

PROTECTING VIRGINIA'S ENVIRONMENT & PUBLIC HEALTH FROM INDUSTRIAL METAL MINING

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EXECUTIVE SUMMARY

Industrial metal¹ mining is moving forward in the Commonwealth without a comprehensive regulatory framework, putting public health and the environment at risk. The heaviest burden is likely to fall on our most vulnerable communities. Surface and groundwater contamination are potential outcomes of these mining activities. Remediating negative impacts is impossible in the context of outdated regulations.

We must support communities most at risk from this extractive industry by pausing the permitting process for metal mining, studying the effects of such mining, and developing improved regulations.

Virginia must fully execute the work group study defined in HB2213, fund its work, and address a broader scope of elements identified as ripe for extraction in the Commonwealth.

CHALLENGE

In Virginia, a large gold-pyrite belt stretches from Fairfax to Halifax county.² This geological structure contains metals like iron, gold, copper, zinc, and pyrite.³ This belt crosses the James River, a source of drinking water for 2.7 million people⁴, and intersects innumerable Virginia communities, many of which are Environmental Justice communities.⁵

Metal mining is the nation's #1 toxic polluter and is land intensive; existing open-pit mine sites in other states cover thousands of acres.⁷ As the Commonwealth spends millions to restore the Chesapeake Bay and reduce nutrient and sediment discharges across the watershed, it makes no sense to introduce this significant new source of pollutants to the watershed without a careful study of its potential impacts on water quality and the ability for Virginia's regulatory programs to prevent such impacts.

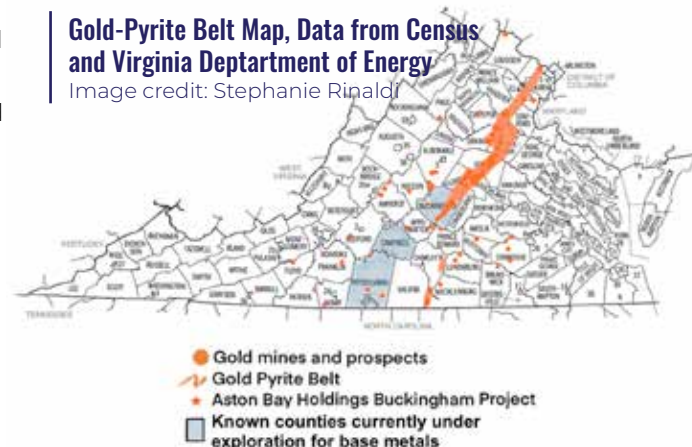
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Mining companies have been prospecting around Virginia's gold-pyrite belt for at least the last five years,⁸ recently announcing "high grade" findings.⁹ Large-scale gold mining has not occurred in Virginia for over 100 years.¹⁰ This type of industrial mining involves processes that result in perpetual acid mine drainage,¹¹ catastrophic waste containment failures, the destruction of cultural heritage,¹² and the devastation of local economies as a result of the boom and bust cycle of the metal mining industry.¹³

Virginia's regulations are not currently designed to address modern-day industrial base and precious metal mining. In 2021, the General Assembly passed legislation — HB2213 — to study the effects of gold mining on the Commonwealth and assess current regulations' abilities to protect the public health, safety, and welfare of Virginians. That study focuses on gold and is currently in process. While we await its results, the industry continues to work toward opening mines across Virginia.¹⁴

Gold-Pyrite Belt Map, Data from Census and Virginia Department of Energy

Image credit: Stephanie Rinaldi



SOLUTION

HB2213 started a crucial review process, establishing a work group to evaluate impacts of gold mining on public health, safety, and welfare.¹⁵ The news that prospecting companies are swiftly pursuing other base and precious metals such as copper, zinc, and lead, creates greater urgency for broader analysis of existing regulations.¹⁶ The threat of large-scale mining is truly Virginia-wide, and would have both short and long term impacts, so existing bonding, reclamation, closure, and monitoring regulations must be comprehensively evaluated and updated.

Therefore, any workgroup, and subsequent study and review processes, must include robust public engagement and education. Financial and environmental tolls of reclamation should also be part of any evaluations, and should not be overlooked because our current regulatory standards are either non-existent or outdated.

Funding for these next steps must be prioritized in the 2022 legislative session, with budgeting allotted for the second year of HB2213's study. Regulations regarding additional metals, including copper, zinc, and lead, should also be reviewed. Additionally, companies' pursuits of projects while studies are underway reinforces the need for the Commonwealth to press 'pause' on permitting. The granting of permits without sufficient knowledge of project impacts, or with deficient regulatory oversight of impacts can lead to environmental and economic devastation.

POLICY RECOMMENDATIONS

Execute robust public engagement within the work group review process as written and intended by HB2213 (2021).

Ensure the Department of Energy has the necessary funding to execute the studies and analysis needed.

Analyze current regulations regarding base metals, such as copper, zinc, and lead, that are mined and/or processed using similar techniques.

Establish a moratorium on permitting any large-scale mining of gold, copper, lead, and zinc operations within the Commonwealth until the analysis of mining regulations based on study results is complete.

Bingham Canyon Copper Mine
Image credit: Billy Clouse