FUNDING FOR THE PURPOSES OF WASTE COAL AND GARBAGE OF BITUMINOUS COAL REMEDIATION IN THE COAL FIELDS REGION OF THE COMMONWEALTH

REPORT TO THE GOVERNOR & THE GENERAL ASSEMBLY

DECEMBER 2, 2024



OVERVIEW

This report is created pursuant to the Commonwealth of Virginia Budget for the 2024-2026 biennium that was passed by the 2024 Virginia General Assembly. The budget language states that the Virginia Department of Energy (Virginia Energy) shall identify and apply for any available federal or other non-general funds for the purposes of waste coal and garbage of bituminous coal remediation in the coal fields region of the Commonwealth. The department shall report on such efforts and resulting funding by November 1, 2024, and by November 1 of each succeeding year to the Governor and General Assembly.

The Virginia Department of Energy (Virginia Energy) monitored grant sources for possible connections for the recovery of waste coal or garbage of bituminous (gob) as directed by the 2024 Virginia General Assembly. Virginia Energy maintains a grant tracking system that is continuously update by administrative grant staff. Virginia Energy management reviews all updates at least monthly. This rigorously monitored tracking system did not identify any funding sources that could advance this legislative initiative.

Additionally, Virginia Energy contacted the Appalachian Region Independent Power Producers Association (ARIPPA), a non-profit trade association comprised of independent electric power producers, environmental remediators, and service providers located in Pennsylvania, Virginia, and West Virginia that use coal refuse as a primary fuel to generate electricity. ARIPPA was not aware of any additional funding opportunities beyond those already employed by the agency.

AML FUNDING

Current funding sources in Virgina for recovery of Abandoned Mine Land waste coal -gob encompasses the Tile IV fee-based program enacted by the Surface Mining Control and Reclamation Act of 1977 (SMCRA), the Abandoned Mine Land Economic Revitalization- AMLER and the most recent Bipartisan Infrastructure Law-BIL grant. All these programs have guidance structured to support AML waste coal -gob recovery and remediation.

The Title IV program was reauthorized by the BIL on November 15, 2021, which continued fee collection on coal mines at a reduced rate. This reduced rate and the downturn of the coal industry reduced the amount of the Virginia Energy AML annual grant to \$3 million. As a "minimum program state" of that \$3 million about \$2.8 million pays for administrative, engineering design and construction of AML projects.

The AMLER program has seen great success throughout the southwest coalfields developing much needed economic stimulation and job creation projects on lands associated with AML. Since 2027 the AMLER program has received between \$10 to 11.8 million annually.

IIJA or BIL passed by the Biden administration not only reauthorize the Title IV program but created additional funding for AML cleanup and remediation. OSMRE received \$11.8 billion dollars to be distributed to states with outstanding reclamation obligations. Virginia is ranked 7th highest and will receive a grant of \$22.7 million annually for the next 15 years. Early estimates determined that approximately 70% of the known AML hazards in the state could be eliminated at the end the 15 years period. Gob clean-up is included.

COAL WASTE & GOB REMEDIATION

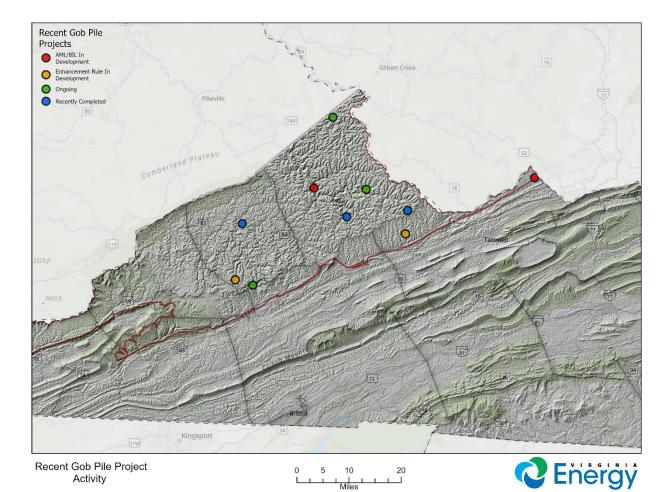
Removal of GOB is most often achieved under the Enhancement Rule. Abandoned Mine Land Enhancement (AML) projects resulted from a 1999 rule change of the federal Office of Surface Mining (OSM) to increase the amount of reclamation accomplished. The rule change now allows government financing on projects to be less than 50% of the total budget, and the coal removal is exempt from permitting requirements. Proceeds from the sale of coal go to offset the cost of project reclamation. The enhancement rule requires Title IV (AML) and Title V (active) branches to make findings and set limits of coal removal. One finding must be that there is little likelihood of the area being permitted and mined as a stand-alone permit. All coal removal must be an engineering necessity that is incidental to the reclamation project. There is risk and reward on enhancement projects, as the government agency does not make any guarantee as to the quality or quantity of coal.

Enhancement projects are set up as routine AML projects. After consulting with state and federal agencies, DMLR submits a project document to OSM. After an OSM review and approval, work can begin upon the contractor submitting bond and liability insurance. The government financing usually takes the form of tree planting over the project. Gob piles and remnant highwall areas are features well suited for AML enhancement.

Another avenue for gob removal and clean-up is through the traditional AML project development and contracting. Previously the AML program did not have funding sufficient to clean up gob piles, which are considered low priority AML issues. The Enhancement Rule enabled contractors to clean up dozens of GOB sites, much of the recovered and processed GOB was utilized at the Virginia City Hybrid Electric Center (VCHEC) to produce electricity. However, as the gob within the direct radius of the facility was cleaned up, increased costs to transport gob by truck to the facility is making clean up financially unfeasible for contractors. Hence, Virginia Energy AML is currently developing several AML projects for GOB removal with that cost included. These projects will include, within the project scope, transporting the material to its destination.

RECENT AML GOB PILE RECLAMATION ACTIVITY

RECENTLY COMPLETED PROJECTS	
Clinchco Ballfield	Dickenson County
Seng Camp Fork	Buchanan County
Page Gob Pile	Buchanan County
ONGOING PROJECTS	
Duty Gob Pile	Buchanan County
West Dante Gob Pile	Russell County
Spruce Pine Project	Buchanan County
IN DEVELOPMENT ENHANCEMENT RULE GOB PILE PROJECTS	
Goodwin Hollow Project	Tazewell County
Betty B Project	Dickenson County
IN DEVELOPMENT BIL FUNDED GOB PILE PROJECTS	
Plaza Drive Gob Pile Removal Project	Buchanan County
Pocahontas Gob Pile Removal Project	Tazewell County



NEW OPPORTUNITIES FOR WASTE COAL & GOB

Grant associations were noted for Rare Earth Elements (REE) extraction. The Virginia Energy Geologic Mineral Resources program is seeking a grant from the US Dept of Energy that supports research for the extraction of REE's from Virginia's mineral mining resources. If awarded this grant could support coal as one source for REE extraction that could be evaluated.

Evolve Central Appalachia (Evolve CAPP) focuses on harvesting the industrial, environmental and economic potential of rare earth elements (REE), critical minerals (CM) and high-value, nonfuel, carbon-based products – all out of waste coal. The U.S. Department of Energy provided the initial funding of \$1.499 million to Virginia Center for Coal and Energy Research (VCCER). The group is working on the final report for the first phase of their project. They plan to apply for additional funding from the Department of Energy and hope to begin the second phase of their study in 2025.

CONCLUSION

Funding searches are continually conducted and funding paths mapped, however, this reporting year no viable connections or new sources could be utilized. Continued focus to identify funding sources for waste coal and gob utilization—for either an energy source or extraction of Rare Earth Elements—is a priority for the Virginia Energy. As funding sources are identified, Virginia Energy will pursue the funding and report the findings as mandated by the Commonwealth of Virginia Budget.

