaries of the Coal River watershed, which has already been heavily impaired by surface coal mining.

The amount of electricity generated through burning coal in the United States in 2020 was 22% of total energy production — the lowest share in modern times. At this point, there is little justification for granting new surface mining permits, and no justification for granting large, destructive mountaintop removal permits in Central Appalachia.

Current Reclamation Needs and Bonding

Reclamation

As mining has declined in the last decade, the pace of reclamation has not kept up, resulting in an increased amount of land in need of reclamation as compared to the amount of coal being produced. Thousands of mine permits across the country are still held by coal companies, and still require reclamation. Over 956,000 acres of modern surface coal mines across the country require some degree of reclamation.⁹

⁸ OSMRE Oversight Documents, state Annual Reports. https://www.odocs.osmre.gov/

⁹ Acreage compiled by Appalachian Voices through record requests to state mining agencies and the Office of Surface Mining Reclamation and Enforcement.

Reclamation Needs by Acre at Mines Currently Held by Coal Companies			
State	Partially Reclaimed	Unreclaimed	Total Outstanding Reclamation
AK	1,000	1,000	2,000
AL	16,000	17,000	33,000
со	6,000	8,000	14,000
KY	139,000	54,000	193,000
МТ	17,000	19,000	36,000
ND	44,000	27,000	71,000
NM	18,000	8,000	26,000
ОН	13,000	6,000	19,000
PA	49,000	69,000	118,000
TN	5,000	7,000	12,000
UT	1,000	2,000	3,000
VA	35,000	18,000	53,000
WA	3,000	3,000	6,000
WV	169,000	36,000	205,000
WY	81,000	84,000	165,000
Total	597,000	359,000	956,000

Reclamation Needs by Acre at Mines Currently Held by Coal Companies

Table 1: This is a partial list of reclamation needs at coal mines across the country. "Unreclaimed" acreage has little to no reclamation completed, and "partially reclaimed" acreage has regrading, and possibly revegetation completed. Data was collected from state mining agencies for Eastern states and from the OSMRE Western Region for Western states. Does not include all coal mining states.

Liability

It is difficult to determine the true liability of outstanding reclamation needs, because the cost of reclamation varies from mine to mine, depending on site conditions, and this data is not regularly gathered by most regulatory agencies. Appalachian Voices completed analysis on outstanding liability for seven Eastern coal mining states in 2020.¹⁰ The results indicate that the true outstanding cost of reclamation at mines currently held by coal companies in those states is between \$7.5 and \$9.8 billion. In contrast, total bonds available in those states only amount to \$3.4 billion.

Appalachian Voices has not completed analysis to estimate outstanding liability in either the Western or Illinois Basin states, and we are unaware of comprehensive analysis regarding liability. Some key differences exist between reclamation in Eastern and Western states: Eastern states are more likely to deal with long term water pollution, Central Appalachian states deal with impacts from mountaintop removal mining, and Northern Appalachian states deal with

¹⁰ Repairing the Damage: The Cost of Delaying Reclamation at Modern-Era Mines. Appalachian Voices. 2021. https://appvoices.org/resources/RepairingTheDamage_ReclamationAtModernMines.pdf

stream dewatering and land subsidence from longwall mining. Mines in Western states typically require longer to establish vegetation, because of the arid environment. Some Western states also deal with depletion of aquifers from intensive water use by mines. The Eastern states account for about 633,000 acres of current coal mines. Inclusion of Western and Illinois Basin mines likely nearly doubles that figure. So it is reasonable to assume that nationwide liability may also be close to twice the estimate for Eastern states — \$15 to \$19.6 billion.

<u>Bonds</u>

Appalachian Voices has collected extensive reclamation bond data from states across the country over the last 2 years. Initially, we collected bonding data from the seven Eastern states covered in our 2021 reclamation report. We determined that total available bonds across the seven states amounts to \$3.8 billion, or about half of the actual reclamation liability. In 2022, we collected additional bonding data from the top coal producing states in the other two regions. Those bonds totaled \$6.2 billion. While this may indicate the Western and Illinois Basin states have more adequate bonding programs overall, it varies by state. For example, bonds in Wyoming and Montana account for half of the \$6.2 billion. In addition, some of the bonds are less secure self-bonds and collateral bonds.

Sureties

Sureties are third party insurance companies that provide coal companies with reclamation bonds. They operate similar to other insurance companies, providing bonds for a premium, and/or requiring coal companies to provide collateral. Many of the companies are well-known insurance agencies (e.g. Liberty Mutual Insurance Company or Travelers Casualty and Insurance Company). But others are smaller, newer companies with less diversified liability. Once seen as the most secure form of bonding when bonds are set at the full cost of reclamation, some sureties now appear at risk of insolvency in the face of widespread coal company bankruptcies.

In particular, Indemnity National Insurance Company seems at risk of failure, due to the bankruptcy of Blackjewel Coal Company, the failure of ERP Environmental, and the surety's propensity for taking on excessive coal reclamation liability.

When Blackjewel declared bankruptcy in 2019, it held 212 permits in Kentucky. Despite efforts on the part of the state and the bonding company to transfer those permits to other coal companies, in late 2021 when Blackjewel dissolved, it still held 139 permits in Kentucky. Reclamation of these permits are now the responsibility of the bonding companies and the Kentucky Energy and Environment Cabinet. It's likely that Kentucky's bond pool will not be sufficient to reclaim those 139 sites. Nearly \$90 million, or 90% of Blackjewel's permits are covered by Indemnity. In Kentucky, Indemnity holds \$363 million in reclamation bonds, which amounts to 42% of all bonds in the state.

In West Virginia, ERP Environmental holds over 90 permits, which the company acquired through the bankruptcy of Patriot Coal Company. In total, ERP assumed over \$200 million in reclamation obligations. In early 2020, when it became clear that ERP was in financial distress

and defaulting on its obligations, the WVDEP took the extraordinary step of forcing the company into a state receivership rather than allowing it to go bankrupt. As WVDEP asserted in court filings, the regulator is concerned that an ERP bankruptcy could bankrupt Indemnity National Insurance Company and overwhelm the Special Reclamation Fund, the state's pool bond fund. Indemnity holds \$592 million in reclamation bonds, which amounts to 66% of all bonds in West Virginia. Indemnity also covers at least \$1 billion in coal mine reclamation bonds across Kentucky, West Virginia, Pennsylvania, and Wyoming.

Self-bonding, pool bonding, collateral bonding, and now overextended sureties have all put SMCRA's original intended guarantee for coal mine reclamation at risk. It is very likely that multiple parts of the bonding system will fail — state pools will not prove adequate funds for reclamation, self-bonds will never materialize, and some sureties may be unable to pay bonds when called or perform reclamation work. Rather than allowing the burden of unreclaimed mines to fall on local communities when coal companies forfeit permits, the federal government should provide financial and regulatory support to ensure these mines are reclaimed.

Jobs

Addressing the reclamation backlog could put a substantial number of miners back to work doing the reclamation they were meant to do. Based on the estimated reclamation liability for land reclamation in the Eastern states, between 23,000 and 45,000 job-years could be created by completing reclamation across the seven states. According to a similar analysis by the Western Organization of Resource Councils, reclamation in Western states could create 6,000 and 12,000 job-years.¹¹

Legislation

In 2020, the Alliance for Appalachia, a coalition of 15 grassroots groups with a shared mission to address the impacts of mountaintop removal coal mining and to promote a healthy, just Appalachia, conducted over two dozen interviews with people impacted by surface coal mining across the country, as well as local, regional, and national nonprofit organizations with expertise in mining issues. The conversations focused on current problems with reclamation delays, on bonding adequacy, and on what interviewees thought should be done about these issues. Building upon this work, the Alliance, Appalachian Voices, and Western Organization of Resource Councils held an online summit with over 40 participants to discuss possible solutions to ensure reclamation of current coal mines. From takeaways generated from the summit, the Sierra Club, Appalachian Citizens' Law Center, and Appalachian Voices drafted proposed legislation to create a new program administered by OSMRE to provide a federal safety net for mine reclamation.

We are grateful to Representative Lamb and his staff for taking our proposal and using it to write the "Revitalize, Enhance, and Nurture in Expanded Ways Our Abandoned Mine Lands Act" or the "RENEW Act." The Act seeks to address the shortfall between currently available funds

¹¹ https://www.worc.org/media/Reclamation-Jobs-Report-FINAL_Nov-2020.pdf

designated for the reclamation of coal mines abandoned under SMCRA, and the actual anticipated cost of completing this reclamation.

The bill would provide \$385 million per year to establish a grant program for states to apply for funding to cover the reclamation bond shortfall for coal mines that were permitted under SMCRA and subsequently forfeited such that the regulatory agency is now responsible for completing reclamation. In other words, funds are not available to mine operators, or for mines where an operating coal company is still responsible for reclamation. *The fund is distinct from funding for "abandoned mine land" (AML) reclamation, which only applies to coal mines abandoned prior* to 1977.

The bill would also take steps to ensure that the bonding program issues that have led to bond shortfalls are not perpetuated — agencies would need to demonstrate active steps to improve reclamation bonding programs and to recover reclamation costs from responsible parties. The bill would also require state programs to aggregate reclamation projects to improve economies of scale, to commit to paying prevailing wages, and to actively engage the community in the design and oversight of reclamation projects.

The Coal Cleanup Taxpayer Protection Act (H.R. 2505) would strengthen coal reclamation bonding by disallowing the use of highly risky self-bonds. Self-bonds are the least secure form of bond, as the coal company does not provide any actual money, but rather just gives its word to the regulatory agency that it will provide the bond money in the event of a mine forfeiture.

Additional Recommendations

While demand for coal will remain far below former levels, and many companies are likely to default on reclamation obligations, there are still many steps state and federal agencies can take to mitigate this situation. The following measures would increase the total amount of reclamation completed by coal companies, and improve the quality of reclamation.

- 1. OSMRE should work with states to complete a nationwide inventory of outstanding reclamation needs and costs at all mining permits, and make this data publicly accessible.
- 2. OSMRE should require full-cost bonding and disallow alternative bonding structures, including self-bonding and pool bonding.
- 3. Regulatory agencies must enforce reclamation requirements more strictly, ensuring timely cleanup is taking place and that coal companies are not idling mines to delay fulfilling their obligations.
- Regulatory agencies should plan for long-term water treatment. Some mines create water pollution that must be treated over many decades. Funding mechanisms, financed by coal companies, should be created to provide treatment costs as long as treatment is needed.