

The Surface Mining Control and Reclamation Act (SMCRA) of 1977 and West Virginia

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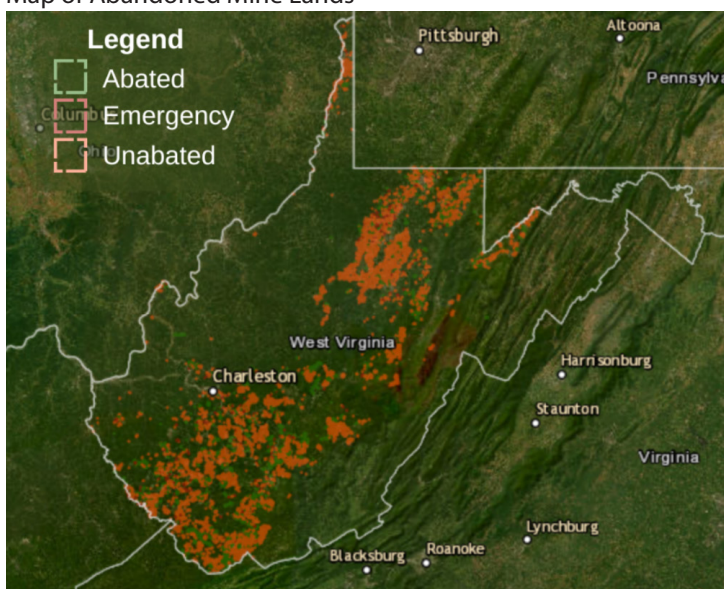
Established in 1977 by the United States Congress and implemented by individual states, the Surface Mining Control and Reclamation Act (SMCRA) regulates US coal mining and reclamation. This Science and Technology Note provides an overview of how regulations differ for mine land reclamation before and after SMCRA, as well as details about West Virginia's post-SMCRA bonding system meant to ensure adequate funds for former mine land restoration.

What Mine Lands Are Covered Under SMCRA?

In West Virginia, SMCRA is codified as [West Virginia Code §22-1](#). For all mines operating after the law passed in 1977 (post-SMCRA), mine operators are required to post bonds equal to the estimated cost of reclamation and develop reclamation plans before coal mining begins. It legally obligates states to reclaim any post-SMCRA mines where the bonds are forfeited, even if the bonds do not cover the full costs of reclamation.

Abandoned mine lands (AML) are [defined](#) as “lands

Map of Abandoned Mine Lands



Source: [WV Department of Environmental Protection GIS Viewer](#)

Research Highlights

- SMCRA regulates former mine lands in West Virginia under two different regimes depending on whether the mine was in operation when the law passed in 1977 (see table for summary).
- Pre-SMCRA mine lands are eligible for reclamation funding through the abandoned mine land (AML) program (and the later AMLER program), but there is no legal responsibility for states to restore former mine land to its pre-mining state.
- Post-SMCRA mine operators must post a bond to cover the costs of reclamation and create a reclamation plan prior to the start of mining. The mined land is required to be restored to its pre-mining state. If the mine operator defaults, legal responsibility for restoration falls to the state.

mined for coal or minerals that were abandoned, inadequately reclaimed and where no individual or company is responsible for the site's reclamation.” Mines abandoned prior to the passage of SMCRA in 1977 (pre-SMCRA) are not subject to the same bonding and restoration requirements as post-SMCRA mines. For these previously abandoned mine lands, SMCRA established the Abandoned Mine Land (AML) program, which offers fundings to states and tribes to restore pre-SMCRA abandoned mines. The AML program is funded by fees on current coal production, and participation by states in the AML program is voluntary. There is no legal obligation to restore pre-SMCRA lands to their pre-mining state. Created in 2016, the [Abandoned Mine Land Economic Revitalization \(AMLER\) program](#) funds economic development projects on pre-SMCRA abandoned mine lands.

The Post-SMCRA Bonding System

The Office of Surface Mining Reclamation and Enforcement (OSMRE) implements SMCRA in partnership with the West Virginia Department of Environmental Protection (WVDEP). For all post-SMCRA mines, states are required to have sufficient money available to complete the reclamation plans if a coal company enters bankruptcy or abandons its reclamation obligations. This money is held in two forms. First, all mine operators are

Regulatory Regimes for Pre- and Post-Post-SMCRA Mine Lands

Legal Obligations	Legal Protection	Money Available for Reclamation
<p>PRE-SMRCA FORMER MINELAND: No money or legal obligation to reclaim minelands</p> <p>POST-SMRCA FORMER MINELAND: Posting of a bond that will only be released after reclamation is finished to ensure there are no more AMLs; federal production tax on coal to clean up legacy mine states.</p>	<p>PRE-SMRCA FORMER MINELAND: Developers in West Virginia are likely to be protected from lawsuits stemming from pollution from AMLs if reclamation attempts are made under the WV Good Samaritan Statute (W.Va Code Section 22-27-21).</p> <p>POST-SMRCA FORMER MINELAND: Mining permits require land to be returned to its pre-mining state unless a variance is authorized because restoration is not technically feasible (e.g., mountaintop removal). Potential variances include using the land for industry, homesteading, forestry or renewable/ alternative energy production (geothermal, biomass, etc.).</p>	<p>PRE-SMRCA FORMER MINELAND: Eligible for funding from the AML and AMLER programs</p> <p>POST-SMRCA FORMER MINELAND: Bonds are meant to ensure that reclamation is completed by the mine operator. West Virginia's SRF is meant to meet shortfalls.</p>

required to have posted bonds to cover post-mining land reclamation costs. These bonds come in three types: self-bonding, surety bonds, and collateral bonds (see table below).

In addition, West Virginia has a [Special Reclamation Fund \(SRF\)](#), funded primarily by state taxes on coal mining activity. The SRF is meant to provide funds to complete land restoration when posted company bonds are insufficient to cover the full costs of land reclamation.

A 2021 West Virginia Legislative Auditor report [estimates](#) posted bonds would cover 10% of reclamation costs in West Virginia. The solvency of the SRF and the issues with the bonding system are discussed in more depth in

another Science and Technology Note.

As of 2017, West Virginia companies [held reclamation bonds totaling around \\$971 million](#), the vast majority of which were surety bonds. The Legislative Auditor's [report](#) notes that due to bankruptcies of coal companies operating in West Virginia, over 55% of the state's bonds are at risk of being forfeited. In 2021, [five surety companies held over 90% of all surety reclamation bonds](#) in the state, with one company, Indemnity National Insurance Company, holding 66.9%. The aforementioned report notes this consolidation may mean surety companies will be unable to honor forfeited bonds, increasing the risk the state will be liable for former mine land reclamation costs.

Types of Bonds Used for Funding Mine Land Reclamation

Self Bonding	Collateral Bonds	Surety Bonds
<p>Description:</p> <p>Allows coal mining operators to demonstrate sufficient corporate assets for site reclamation without requiring cash or collateral upfront</p> <p>No funds for the operator to forfeit, in bankruptcy as the value of the bond is based on the solvency and assets of the company</p> <p>Features:</p> <ul style="list-style-type: none"> No cash or collateral upfront Dependent on sufficient corporate assets No funds at risk Nothing is left to reclaim if the company declares bankruptcy The GAO has recommended removing the option of self-bonding entirely 	<p>Description:</p> <p>Requires coal mining operators to provide financial instruments or property assets (cash, certificates of deposit, first-lien interests in real estate) as collateral</p> <p>Features:</p> <ul style="list-style-type: none"> Originally cover the cost of the bond but depreciate and can be hard to recover in bankruptcy proceedings Only 3% of bonds in WV 	<p>Description:</p> <p>Underwritten by an insurance company that will cover costs if the coal company forfeits the bond</p> <p>Theoretically the safest bonds but dependent on solvency of the underwriting company</p> <p>Features:</p> <ul style="list-style-type: none"> Full costs of the bonds are recoverable in event of bankruptcy by the mine operator WV has no statutory limits on the amount of reclamation surety bond coverage a single surety company may issue, either in the case of individual bonds or in the aggregate Highly concentrated among a few surety companies due to the risk involved, which increases the risk that the surety companies could go bankrupt if too many of the bonds are forfeited.

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