S. HRG. 119–46

PENDING LEGISLATION

HEARING

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

ONE HUNDRED NINETEENTH CONGRESS

FIRST SESSION

ON

S. 362
S. 544
S. 596
S. 714
S. 789
S. 859

MARCH 12, 2025

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CONTENTS

OPENING STATEMENTS

WITNESSES

ALPHABETICAL LISTING AND APPENDIX MATERIAL SUBMITTED

The text for each of the bills addressed in this hearing can be found on the Committee's website at: https://www.energy.senate.gov/hearings/2025/3/full-committee-hearing-to-receive-testimony-on-pending-bills

PENDING LEGISLATION

WEDNESDAY, MARCH 12, 2025

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The Committee met, pursuant to notice, at 10:01 a.m. in Room SD–366, Dirksen Senate Office Building, Hon. Mike Lee, Chairman of the Committee, presiding.

OPENING STATEMENT OF HON. MIKE LEE, U.S. SENATOR FROM UTAH

The CHAIRMAN. The Committee will come to order.

Welcome to the Committee's first legislative hearing of the 119th Congress. Today, we will receive testimony on six bills listed in the notice for today's hearing. All of these bills address domestic mining and mineral processing, related reporting, and public information. Four of these measures have bipartisan co-sponsors, and a fifth has received some bipartisan support. Having served on this Committee since 2011, I am keenly aware that the United States has fallen behind China and other nations when it comes to mining and mineral processing. Today's hearing represents a first step in developing a legislative record on measures to address this very problem.

Of course, not all of us will support each measure on which the Committee will hear testimony today. I don't support all of the bills listed on the notice for today's hearing. For example, although I agree that America needs to process more non-fuel minerals here at home, and I appreciate that Senator Hickenlooper's bill, S. 596, has Republican co-sponsors, I have strong reservations about the pilot program that this legislation would establish.

Also, I included Senator Luján's bill, S. 859, in today's hearing as a courtesy. Senators Henrich, Wyden, and Padilla are co-sponsors, along with a number of Democratic colleagues.

Today's hearing is reflective of my intent to sharpen the Committee's focus on legislation without diminishing our other responsibilities to consider presidential nominations or to conduct oversight within our Committee's jurisdiction. We will begin by moving pending nominations through the Committee as soon as we have the requisite paperwork on these additional nominations.

I want to thank Ranking Member Heinrich and all the members of the Committee for helping identify the six bills that we will receive testimony on this morning. After I conclude my opening statement, we will hear from Senator Heinrich for his opening statement, and thereafter, I will introduce our distinguished panel of

witnesses. We will hear the witness testimony, and then move to a round of questions from members. Members will have five minutes for their questions and we will alternate between senators on one side of the dais and then the other.

If you are here today, it's because you understand that America's economic strength and national security hinge ultimately on securing a reliable supply of key materials. Currently, a majority of the world's mineral extraction and refinement are controlled by adversarial countries. We have seen what happens when we rely on these nations for essential resources—supply chain disruptions, economic vulnerabilities, and ultimately, tragically, national security risks. It's time to fix that. The resources are here—right here in the United States, and we just need the right policies in order for us to be able to unleash them. My home State of Utah, for example, has 40 of the 50 minerals deemed essential by the U.S. Geological Survey. Yet, bureaucratic delays and inconsistent regulations create often insurmountable barriers to domestic production.

A 2024 S&P global survey found that U.S.-based mineral projects take an average—an average—of 29 years to move from discovery to production. That is the second longest timeline in the world. To put that in perspective, if a mine were needed for defense applications during World War I, using today's permitting timelines, it wouldn't be operational until after World War II had come to an end. That is unacceptable. It's one of the reasons why I have introduced the Critical Mineral Consistency Act with my colleague from Arizona, Senator Mark Kelly. Right now, the Department of Energy and the Department of the Interior have separate, parallel, inconsistent lists of what counts as critical and what does not. That does not make any sense.

In 2023, the Energy Department added copper to its list of critical materials, recognizing the metal as integral in energy technologies, but also at risk for supply disruptions by 2035. But the U.S. Geological Survey left copper off its own list, even though it is vital for power grids, wind turbines, and electric vehicles. My bill would require these lists to match. These designations send a powerful message to investors. The U.S. Government is backing these supply chains on national security grounds. If we want private investment in domestic production, we need clarity and we need consistency. That is exactly why we need to pass Senators Cortez Masto and Risch's Mining Regulatory Clarity Act to enable mining on federal land.

But streamlining regulations is only part of the equation. This doesn't get to the whole thing we need to get to, streamlining regulations. We need to go beyond that, and to truly strengthen our supply chains we must also reject policies that create additional burdens on domestic production. Imposing additional federal royalties would only add cost and uncertainty, potentially shutting down existing projects, and driving investment overseas—overseas specifically to nations with far worse, far inferior environmental and humanitarian standards than what we have here. It would create redundant fees, as domestic mining projects are already subject to state and local royalties and taxes. Simply put, these proposals would make our mineral supply chains less competitive and it would make them more vulnerable, impacting everything from eco-

nomic growth to national security. We cannot afford to drag our feet any longer. China is racing ahead in mineral processing and refining. We need to move faster, smarter, and more strategically. The United States has the resources, the talent, and the technology. We just need the right policies to lead this charge. That starts here with hearings like this one that we are having today, and with legislation like what we will be discussing at this hearing.

I look forward to working with my colleagues to ensure that we have the ability to unlock our full potential and secure America's mineral future. Thank you.

I now recognize Senator Heinrich for his opening statement.

OPENING STATEMENT OF HON. MARTIN HEINRICH, U.S. SENATOR FROM NEW MEXICO

Senator HEINRICH. Thank you, Chairman.

I am glad that we are holding this hearing today on a set of issues that are critically important to people and communities across the country, but particularly in the West. However, before turning to the topic of today's hearing, I think it's impossible to talk about any natural resource issue today without talking about the incredible damage being done to the workforce that manages those lands and resources for the American people.

The illegal firings of probationary staff, rumored to be just the beginning of staffing reductions, is already reducing access to public lands, with locked gates and closed visitor centers at parks across the country. What's more, as we are considering legislation intended to increase mineral production on public lands, this Administration is cutting staff at land agencies that process those same permits. With a voluntary resignation offer that encouraged some of the most experienced, highest-performing staff at these agencies to leave public service, along with illegal firings of staff who were recently promoted because of their high performance, this Administration is crippling the very public land agencies that evaluate plans for new mines. Anyone who is hoping for "government efficiency" out of this Administration can see that what we are actually getting is government dysfunction.

Now, to today's hearing, in particular. Modern technologies involve a lot of raw materials, and as our scientists and engineers find new and cheaper ways to generate and store energy, the types and quantities of minerals used in energy technologies will only continue to grow. Responsible domestic mining and processing can be part of the solution, but we can't get there with outdated laws that don't reflect the nation's needs and priorities today. The law that governs metal mining on most public lands in the West was written in 1872—more than 150 years ago. Yellowstone had been a national park for barely two months when the mining law was signed, and New Mexico would still be a territory for another 40 years. We have actually learned quite a bit since 1872—how to manage public land for public benefit, how to conserve habitat for sustainable fish and wildlife populations, how to protect our drinking and irrigation water from heavy metals pollution, and how to ensure a fair return for the commercial development of resources that, after all, belong to the American people. And yet, our hardrock mining law remains stuck in the 19th century, right

when we need to build the energy infrastructure of the 21st century. Updating the 1872 Mining Law could bring public land mining into the 21st century and provide the minerals that we need for the energy technologies of today.

But we are here today to talk about more than just mining, because mining alone won't solve our supply chain dependence on adversaries unless we also invest in the entire life cycle of minerals. This includes increasing our domestic mineral processing capacity, continuing the onshoring of manufacturing through the CHIPS and Science Act, and investing in recycling technologies so that we can reuse the minerals that we already have. The fact that we export copper and rare earth materials, as well as things like batteries, to China in the form of electronic waste is one of the more infuriating realities of our current system. We should be capturing and reusing the minerals present within our borders in devices, vehicles, batteries, and machinery, rather than paying to ship them overseas.

I firmly believe we can find ways to secure the minerals we need for new energy technologies while also protecting our water, air, and public lands. I believe it's possible to open new mines while giving local communities a say in whether a particular location on public land is an appropriate place for a new mine, just like we do for oil and gas and other uses. And I am confident that we can find a way to finally fund the cleanup of legacy mine pollution that contaminates streams and rivers across the West. I hope that today's hearing will be a step toward all of those goals.

The CHAIRMAN. Thank you, Senator Heinrich.

Now, I will be pleased to introduce each of our witnesses.

It is my pleasure, first, to introduce and welcome Brian Somers, the President of the Utah Mining Association. Mr. Somers joined the Association as its President back in 2019. He previously led the Utah Science, Technology, and Research Initiative as its Managing Director. Earlier in his career, Mr. Somers served in leadership and senior staff positions in the Utah state government and also in private industry.

Our next witness is Mr. Rich Haddock. Mr. Haddock is an attorney who has worked in the mining industry for more than 30 years. He spent the last 25 years of that time at Barrick Gold Corporation in both legal and operational roles and retired as general counsel in 2022. Mr. Haddock is currently a senior advisor to Barrick. He is also a member of the Board of the Directors of Perpetua Resources Corporation. I am pleased to relate that Mr. Haddock holds a degree in geology from Brigham Young University and a law degree from the University of Utah School of Law.

Finally, we will hear from Mr. Chris Wood, the President and CEO of Trout Unlimited since 2001. Before joining Trout Unlimited, Mr. Wood served as the Senior Policy and Communications Advisor to the Chief of the U.S. Forest Service, capping a career in government. He is the author and co-author of numerous papers and articles and three books.

Okay, so we will now hear from each of the witnesses. Mr. Haddock, we will start with you, then move to Mr. Somers, and then Mr. Wood.

STATEMENT OF RICH HADDOCK, SENIOR ADVISOR, BARRICK GOLD CORPORATION

Mr. HADDOCK. Chairman Lee, Ranking Member Heinrich, Senator Cortez Masto, and members of the Committee, thank you for inviting me to testify today. I believe it is critical to competitiveness and national security for the United States to develop a secure mineral supply chain. One only needs to look at China's export ban of certain strategic minerals to understand this. I believe we can do much of what is necessary here at home with a domestic mining industry.

Over the last 40 years, production of many critical minerals has become concentrated in just a few mines in unfriendly jurisdictions where global demands are met by a race to the bottom—a price of human rights standards, of labor standards, and of environmental standards. Often, critical minerals are produced only as byproducts or are found in very small quantities along with gold, copper, lead, zinc, iron, and other economically viable minerals. The key to domestic production of as many of these minerals as possible is a healthy ecosystem for the U.S. mining industry, policy, expertise, and investment. The first step in creating a healthy mining ecosystem is before you today as S. 544, the Mining Regulatory Clarity Act. This is a bipartisan bill. I testified in support of it at the request of chairs from both parties. This bill addresses the confusion, delay, and continuing litigation created by the Ninth Circuit Rosemont decision, which upended decades of mining law interpretation and agency practice. Rosemont, if not addressed, would make it nearly impossible to site mine support facilities like mills, shafts, crushers, tailings facilities, and roads. In BLM regulatory parlance, these are called ancillary facilities, but I think "necessary" is really a better adjective because you can't have a mine without one, and I am grateful the Committee recognizes that.

The version of the MRCA before you today responds to criticisms of the original bill, S. 1281, introduced by Senator Cortez Masto in the 118th Congress. Initially, industry and environmental groups worked together to develop a detailed savings clause to defuse the criticism. When it persisted under Senator Cortez Masto's leadership, Committee staff worked with industry representatives and environmental group representatives to produce this version of the bill. It is the same language this Committee advanced last fall as part of the Energy Permitting Reform Act of 2024.

The MRCA is narrowly tailored. Over the last 50 years, less than one-third of one percent of the land in Nevada has been included in a plan of operations. This, the state with the most mining and 85 percent federal land. Only a portion of the ground inside a plan of operations is disturbed and only a part of that disturbed ground contains ancillary facilities. These subsection (c) mill sites created by the bill can only be located inside a proposed plan of operation, which only happens when you have a real mine. Real mines are few and far between, and honestly, I wish we had a few more, and perhaps our critical mineral concerns might not be as acute as they are today.

So with that, I applaud that the Congress recognizes the strategic importance of minerals as represented by the three critical mineral bills before the Committee. I thank the sponsors for their

work on these bills. The Chairman's Critical Mineral Consistency Act is common sense—one list, that is dynamic, to guide policy.

I applaud the goals of the Critical Minerals Future Act, S. 596, because it recognizes there are market forces that inhibit the domestic production of these minerals and proposes ways to begin to address those forces. I thank Senator Hickenlooper and his staff for their extensive outreach to industry and effort on the bill. I also appreciate that S. 789 recognizes that the U.S. needs to be as resource-savvy as our global competitors. Importantly, I think these bills underscore the need to focus on and improve our knowledge of potential domestic resources for these minerals, which I believe should be our long-term primary goal.

And finally, while not today's topics, I would be remiss if I didn't, number one, thank the Committee on Environment and Public Works for recognizing that permitting and associated judicial review needs to be improved, and for your ongoing work on these issues. And number two, acknowledge, thank, and congratulate Senator Heinrich for his tireless effort on the Good Samaritan bill last year, which was a great step in the right direction, and we were delighted to see signed into law.

Thank you, and I look forward to any questions.

[The prepared statement of Mr. Haddock follows:]

Haddock-Barrick

United States Senate
Committee on Energy and Natural Resources

Hearing to Receive Testimony on Pending Legislation
S. 362, S. 544, S. 596, S. 714, S. 789, and S. 859

March 12, 2025, 10:00 AM

Statement of Rich Haddock
Senior Advisor
Barrick Gold Corporation

Chairman Lee, Ranking Member Heinrich, and Members of the Committee, thank you for inviting me to appear before you on behalf of Barrick Gold Corporation and give testimony on legislation pending before the Committee. I would also like to note the bipartisan nature of the Mining Regulatory Clarity Act, as I have testified on these issues at the request of Chairs of both parties, in this Congress and prior Congresses.

I have been a practicing lawyer for 40 years, 30 of those as in-house counsel at mining companies. Before retiring as Barrick's General Counsel in 2022, I worked for Barrick for 25 years in various legal roles, and also served as Barrick's global Vice-President of Environment for three years.

I continue to serve as a Senior Advisor to the company.

Barrick Gold Corporation

Barrick is the second largest gold producing company in the world and biggest gold producer in the United States. Barrick has gold and copper mining operations and exploration projects in North and South America, Asia, Africa, Papua New Guinea, and Saudi Arabia.

Most of our U.S. gold production comes from Nevada where we operate Nevada Gold Mines LLC, a joint venture of Barrick and the Newmont Corporation. Nevada Gold Mines is the largest gold-mining complex in the world, with more than 7,200 employees, and 2,000 full-time on-site contractors who employ thousands more people in Nevada and around the country. Barrick procures $5 billion in goods and services in the U.S. every year. We have been operating mines in Nevada for over 40 years and some of our employees are third-generation Barrick miners.

Barrick's annual U.S. payroll is approximately $1.2 billion; most of those jobs are in northern Nevada. These mining jobs pay average annual wages of $94,000 – higher than any other industry in Nevada. Barrick is the second largest employer in the state of Nevada, and

importantly, because these well-paying jobs are principally located in ***rural*** areas, they have an outsized influence on the local economies in which they are situated.

Promoting The Growth of Mining in the United States

Most of Nevada Gold Mines' operations take place on unpatented mining claims on public lands managed by the Bureau of Land Management. About 85% of the land in Nevada is owned and managed by the Federal Government, more than any other state. Other (mostly) western states also have millions of acres of federal land that contain mineral deposits, many yet to be discovered. It follows that the Federal Government has a central role to play in fostering and promoting the growth of mining in the United States. Through its policies and actions, the government can ensure that the domestic mining industry flourishes, or it can create conditions (or allow them to persist) that discourage developments of domestic sources of minerals.

For most of the last 40 years, a healthy domestic mining industry was not a priority for policymakers. U.S. businesses could source their minerals and refined mineral products anywhere in the world; they did not need to be mined or processed in the U.S. The reality is that the mining industry has largely become an international industry over that same time. In many cases it has been cheaper to import minerals than to find, mine, and process them in the U.S. Production of some critical minerals has become focused in just a few mines in politically unfriendly jurisdictions where total global demand could be met by a race to the bottom of the most inexpensive production – often as a result of lax environmental standards, terrible labor conditions, and in some cases government financial support.

Also, importantly to industry decision makers, the U.S. has become viewed as a politically difficult, if not high-risk, jurisdiction because of the long permitting timelines, followed by seemingly endless litigation, and the constant threat of legislative proposals to gut the U.S. Mining Law. The U.S. is really only a destination for the most well-funded of international miners and for the most obvious and highly prospective deposits. For smaller, low-margin metal projects, which includes many critical minerals, the added procedural costs and financial impact of delay are simply too expensive, making it risky to invest in the U.S.

Recent global events have renewed our focus as a nation on the value of domestic minerals production, including mining, smelting, and refining. There is bipartisan recognition that the U.S. needs to secure supply chains and its own healthy domestic mining industry. Barrick welcomes this shift in perspective. It is in the economic and national security interest of the U.S. to enact policies that will attract exploration and capital investment in U.S. mineral projects, not only for the high-paying jobs and community benefits, but because a thriving mining industry is needed to secure supply chains of the minerals needed for American industrial and defense uses. But there is much focused work to be done.

Stated simply, in enacting mining legislation intended to develop domestic sources of minerals, Congress must answer two questions: (1) what policies will attract additional exploration interest and capital investment in U.S. mineral projects? and (2) who will provide the expertise to operate the new mines and mineral processing facilities? Modern industrial mining is a complex

enterprise that relies on expertise and skilled labor using the most advanced technologies. Most of the metals mined today in the U.S. are gold, copper, or iron, but the engineers, metallurgists, chemists, geologists, environmental scientists, equipment operators, and others who work at these mines are also the people with the education, skills, and experience that will be needed to operate the domestic lithium and other important mineral mines of the future. It is also the case that many minerals vital to national security and technology needs are byproduct minerals. They are not mined as the primary mineral, but instead are found in small quantities with primary metals like gold, copper, iron, lead, zinc, nickel, and other more economically viable minerals. Germanium and gallium are example of such by-products. Because it is typically not profitable to recover these minerals, they remain with mine wastes instead of being recovered. U.S. mining policy must be cognizant of the entire industry ecosystem.

In one way or another, all but one of the bills before the Committee today seek to promote domestic mining or critical minerals supply chains. S. 596, S. 714, and S. 789 are aimed at advancing or improving current U.S. policies prioritizing secure mineral production, processing, and supply chains. S. 544 is absolutely essential to continued mining on federal lands because it would alleviate uncertainty and disruption caused by the *Rosemont* decision so obviously necessary surface facilities can at least be permitted. S. 362 addresses a specific coal mining project in Montana. I am not familiar with the details surrounding this project, and feel unqualified to express views on Barrick's behalf about that legislation.

In contrast to the other five bills, most of which are bipartisan, S. 859 represents a giant leap backward. This bill, if enacted, would serve only as a barrier to mining in the U.S. and drive mining investment out of the U.S. at the very moment there is bipartisan consensus that we must increase domestic production and shore up the U.S. mining industry.

From Barrick's perspective, the most urgent of the bills is S. 544, the Mining Regulatory Clarity Act. The bill addresses the disruptive impacts of what is known as the *Rosemont* decision from the Ninth Circuit Court of Appeals. *Rosemont* has created massive uncertainty and litigation risk, and added more delay to a permitting process that is already too long and expensive. *Rosemont* has disrupted mine permitting on Federal lands and, even as we sit here today, is being used by mining opponents in litigation to attack agency approvals of proposed mines and mine expansions. This includes mines that would produce lithium, needed for batteries, and antimony, needed for national defense. It is imperative that Congress act quickly to remedy this situation; S. 544 would accomplish that.

S. 544 – The Mining Regulatory Clarity Act

Barrick strongly supports S. 544. Additionally, Barrick greatly appreciates the efforts of this Committee, in this Congress, and in the 118th for advancing the legislation. We are grateful as well to members of the Committee – Senator Cortez Masto, Senator Risch, and Senator Murkowski – for sponsoring the legislation.

S. 544 would create a second type of "mill site" that can be used to locate activities that are "ancillary" but necessary to mining, such as storage of rock and overburden removed from the mine to allow access to the ore deposit. For clarity, I will refer to this new kind of mill site as a

"subsection (c) mill site" (because it would be added to existing law as a new subsection (c), in contrast to the existing mill site claim provision in subsection (a) of existing law).

How the subsection (c) mill site addresses the *Rosemont* problem[1] requires further explanation.

Background: The "*Rosemont*" court in 2019 vacated a plan of operations for the Rosemont copper mine in Arizona because the Forest Service failed to confirm the "validity" of mining claims before it approved the mining plan.[2] As had been standard practice for decades, the operator proposed to use the surface of some of its unpatented mining claims to store mine waste. The Forest Service, following standard procedures, including detailed NEPA analysis, and applying a settled interpretation of the Mining Law in place for over 100 years, approved the plan. However, by requiring the company to establish "validity" first – which means that each claim has to be shown to contain a valuable mineral before it can be used for any purpose– the court wreaked havoc on 100+ years of Mining Law interpretation and practice, and 40+ years of federal permitting and land management regulations. In the past, validity determinations have been required only in limited cases, such as when patenting claims, in disputes with the government or a rival claimant, or when federal lands are withdrawn from mineral entry – in other words, when there is some active question of validity that needs to be answered, as opposed to this case where the question really is "what novel arguments can be used to block mines?." The Mining Law has never required standard validity determinations for claims as a prerequisite of mining, even for claims from which the minerals are being removed under an agency approved plan of operations. *Rosemont*'s introduction of validity as a standard permitting requirement created a "Gordian Knot" in Mining Law practice that did not exist previously and that must be undone.

Senator Cortez Masto, the principal sponsor of S. 544, introduced similar legislation in the 118th Congress to address the *Rosemont* problem. That bill – S. 1281 – would have explicitly restored the pre-*Rosemont* interpretation of the Mining Law, essentially reversing *Rosemont* by removing the requirement to establish validity before using unpatented mining claims for ancillary activities. Concerns and objections were raised, and discussed before this Committee in late 2023, that S. 1281 (and its companion legislation in the House of Representatives) would open the door to mining in Wilderness Areas, in National Parks, and on other protected federal lands, and to nuisance claims that would impair other projects, such as solar energy. From my perspective these were neither legally meritorious nor practically real arguments, yet despite assurances and amendments intended to address and relieve these concerns, the opposition persisted. Senate Energy staff, coordinating with Senator Cortez Masto, initiated discussions with the mining industry and conservation organization representatives to explore other ways to

[1] I testified in December 2023 and January 2024 before Senate and House Subcommittees about the *Rosemont* litigation and its potentially disastrous impacts on mine permitting. My written testimony described the *Rosemont* case and its impacts in detail. Rather than repeating that detail here, I recommend relevant portions of that written testimony and incorporate it here by reference. *See* Statement of Rich Haddock, Senior Advisor, Barrick Gold Corporation, Hearing to Receive Testimony on Pending Legislation, S. 1281 and S. 1742 Senate Committee on Energy and Natural Resources, Subcommittee on Public Lands, Forests, and Mining 4-14 (December 12, 2023); Statement of Rich Haddock, Senior Advisor, Barrick Gold Corporation, Hearing to Receive Testimony on Pending Legislation, H.R. 2925, H.R. 6862, H.R. 7003 and H.R. 7004, House of Representatives Committee on Natural Resources, Subcommittee on Energy and Mineral Resources 2-11 (January 31, 2024).

[2] Center for Biological Diversity v. U.S. Fish and Wildlife Service, 409 F. Supp. 3d 738 (D. Ariz. 2019), *aff'd* 33 F.3d 1202 (9th Cir. 2022).

resolve the problems caused by *Rosemont*. The result – the new subsection (c) mill site described above – was included in S. 4753, the Energy Permitting Reform Act of 2024, which this Committee advanced on a bipartisan basis. That same solution is now embodied in S. 544 as a stand-alone bill.[3]

Bill Provisions: The purpose of the bill is to provide federal land managers and mine operators with an alternative means to permit public lands uses that are reasonably incident to legitimate mining operations, including storage of mine waste rock and tailings in accordance with the definition of "operations" as used by federal land managers for decades. The legislation simply provides an alternative approach to permitting; it does not reverse or disturb the *Rosemont* holdings.

One of the most important provisions of this approach is that a subsection (c) mill site can only be located by an operator in connection with a mining plan of operations submitted to the Bureau of Land Management or U.S. Forest Service for review and approval. In other words, contrary to arguments raised by opponents, there is no pathway for these subsection (c) claims to be used to block other uses or create "nuisance claims", because they cannot be filed until an operator has a fully developed mining plan of operations and must be located within the plan of operations boundary.

When the plan is approved, the operator may use these new mill sites for any mine support facilities approved in the plan. The operator may locate, and the federal land manager may approve, the use of as many new mill sites as reasonably necessary to support operations within the plan of operations boundary. These new mill sites can be located on public land without regard to the mineral character of the land so the federal land manager need not investigate the mineral character of the land in connection with plan review and approval. Importantly, the current procedures and standards for plan review and approval under mining regulations adopted by BLM and the Forest Service remain in place without change. None of the substantive permitting or environmental requirements that mining operators must meet are changed by this legislation.

Other key provisions of S. 544 include:

- **Section 3** makes clear that this new type of mill site does not convey minerals to the locator/operator. A locator instead must claim minerals by locating lode claims or placer claims and would be required to comply with any requirements associated with such claims.

- **Section 4** limits the size of each subsection (c) mill site to 5 acres. The operator can locate as many subsection (c) mill sites as "reasonably necessary" to accommodate

[3] In Questions for the Record of the December 12, 2023 hearing referred to in Note 1, *supra*, I explained in detail how use of the original mill sites in the Mining Law (referred to herein for clarity as "subsection (a) millsites") is not a practical solution for the *Rosemont* problem. Responses of Rich Haddock, Senior Advisor, Barrick Gold Corporation, Questions for the Record of the December 12, 2023 Hearing of the Public Lands, Forests, and Mining Subcommittee 4-6 (January 12, 2024). Briefly, subsection (a) millsites can be located *near* mines, but cannot be on land that is "mineral in character." This and other limitations mean that subsection (a) mill sites often cannot accommodate necessary facilities such as roads, power lines, and mine waste structures.

approved ancillary facilities. Sections 5 and 6 provide that subsection (c) mill sites can be located over the same ground that the locator/operator holds or controls through the location of lode or placer claims without affecting the validity of the underlying lode or placer claims.

- **Section 7** provides that subsection (c) mill sites cannot be patented.

- **Section 8** is an extensive savings clause, developed in collaboration with conservation community representatives, that makes clear that this bill does not affect the government's ability to manage or control mining claims or mining operations on lands that have been withdrawn from location under the mining laws (such as National Parks) while confirming that the bill does not diminish any rights of a mining claimant under other law.

Importantly, subsection (c) mill sites would increase revenues to the United States. Currently, miners pay a maintenance fee of $200 per year for a lode claim. The draft legislation would impose an annual maintenance fee of $200 for each Subsection (c) mill site. Assuming the miner locates Subsection (c) mill sites ***and*** holds on to the underlying lode claim to continue mineral exploration, the miner would be paying $800 per year for four mill sites, plus $200 for the lode claim, for a total of $1000 per year for the area covered by the lode claim. The additional money would go into the Abandoned Hard Rock Mining Fund created by this bill to provide for the remediation of historical mining sites under the program created in the Infrastructure Investment and Jobs Act.

Finally, the draft legislation makes clear that nothing in the Act:

(1) would affect the government's ability to withdraw lands for any purpose, such as conservation or renewable energy,
(2) would resurrect rights in areas that have already been withdrawn, or
(3) would prevent or interfere with the government's regulation of withdrawn lands.

These last provisions should resolve any concerns raised by opponents about S. 1281 in the 118th Congress. S. 544 makes irreducibly clear that subsection (c) mill sites would in no way interfere with the U.S.'s ability to manage protected lands and exclude mining activity from them. It simply provides an alternative legal avenue for federal land managers to approve placement of ancillary features that does not require validity determinations and does not bring mine permitting to a standstill. All other permitting requirements remain. This bill addresses the *Rosemont* problem in a practical, narrowly-crafted and transparent way and we urge the Committee to advance the legislation as soon as possible.

Finally, as important as S. 544 is, it is only a start. *Rosemont* just made a broken system more broken. Comprehensive permitting reform, especially with regard to judicial review, remains crucial to any effort to increase domestic mining and we applaud the efforts of this Committee and the Committee on Environment and Public Works to fix that broken process.

The Critical Minerals Bills

Barrick applauds the efforts of Committee Members to continue building on existing U.S. policy to bring critical mineral mining and processing back to the U.S. and to develop secure supply chains in partnership with U.S. allies. These bills – assigning critical minerals responsibilities as they do to numerous agencies across the federal government – highlight the urgency and scope of the challenge, and underline the absence of a central hub for mineral location information and technology and policy development within the federal government. The Bureau of Mines, which was closed in 1996, once served many of these purposes. While I am not advocating reconstituting the Bureau as it previously existed and I realize that it is not the focus of this hearing, I do believe the challenge of securing domestic mineral supply chains requires some form of centralized effort to address and implement mineral policy and to be the repository of key information. Barrick stands ready to work with the Members of the Committee on solutions to address this issue in a comprehensive manner.

- **S. 596 – The Critical Minerals Future Act of 2025**

S. 596, sponsored by Senator Hickenlooper, would create a pilot program at the Department of Energy supporting at least three critical materials processing projects to be carried out in the U.S. using "innovative financial tools" such as price supports or price floors to attract private investment in domestic critical mineral projects. The bill properly recognizes the concerning reality that investors are reluctant to commit capital to materials mining and processing in the U.S. because of price instability, and market manipulation by China and other foreign actors, and focuses attention on what it will take to create a domestic supply chain. We support legislative solutions that strengthen the domestic supply chain and thank Senator Hickenlooper and his staff for their focus on this issue and for their engagement with industry.

- **S. 714 – The Critical Mineral Consistency Act of 2025**

S. 714, led by Chairman Lee and cosponsored by other members of this Committee, would amend the Energy Act of 2020 to create consistency between the list of "critical minerals" designated by the Secretary of the Interior and the list of "critical materials" maintained by the Secretary of Energy. This is common-sense legislation that has bipartisan sponsorship and received bipartisan support in the 118th Congress. Differences in lists create confusion over tax credits, availability of research funding, permitting, and other incentives in existing and law and future legislation. S. 714 would reduce uncertainty by incorporating all critical materials and critical minerals into one list maintained by the Secretary of the Interior. The Department of Energy's critical materials list already incorporates all minerals designated by DOI as critical. The legislation would fully synchronize the lists. To focus our national efforts, we support a single "living" list of the critical minerals that is responsive in real-time to our needs.

- **S. 789 – The Critical Minerals Security Act of 2025**

S. 789, sponsored by Senator Cornyn, would direct an ambitious knowledge-gathering initiative to learn about the location and control of critical minerals worldwide. It addresses the real problem of global competitors hostile to the U.S. securing mineral supply chains through various methods. Barrick supports the goal of ensuring that the U.S. is as resource-savvy as our global

competitors. We support further development of our national knowledge base about mineral resources, especially of domestic sources of minerals.

S. 859 – The Mining Waste, Fraud, and Abuse Prevention Act of 2025

S. 859, sponsored by Senator Lujan, is similar to S. 1742, the Clean Energy Minerals Reform Act, introduced in the 118th Congress by Ranking Member Heinrich. Barrick appreciates some nuanced aspects of S. 859 but cannot support the bill. To Barrick, the most important element of S. 859 is that it recognizes and retains the core principles of the Mining Law: self-initiation and security of tenure. Barrick also appreciates that, unlike past Mining Law reform proposals, S. 859 does not attempt to insert separate environmental provisions into the law. The bill recognizes that, like every other industry in the U.S., the mining industry must already comply with all federal, state (and sometimes tribal and local) environmental and historic/cultural protection laws and regulations.

We have many concerns with the bill which are too detailed to be fully listed here, but some of the most problematic issues are:[4]

- **Claim Maintenance Fee Provisions.**

S. 859 addresses the existing claim maintenance and location fee system. Barrick does not believe this system needs to be included into this new legislation, particularly in the manner proposed. S. 859 incorporates some parts of the existing regulatory language but not others, which would introduce confusion in an otherwise well-understood program.

- **Royalty and Fees.**

Royalties: Barrick has long supported the imposition of a reasonable net royalty, but is opposed to the imposition of a gross royalty as proposed by S. 859. The proposed gross royalty ignores that different hardrock ores are of different qualities and require different kinds of extraction techniques and, more importantly, bespoke processing facilities to make them into the end metal product. Hardrock geologic deposits are incredibly metallurgically complex. Often different ore bodies carrying the same commodity (such as copper or gold for example) require completely different processing facilities (i.e., "mills") to convert the raw ore into a commodity product that can be sold. For example, one gold mine might require a $150 million mill while another might require an entirely different $1.5 billion mill to produce the same amount of gold. Creating such bespoke processing facilities is an enormously expensive and complex undertaking, requiring

[4] I submitted testimony on S. 1742 in December 2023. Rather than repeating that information in detail here, I recommend relevant portions of that written testimony and incorporate it here by reference. *See* Statement of Rich Haddock, Senior Advisor, Barrick Gold Corporation, Hearing to Receive Testimony on Pending Legislation, S. 1281 and S. 1742 Senate Committee on Energy and Natural Resources, Subcommittee on Public Lands, Forests, and Mining 14-21 (December 12, 2023).

hundreds of millions of dollars and sometimes billions of dollars in engineering, pilot mill design and construction, full-scale mill design and construction, and commissioning. A gross royalty is a tax burden on all that massive capital investment. Rather than assessing the royalty on the value of what the miner separates from the ground, which is the value of what the U.S. brings to the enterprise, the proposed royalty is assessed at the end of a very capital-intensive refining process. It is akin to assessing the oil & gas royalty on gasoline instead of on crude oil.

Barrick believes the federal government should receive compensation for its minerals. But Barrick also believes firmly that it is short-sighted and bad policy to focus on just the royalty, which is only one aspect of the government's "take." Governments around the world choose the manner in which they take a share of mineral production for the nationally owned resource. In doing so developed countries employ two basic levers: taxes (including fees and duties), and royalties. In deciding what is an appropriate share for the government to receive, Congress should be looking at "total government take," the sum of all levers. Also, in our federal system, Congress cannot ignore taxation at the state level. State taxes, like Nevada's net proceeds tax (which is a large tax that operates like a net royalty), are part of government take, and affect project economics just as federal taxes and royalties do. As I have testified before, the U.S. total "take" compares reasonably to other developed mineral-producing nations such as Canada and Australia.[5]

Fees: In addition to the gross royalty discussed above, S. 859 would require a land use fee of four times the amount of the claim maintenance fee (in addition to the claim maintenance fee), and a reclamation fee of between 1% and 3% of the gross value of mine production. Importantly, the reclamation fee as proposed is just additional gross royalty and is proposed to apply to hardrock mining everywhere within the United States, including on private and state lands, not just Federal lands. Combined with the primary gross royalty, location fees, and claim maintenance fees, these additional fees will impose a significant and unworkable cost burden on U.S. hardrock mines. As we have illustrated in the past,[6] the cumulative effect of these royalties and fees, along with federal and state taxes, would mean a total U.S. government take of two-thirds of the value of an operation, which destroys any potential investment. As Congress considers Mining Law amendments and the imposition of royalties and fees, it must remember that the overall goal is to grow the domestic mining industry, which creates jobs and tax revenue, and the minerals the country will need in the coming decades.

- **Exploration Permits**

S. 859's new exploration permit requirement is unnecessary to protect sensitive resources, would discourage exploration, not advance it, and would place a massive burden on federal land

[5] Barrick appeared before the full Committee in a hearing on October 5, 2021, and submitted testimony and responses to written questions that explained in detail the policy and economic underpinnings of our position on royalties. Barrick also addressed our position more specifically in relation the proposals in this bill as embodied in S. 1742. Rather than repeating those arguments in this limited space, we recommend those materials and incorporate them here by reference. *See* Responses of Rich Haddock, General Counsel of Barrick Gold Corporation, Questions for the Record of the October 5, 2021 Hearing of the Senate Energy and Natural Resources Committee to Examine and Consider Updates to the Mining Law of 1872 2-10, 18-19, 20-22 26-31, 32-35 (October 29, 2021) and Note 4, *supra*.

[6] Note 5, *supra*.

managers. The current system of notice-level activities and permit-level activities should be retained.

- **"Undue Degradation".**

Another most troubling concern is the bill's definition of "undue degradation," which is a *sub rosa* amendment of the Federal Land Policy and Management Act (FLPMA) Section 302(b)'s "unnecessary or undue degradation" standard. The definition would displace decades of administrative and judicial interpretation of FLPMA by grafting into it the "substantial irreparable harm" standard that mining opponents have sought for decades. Section 306(c) of the bill then finishes the job by declaring that the Secretaries must withhold permission for any mineral activity that will result in undue degradation – the "mine veto."

Barrick cannot support this radical and unwarranted change to FLPMA and the Mining Law. It is simply unreasonable to expect any mining company to invest the time and money that it takes to find, engineer, and permit a mining operation knowing that it can have the investment wiped out at the end of the process.

In sum, Barrick cannot support S. 859 and asks that the Committee refrain from advancing it. As always, however, Barrick remains committed to working with Members of Congress to establish an appropriate net royalty regime that puts the myth that federal land miners pay nothing to rest once and for all.

Conclusion

Again, Barrick reiterates that advancing S. 544 is urgent and sends an important message that our nation is serious about mineral production. Barrick welcomes the opportunity to work with Committee Members on these and other issues.

Supplemental material to Mr. Haddock's Testimony follows, including:

(1) His written testimony before the Senate Committee on Energy and Natural Resources Subcommittee for Public Lands, Forests, and Mining on 12/12/2023;
(2) His written testimony before the House Committee on Natural Resources Subcommittee on Energy and Mineral Resources on 1/31/24;
(3) His responses to questions for the record for the Senate Committee on Energy and Natural Resources Subcommittee for Public Lands, Forests, and Mining hearing on 12/12/2023 (QFR Response dated 1/12/2024); and
(4) His Responses to Questions for the Record for the Senate Committee on Energy and Natural Resources hearing on updating the Mining Law of 1872, held on 10/5/2021 (QFR response dated 10/29/2021).

United States Senate
Committee on Energy and Natural Resources
Subcommittee on Public Lands, Forests, and Mining

Hearing to Receive Testimony on Pending Legislation
S. 1281 and S. 1742

December 12, 2023

Statement of Rich Haddock
Senior Advisor
Barrick Gold Corporation

Chairwoman Cortez Masto, Ranking Member Lee, Chairman Manchin, and Members of the Subcommittee, thank you for inviting me to appear before you to offer the views of Barrick Gold Corporation on S. 1281, the Mining Regulatory Clarity Act of 2023, and S. 1742, the Clean Energy Minerals Reform Act of 2023. S. 1281 is an important piece of legislation. I appreciate Chairwoman Cortez-Masto's hard work to get the bill to this hearing and I am pleased to be here to support it.

Barrick is the second largest gold producing company in the world and biggest gold producer in the United States. Barrick has gold and copper mining operations and projects in 13 countries in North and South America, Africa, Papua New Guinea, and Saudi Arabia. Barrick has also owned and operated mines in Australia during my tenure with the company. Accordingly, although I am primarily a U.S. Mining Lawyer, I am familiar with the mining legal and fiscal regimes in other mining jurisdictions around the world.

Most of our U.S. gold production comes from Nevada where we operate Nevada Gold Mines LLC, a joint venture of Barrick and the Newmont Mining Corporation. Nevada Gold Mines is the largest gold-mining complex in the world, with more than 7,000 employees and 4,000 contractors, who employ thousands more people, in Nevada and around the country. These jobs pay average annual wages of $94,000 – higher than any other industry in Nevada.

Most of Nevada Gold Mines' operations take place on unpatented mining claims on public lands managed by the Bureau of Land Management. About 85% of the land in Nevada is owned and managed by the Federal Government, more than any other state. Not all of this federal land in Nevada is open to mining exploration and development. About 22 percent of the State is withdrawn from mineral entry and another 10 percent has been proposed for withdrawal for Greater Sage Grouse management. The dominance of federal lands in Nevada means that the Mining Law is more important in Nevada than in any other state.

Before retiring as Barrick's General Counsel in 2022, I worked for Barrick for 25 years and was an in-house lawyer in the gold mining industry for 30 of the 38 years I have been practicing law. I also served as Barrick's global Vice-President of Environment for three years. I am familiar with almost every aspect of this company's U.S. operations, including the Nevada Gold Mines joint venture. I continue to serve as a Senior Advisor to the company.

The Mining Law

In my career I have participated in many administrative and Congressional debates and far too much litigation concerning the Mining Law. I reject the often-repeated criticism that the Mining Law should be changed because it is old. It was signed into law in 1872, the same year as the act that created Yellowstone National Park.

The Mining Law has survived so long for a simple reason: because it does what it was designed to do very effectively. The Mining Law is a land tenure law. It incentivizes the discovery and production of American mineral resources on federally owned lands. It also governs the relationships between claimholders and the U.S. government as paramount title holder, and between competing private claimants. The Mining Law can continue to function effectively if Congress passes the Mining Regulatory Clarity Act of 2023 to restore the longstanding interpretation and application of the law.

We have recently passed through an era in American history when not everybody thought it was a good idea to incentivize mining. During the last 40 years of unprecedented globalization, American businesses could obtain metals and metal products from any number of countries around the world. Mining exploration dollars and capital investment went to countries where it was easier or more attractive to mine for various reasons, including lower costs, especially labor, faster permitting timelines, and even in some cases government subsidies. It was cheaper to import minerals than to find and mine them in the United States. Some began to believe that in a global economy, a domestic mining industry was unnecessary. Congress closed the Bureau of Mines, and policymakers paid scant attention to the health of the domestic mining industry. At the same time, those who opposed mining, particularly on public lands, took the opportunity to attack the Mining Law as a problem to be resolved and sought to minimize domestic mining.

I hope we can agree that those days are over. Today, many of the minerals we need for energy, our economy and defense are produced in countries that cannot be trusted to remain good trading partners, or that don't adhere to American labor, environmental, and other standards. The President and a bipartisan majority in Congress agree that America once again needs to incentivize the production of domestic mineral resources. It is in the economic and security interest of the United States to do so. There is no dispute that we need reliable domestic supplies of minerals for economic development, electric vehicles, wind turbines, solar panels, semiconductors, medical technologies and treatments, mobile phones, computers, and satellites. We also cannot ignore the increasing need for minerals in national defense, including for vehicles, traditional weaponry, high-tech weaponry and munitions. Congress has appropriated billions of dollars to finance development of domestic mineral supplies for these uses.

We should not be drawn into a debate about which minerals matter the most or somehow think that different economic or regulatory schemes for different minerals would make sense. One broad lesson from the emerging energy economy of the last ten years and the overnight recognition of the importance of lithium (as an example) is that we do not know which minerals will become vitally important to our nation's economy and security in the future. For example, gold is widely used in space exploration because of its extremely advantageous properties of heat and corrosion resistance and high reflectivity. With China's view that the U.S. is militarily and economically vulnerable to China's space-directed initiatives, we cannot afford to create unneeded obstacles to domestic production.[1]

The Mining Law should continue to provide the land tenure framework for this renewal of domestic mineral exploration and production. I recognize the Mining Law is not perfect, and parts of it can be updated, but that is not unusual. Congress has amended the Mining Law many times in the past one hundred and fifty years, and as recently as the 1990s, when it ended patenting and added claim maintenance fees.

Barrick has supported updates to the Mining Law – including the imposition of a reasonable net royalty – since the early 1990s and continues to support needed changes. But we don't endorse change for the sake of change. We support a reasonable ***net*** royalty – this is long overdue – and other changes that will streamline the Mining Law, encourage exploration and bring more American mines into production. But here is the most important thing: changes to the Mining Law cannot make it more difficult to find and mine minerals or lessen or remove the incentives that draw mining capital to the United States. The Mining Law must unleash American brainpower and entrepreneurial spirit again to solve the riddles of mineral discovery and with speed and agility meeting future production needs for whatever minerals are necessary at the time for economic or national security. This is exactly what the incentives and self-initiation principle of the Mining Law do best—encouraging exploration and enabling production of whatever American minerals are needed at any given time.

Those are the standards by which any proposed Mining Law amendments should be measured. The purpose and effect of any changes to Mining Law must be to increase supplies of domestic minerals. If Congress makes it harder to find minerals and get mines into production, there will be less mining in the United States and we will not produce the minerals necessary for a successful carbon neutral transition and for our national security and to sustain the high quality jobs and taxes that mining provides, often in communities with little other economic opportunity. If royalties and fees are excessive, and permitting is prolonged by uncertainty and litigation, mining will happen in other countries, not here. It cannot be stated more simply than that.

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[1] "China's goal to establish a leading position in the economic and military use of outer space, or what Beijing calls its 'space dream,' is a core component of its aim to realize the 'great rejuvenation of the Chinese nation.' In pursuit of this goal, China has dedicated high-level attention and ample funding to catch up to and eventually surpass other spacefaring countries in terms of space-related industry, technology, diplomacy, and military power. … China views space as a critical U.S. military and economic vulnerability, and has fielded an array of direct-ascent, cyber, electromagnetic, and co-orbital counterspace weapons capable of targeting nearly every class of U.S. space asset." U.S.-China Economic and Security Review Commission, Chapter 4, Section 3, "*China's Ambitions in Space: Contesting the Final Frontier,*" 2019 Annual Report to Congress, November 2019, 359-60, https://www.uscc.gov/annual-reports.

Efforts to Make the Mining Law Unworkable, Department of Interior Response, and Litigation

In the past, ***some*** opponents of mining attacked the Mining Law because they didn't want mining to happen, particularly on public lands. There is no sugarcoating that reality. Some Mining Law reform efforts were (and still are) ***intended*** to reduce the amount of mining that happens in the United States. The Subcommittee should beware of reform proposals that make it more difficult and more expensive to mine, reduce lands available for exploration and mining, or that increase litigation and delay.

Part of the long-term strategy for mining opponents has been to reduce the public land available to support mining—lands for uses such as construction and operation of processing facilities, storage of waste rock or tailings, ore and soil stockpiles, truck shops, powerlines, pipelines, storage ponds, roads—all of the infrastructure that is necessary to get the ore out of the ground and turn it into a useful product. In the legal debate, these land uses have come to be called "ancillary" uses or activities, but they are absolutely essential for mineral production.

Two notable critics of the Mining Law— Interior Secretary Bruce Babbitt and his Solicitor, John Leshy – made legislative reform of the Mining Law a priority in the early 1990s. Ultimately their efforts failed. My view was that mining opponents were unsatisfied with the final proposed legislation. Though it offered a royalty, it did not include enough restrictions on mining on federal lands or create a completely separate set of environmental restrictions for mining. In short, they wanted more.

Following that legislative failure, Secretary Babbitt and Solicitor Leshy announced that they would seek to accomplish as much of the reform package as possible through administrative action.[2] Key components of that administrative package were two Solicitor's Opinion that restricted the lands available for ancillary uses. These opinions put into action a mining law strategy advocated by Solicitor Leshy before he became Solicitor, when he said that "it might even be appropriate for the Interior Department and the courts to **consciously reach results that make [the Mining Law] unworkable"**[3] in order to force reform. In other words, it might be necessary to break the Mining Law so that Congress would be forced to act. Those opinions planted the legal seeds that bring us all to this hearing room today.

The first prong of the effort to make the Mining Law unworkable involves the use of mill sites. In 1997, when Solicitor Leshy issued an opinion concerning the patenting and use of mill sites.[4] The Mining Law allows location and patenting of mill site claims of up to five acres, provided that they are 1) nonmineral, and 2) used for mining and milling purposes. The Millsite Opinion announced that the Department of the Interior should not approve patents or plans of operations that included a greater number of mill sites than associated lode claims. In other words, the

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[2] See Patrick Garver and Mark Squillace, Mining Law Reform—Administrative Style, 45 *Rocky Mtn. Min. L. Inst.* 14-1 (1999).
[3] John D. Leshy, Reforming the Mining Law: Problems and Prospects, 9 *Pub. L. L. Review*, 1, 11 (1988) and John D. Leshy, The Mining Law: A Study in Perpetual Motion, 282 (1987).
[4] Department of Interior, Opinion M-36988, "Limitations on Patenting Millsites Under the Mining Law of 1872," (1997).

Millsite Opinion claimed that the law only allowed a claimant to locate one five-acre mill site for each mining claim. The Millsite Opinion was never implemented. When the Department relied on the opinion to deny approval of the Crown Jewel Mine in Washington, Congress acted to block application of the limitation in the Millsite Opinion to that project or any other plan of operation that had been submitted prior to the opinion.[5]

In 1999, the Bureau of Land Management proposed a rule that would have limited claimants to five acres of mill site land "for each 20-acre parcel or patented or unpatented placer or lode mining claims . . . regardless of the number of lode or place claims located in the 20-acre parcel."[6] Similar to the Mill Site Opinion, this mill site rule was never adopted. Instead, after public comment, BLM adopted a rule allowing operators to locate as many mill sites as are "are reasonably necessary to be used or occupied for efficient and reasonably compact mining or milling operations."[7] The rule was challenged by environmental plaintiffs who urged the court to adopt the mill site acreage ratio as the only permissible interpretation of the mining law. The rule was upheld by a Federal District Court decision in 2020, [8] but an appeal is pending. Oral argument on the appeal is scheduled before the D.C. District Court of Appeals in January 2024. Thus, the long-term viability of the use of mill sites to support ancillary facilities remains uncertain.

The second prong of the effort to make the Mining Law unworkable involves restricting the ability of miners to site the ancillary uses mentioned above. In January, 2001, just days before a new a President was to be sworn in, Solicitor Leshy issued a second opinion addressing the use of mining claims for ancillary uses.[9] When approving a proposed plan of operations, the Ancillary Use Opinion directed BLM to inquire into the validity of the mining claims used for ancillary uses, and if there were "grounds" for questioning the validity, then BLM should not approve the plan until the operator either moves the facility, properly stakes mill site claims, obtains a discretionary permit from the BLM, or acquires the land through exchange or sale. The Ancillary Use Opinion was never implemented. It was contrary to BLM mining regulations adopted in 2001, and it was eventually formally withdrawn.

In the years since, environmental plaintiffs repeatedly attempted to revive the reasoning of the Ancillary Use Opinion in litigation challenging BLM's mining rules. Indeed, that effort and litigation led to the *Rosemont* and *Thacker Pass* decisions. In one of the early rounds of litigation over the ancillary use question BLM's mining regulations (including the definition of "operations") were upheld by a Federal District Court in 2003, apart from one question that was remanded to the BLM.[10] The question was whether FLPMA's preference that the government acquire "fair market value" for use of federal lands had been considered in the 3809 Regulations.

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[5] Consolidated Appropriations Act, 2000, Pub. L. No. 106-31, § 3006, 113 Stat. 57.
[6] 64 Fed. Reg. 47,023, 47,037 (proposed Aug. 27, 1999). Mining lawyers had quickly figured out that the one to one claim ratio in the Millsite Opinion could be manipulated by dividing lode and placer claims, which have a **maximum** size of 20 acres, into smaller claims.
[7] 43 C.F.R. § 3832.32.
[8] Earthworks v. U.S. Dept of the Interior, 496 F. Supp. 3d 472, 485 (D.D.C. 2020), *appeal docketed*, No. 20-05382 (D. D.C. Cir. Dec. 30, 2020).
[9] Department of Interior, Solicitor's Opinion M-37004, *Use of Mining Claims for Purposes Ancillary to Mineral Extraction* (Jan. 18, 2001.
[10] Mineral Policy Center v. Norton, 292 F. Supp. 2d 30 (D.D.C. 2003).

BLM was directed to consider whether FLPMA required the agency to charge "fair market value" for operations conducted on "unclaimed or inadequately claimed land." This was essentially the same argument as the Ancillary Use Opinion, because plaintiffs argued that BLM had to assess the validity of every claim within a plan of operations and address "invalid" claims under other FLPMA authority. On remand, BLM conducted a rulemaking and determined that there were no such on operations on unclaimed or inadequately claimed lands, but acknowledging there were many claims that were properly located by of unknown validity. BLM determined that evaluating those claims place an unbearable financial burden on the agency and disrupt mining regulations because the Mining Law and the 3809 regulations "create a 'cradle to grave' framework" based on a "long-established . . . practice of permitting mining operations on mining claims without requiring formal claim validity exams."

Environmental plaintiffs challenged BLM's response to the remand, urging the Federal District Court to adopt the reasoning of the Ancillary Use Opinion and require BLM to conduct claim validity examinations before approving mining plans of operations. In 2020, the District Court upheld BLM's rule.[11] The court stated that plaintiffs' interpretation of the law would "quietly upend the current claim system under the Mining Law" and it declined to read FLPMA "as silently working such a fundamental change to longstanding practice under the Mining Law."

Subsequently, in Federal District Court in Arizona, some of these same environmental plaintiffs who are litigating in the DC Circuit revived the reasoning of the Ancillary Use Opinion to challenge the Forest Service's approval of the plan of operations for the Rosemont Mine and found a more sympathetic judge. The District Court reversed approval of the Rosemont plan because the Forest Service did not confirm that the mining claims underlying proposed waste rock and tailings storage facilities were valid before approving the plan.[12] In May, 2022, in a 2-1 opinion, a Ninth Circuit panel affirmed the District Court's decision (though on different legal reasoning) and that brings us to S. 1281 and this hearing today.

S. 1281 - The Mining Regulatory Clarity Act

In September of this year, the full Committee held a hearing on issues affecting the domestic mineral supply chain. Dr. Daniel Yergin, Vice President of S&P Global predicted that U.S. demand for copper will double over the next twelve years, and demand for nickel, cobalt and lithium will increase over twenty-three times during the same period. Dr. Yergin identified permitting delays, uncertainty and litigation risk as the primary obstacles to meeting domestic mineral needs. At the same hearing, Deputy Interior Secretary Tommy Beaudreau, identified conflict and litigation as the biggest impediments to domestic mineral production.

In a report issued a few weeks ago, the Fraser Institute looked at just one slice of expanded mineral demand: electric vehicles. Based on existing goals for electric vehicle production and

[11] Earthworks v. U.S. Dept of the Interior, 496 F.Supp. 3d 472 (D.D.C. 2020). Plaintiffs initially appealed both parts of the District Court decision but withdrew their appeal of the Fair Market Value rule after the Ninth Circuit issued the *Rosemont* decision.

[12] Center for Biological Diversity v. U.S. Fish and Wildlife Service, 409 F. Supp. 3d 738 (D. Ariz. 2019), *aff'd*, 33 F.3d 1202 (9th Cir. 2022).

sales in the U.S. and Canada, the world will need 50 new lithium mines by 2030, along with 60 new nickel mines, and 17 new cobalt mines. The materials needed for cathode production will require 50 more new mines, and anode materials another 40. The battery cells will require 90 new mines, and EVs themselves another 81. In total, this adds up to 388 new mines. For context, as of 2021, there were only 270 metals mines operating across the U.S. and only 70 in Canada.[13]

These same themes have been identified by multiple witnesses in multiple hearings before multiple Senate and House committees and subcommittees. In response, Congress has appropriated billions and has begun to address significant permitting reform, with important NEPA reforms in the Fiscal Responsibility Act and permitting bills authored by the Chairman and Ranking Member of this Committee and others. But these efforts are doomed to fail unless Congress acts to resolve the uncertainty and litigation risk caused by *Rosemont.*

S. 1281 addresses the single most important source of legal uncertainty and litigation to the U.S. mining industry today. In May of 2022, the second prong of the effort to make the Mining Law unworkable finally bore fruit. After more than twenty years and many court and IBLA rejections of the rationale of the 2001 Ancillary Use Opinion, a panel of the Ninth Circuit Court of Appeals vacated Forest Service approval of a mining plan of operations for the Rosemont Copper Mine in Arizona. Two judges found that the Mining Law required that the Forest Service confirm that validity of mining claims that were proposed to be used for storing waste rock and tailings and remanded the decision back to the agency for further work. The dissenting judge would have found that the agency acted properly and in accordance with the intent and text of its longstanding mining regulations. The dissent pointed out correctly that the majority's reasoning in fact, made the mining law "self-defeating."

As we have had the time to analyze the impacts of the *Rosemont* decision, see it applied by two federal district courts in Nevada and interpreted by the Department of Interior's Solicitor, and evaluate the arguments that the anti-mining litigants still want to press, it is clear that leaving *Rosemont* unaddressed creates major uncertainty in mine permitting on federal lands and will lead to further litigation to resolve questions about the scope of the decision.

Before *Rosemont*, the scope of mining regulation on federal lands had been well settled in regulation and practice for over 40 years. The regulators and the operators both have had certainty concerning which lands are available for locating ancillary facilities. The Forest Service adopted regulations in 1974 and the BLM in 1980. Both required operators to submit plans of operations for review by the agencies before mining could begin on federal lands. Both sets of regulations have been revised and fleshed out with detailed agency guidance. The Forest Service regulations are published at 36 C.F.R. Part 228A and referred to as the "228 Regulations." The BLM regulations are published at 43 C.F.R. Subpart 3809 and referred to as the "3809 Regulations." Both sets of regulations cover mineral activities from initial exploration through production and reclamation, mine closure and post-closure maintenance, applying environmental performance standards and requiring financial assurance at each and every stage of the process to all facilities.

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[13] Kenneth P. Green, Fraser Institute, *Can Metal Mining Match the Speed of the Planned Electric Vehicle Transition?* (2023).

Both sets of regulations broadly define the "operations" that are subject to the regulations without regard to mining claim status. The Forest Service defines "operations" to mean:

> [a]ll functions, work, and activities in connection with prospecting, exploration, development, mining or processing of mineral resources and all uses reasonably incident thereto, including roads and other means of access on lands subject to the regulations in this part, **regardless of whether said operations take place on or off mining claims.**[14]

BLM's regulations are similar, defining "operations" as:

> [a]ll functions, work, facilities and activities on public lands in connection with prospecting, exploration, discovery and assessment work, development, extraction and processing of mineral deposits locatable under the mining laws; reclamation, or disturbed areas; and all other reasonably incident uses, **whether on a mining claim or not**, including the construction of roads, transmission lines, pipelines and other means of access across public lands for support facilities.[15]

BLM explained that it adopted the broad definition of operations so that it could manage mining on federal lands from "cradle to grave."[16] Since their adoption, BLM and the Forest Service have applied these regulations to hundreds of mining and exploration plans of operations. In no case, until the *Rosemont* decision, has the BLM or Forest Service investigated as part of mine permitting the mining claim status of lands proposed for mining operations on lands that were open to location under the mining laws.

The Rosemont Decision in Detail

The Rosemont copper mine was a typical large, open pit copper mine proposed to be located on National Forest lands in Arizona. The open pit was on a mix of private land and unpatented mining claims. The Forest Service reviewed the proposed plan under its 228 regulations and prepared an environmental impact statement. The EIS evaluated five different configurations for the storage of waste rock and tailings. In the decision approving the plan, the Forest Service selected a particular alternative that had the smallest disturbance footprint and avoided an important cultural site. The Forest Service also approved a reclamation plan that would require that the waste rock and tailings storage areas be reclaimed and returned to the prior land uses, wildlife habitat and grazing, after mining was concluded. Consistent with practice since the inception of the Mining Law, the Forest Service did not consider the status of any of the mining claims included in the plan of operations and did not constrain its selection of the preferred alternative based on mining claim status.

The Center for Biological Diversity and other groups challenged the Forest Service decision in federal court. The District Court reversed the agency's decision and held that the Forest Service applied the wrong regulations to the proposed waste rock and tailings storage facilities. According to the court, the Forest Service should have applied its special use regulations, rather than the 228 mining regulations because the mining claims were not valid. The court reasoned that the mining regulations only governed mining

[14] 36 C.F.R. § 228.3(a) (emphasis added).
[15] 43 C.F.R. § 3809.5 (emphasis added).
[16] 65 Fed. Reg. at 70,013 (Nov. 21, 2000).

activities on valid mining claims and because the Forest Service failed to confirm that the operator's mining claims were valid, it could not approve the mining plan under its mining regulations.[17]

But the Forest Service special use regulations contain no provision for the review or management of any mining or mining-related facilities. In fact, those regulations explicitly disavow any application to mining plans of operations. The special use regulations also prohibit the approval of facilities that include disposal of solid waste on Forest lands. Paradoxically, the district court mandated application of a legal framework that would not allow the Forest Service to approve the mine as proposed.

The Forest Service and the operator appealed to the Ninth Circuit Court of Appeals. Two judges in the three-judge panel affirmed the lower court's decision, but on different reasoning. A third judge dissented, finding that the Forest Service properly reviewed the mining plan of operations under its 228 regulations.

The majority opinion ignored the district court's conclusion that the agency had used the wrong regulations. It found that concern, as well as the dissent, "premature." Instead, the majority found that the Forest Service had erred when it "assumed that Rosemont's mining claims on [the land proposed to be used for waste storage] were valid." Of course, the Forest Service made no such assumption—the agency determined, in accordance with the long-standing definition of mining "operations," that all activities in the proposed plan of operations were to be reviewed under its mining regulations without regard to the status of the claims. The majority opinion dismissed that inconvenient fact in a parenthetical: "In the FEIS, the Service either assumed that Rosemont's mining claims on that land were valid or **(what amounted to the same thing)** did not inquire into the validity of claims."[18]

The majority opinion then determined that the record before the Forest Service included "no evidence" that the claims were valid and the agency's reliance on the 228 regulations was in error. The court remanded the decision back to the Forest Service to determine if its 228 regulations "are applicable to Rosemont's proposed occupancy of invalid mining claims with its waste rock, . . ."[19]

Application of the Rosemont Decision Today

The majority opinion's holding is quite narrow and based on an incorrect reading of the agency record, but the opinion also includes a long discourse on the Mining Law that as subsequently applied by lower courts and interpreted by the Department of Interior, leaves mining regulation on federal lands incredibly muddled. Further litigation is certain. Indeed, in a decision earlier this year, the United States District Court for the District of Nevada directed BLM to inquire into the validity of certain mining claims associated with the Thacker Pass lithium mine project, but did not vacate the approval of the mine plan of operations. Opponents of the mine appealed the decision not to vacate approval of the mine plan of operations, but that appeal was denied on procedural grounds. Appellants raised issues regarding the scope and application of the Rosemont

[17] Center for Biological Diversity v. U.S. Forest Service, 409 F. Supp. 738 (D. Ariz. 2019), *aff'd* 33 F. 4th 1202 (9th Cir. 2022).
[18] Center for Biological Diversity v. U.S. Forest Service, 33 F.4th, 1202, 1212 (9th Cir. 2022) (emphasis added).
[19] 33 F.4th at 1224.

decision, including specifically that the BLM was required to perform a claim validity determination akin to the examination required to support a patent application, but those were found to be untimely and were not considered by the Ninth Circuit panel, which ruled that the plaintiffs must first raise those arguments before the district court.

Shortly after the district court's decision on the Thacker Pass project, another Federal District Court in Nevada relied on the *Rosemont* decision to vacate BLM's approval of the proposed Mount Hope molybdenum mine. The Mount Hope deposit is considered one of the largest and highest-grade molybdenum deposits in the world. Molybdenum of course is used to make all manner of alloys, including steel alloys to increase strength, hardness, electrical conductivity, and to increase resistance to corrosion and wear—all uses that make it important for the future of this country. Unfortunately, the permitting history of the Mount Hope project is but another example of how appeals and litigation can unreasonably delay mining projects.

The proposed plan of operations for the Mount Hope molybdenum mine was originally submitted to BLM in June, 2006. The notice of intent to prepare an environmental impact statement was published in the Federal Register in March, 2007. The Draft EIS was made available for public comment in December, 2011, the final EIS was published in October, 2012 and the Record of Decision approving the project was issued the next month. BLM's decision was challenged by Great Basin Resource Watch and the Western Shoshone Defense Project. The Federal District Court for the District of Nevada upheld BLM's decision in July, 2014. Notably, in that appeal, these plaintiffs argued that BLM erred when it did not confirm validity of the Mount Hope mining claims before approving the plan of operations—the *Rosemont* argument. Consistent with every other decision on mining opponents' ancillary use attacks up to that time, the Nevada court applied established precedent and rejected that argument finding that the Mining Law did not require that BLM inquire into claim validity.

Plaintiffs appealed the 2014 decision to the Ninth Circuit Court of Appeals raising several environmental claims, but they did not pursue their ancillary use argument. In December, 2016, the Ninth Circuit affirmed most of BLM's decision, but remanded the project back to the agency for additional environmental analysis on two air quality issues and asked BLM to clarify the legal status of certain springs. BLM completed that work and published a Draft Supplemental EIS for public review in February, 2019, and a final Supplemental EIS in July, 2019. The Record of Decision approving the project was reinstated the next month. The same plaintiffs again challenged BLM's decision. In April, 2023, following briefing on the impact of the *Rosemont* decision, the same federal judge who approved the project nine years earlier, vacated the decision and sent the project back to BLM to evaluate the project's mining claims in light of the *Rosemont* decision.

The Department of Interior Recent Solicitor's Opinion

In May, 2023, the Solicitor of the Department of Interior issued an opinion,[20] binding on the agency, that extended the *Rosemont* court's strained reading of the Mining Law beyond the Ninth Circuit and ignored the text of the 3809 regulations and BLM's application of those regulations over the past 40 years. The Department offers the Solicitor's Opinion, and perhaps some subsequent guidance that has not yet been made public, as a solution to the practical

[20] Department of the Interior, Office of the Solicitor, Use of Mining Claims for Mine Waste Deposition, and Rescission of M-37012 and M-37057, May 16, 2023.

problems created by the *Rosemont* decision. Respectfully, I do not agree. Instead, the Solicitor's Opinion creates more uncertainty, guarantees further legal challenges to mining projects, and undermines the stated policy of this administration and a bipartisan majority of this Congress to encourage domestic mineral exploration and production.

The Solicitor's Opinion directs that BLM shall not approve "plans of operations where the operator proposes to place significant waste or tailings facilities on mining claims where BLM's record lacks evidence of the discovery of valuable mineral deposits underlying those facilities." The agency is given no guidance but to reject the proposed plan of operations. In those circumstances, the burden shifts back on to the operators to 1) submit additional evidence, 2) "re-site the ancillary uses on mill sites (as appropriate)," 3) seek a land use authorization under other BLM regulations ,or 4) seek to acquire title to the land through a land exchange or sale.

The Opinion effectively rewrites the 3809 regulations without any public notice or comment. The current regulations and 40 years of practice are dismissed in a footnote where the Solicitor "acknowledges that the Department's reading of the Mining Law has not remained static in the last several decades, and that BLM may have approved mining plans that, at least in part, are not strictly consistent with this memorandum."[21]

Congress should move forward and enact S. 1281 in the face of the Solicitor's Opinion for two important reasons: First, the Opinion does not settle the matter. Further litigation is certain. As I noted above, anti-mining plaintiffs continue to argue in the DC Circuit that the Mining Law only allows one five-acre mill site for each 20-acre lode claim. Second, and more to the point of the Committee's work, application of the Opinion is bad mining policy and will discourage and delay mining investment, exploration and production.

This Subcommittee should not assume that this Solicitor's Opinion will survive legal challenge any better than prior opinions. The majority opinion in the *Rosemont* case swept aside a 2020 Solicitor's Opinion that comprehensively evaluated the Mining Law and BLM practice and interpretation in two sentences, according the Opinion no deference because "the Solicitor has taken inconsistent positions" on the issue. The new Opinion is simply another inconsistent position.

The *Rosemont* decision left many questions unanswered targets for further legal challenges. The Solicitor's Opinion attempts to limit the *Rosemont* decision to its facts: an inquiry into claim validity is necessary only where an operator proposed to permanently occupy land with significant waste rock or tailings facilities. But mining opponents have already challenged that limitation and litigate both the scope of the decision—to which ancillary facilities does the claim validity requirement apply—and the process for determining claim validity, insisting on complete claim validity examinations on each and every claim.

In litigation over the Thacker Pass project, some plaintiffs argued that the *Rosemont* decision applied to every facility in the plan of operations, not just "permanent" features as argued by the Solicitor's Opinion, attempting to capture pipelines, transmission lines, roads, stockpiles, processing facilities, and all other uses. The court, however, found that argument untimely, so it was not resolved. Those plaintiffs argued that BLM cannot approve <u>any</u> mining facility on public land until it has determined that the underlying claims are valid. Thus, despite the Department of Interior's protestations to the contrary, the Solicitor's Opinion has resolved

[21] Solicitor's Opinion at p. 9, n.7.

nothing. Those same opponents argue that BLM must conduct a full claim validity examination for each claim included in the plan of operations—that the suggestion in the Solicitor's Opinion that BLM need only "some evidence" of claim validity is far too little. As they have already done, it is inevitable that mining opponents will continue to seek opportunities to raise these legal challenges.

The alternatives suggested by the Solicitor's Opinion will also result in further uncertainties and delays. Since the 3809 regulations were adopted in 1980, all major mine facilities have been reviewed under those regulations. After decades of pre-*Rosemont* consistency, switching to new systems and processes now will only cause further uncertainty and harm. The learning curve on putting a square peg in a round regulatory hole will add years of delay to every mining project forced to obtain new permits. The regulatory program was designed to review mining operations holistically. Requiring different permits for individual mine features will unduly complicate the permitting process, resulting in additional delays. Indeed, given the arguments that plaintiffs are making regarding ancillary uses in current litigation and permitting, mine proponents must necessarily engage in a guessing game to determine which facilities should be permitted under which regulations. Issuing special use permits or rights-of-way for mining facilities, rather than permitting them through plans of operations (as intended under FLPMA and done for decades) will also add more opportunities for litigation. Under BLM's 3809 regulations, mine plans are approved if the BLM finds that those plans include adequate measures to prevent "unnecessary or undue degradation," the standard imposed by FLPMA and defined in the regulations. Rights-of-way and other permits have different standards and afford BLM more discretion in making decisions. The exercise of that discretion is subject to legal challenge.

The Solicitor has also failed to consider important practical problems imposed by the opinion in mine permitting. For example, BLM's 3809 regulations require that every plan of operations with an open pit include an analysis of the feasibility of backfilling the open pit with waste rock. Waste rock is nothing more than naturally occurring material that must be moved from one place to another so miners can access ore. But miners need somewhere to place the waste rock. Backfilling is a preferred method of reclamation where a pit is mined out and the backfill rock will not create the risk of water quality problems. Nevada Gold Mines has placed billions of tons of waste rock as open pit backfill, essentially putting the rock back where it came from. Backfilling can work where the operator is mining in one portion of a pit, an adjacent pit, or a nearby underground mine but then places the backfill rock in the mined-out portion of a completed pit or the mine-out portion of an underground mine. But under *Rosemont* and the Solicitor's Opinion, the status of mining claims in a mined out open pit or underground mine creates a vexing legal question. Applying the *Rosemont* analysis, an operator must either show that the claims remain valid or that the lands are nonmineral in character and the operator must then stop and relocate the area as mill sites. Both create complex geologic questions of fact that are ripe for litigation. The necessary showings will be almost impossible to make. For surface mines, the pit has been designed to **the economic limits of mining at that date**, and the value has been removed but the rock just outside of pit wall is still mineralized, so it may not be available for location as either a mining claim or mill sites. For underground mines, the mining areas (stopes) have also been designed to the economic limits of mining at that date, but the adjacent rock will be mineralized and there may be mineralization stratigraphically above or below the mining areas that make location with a mining claim or mill site a vexing question. Further, after mining is completed, *Rosemont* (and the Solicitor's Opinion) require that miners must reevaluate their claim locations and decide which type of claim is appropriate, which as

noted above is anything but clear, and then go through the process of locating those claims on already located and mined ground. Again this complexity and uncertainty created by *Rosemont* and adopted by the Solicitor's Opinion, litigation is certain in either case.

Further experience with the *Rosemont* decision will lead to additional absurd results. We have underground mines where we are using the surface above the underground mine for ancillary uses, including rock crushers, roads, pipelines and even waste rock storage. While the valuable minerals remain in the ground, those claims are "valid," but when the underground mining is completed, those same claims would lose their validity under the *Rosemont* paradigm, even under a narrow reading of the decision, yet they certainly remain mineralized, again bringing into question whether the operator can relocate the claims as mill sites.

The suggestion of a land exchange or land sale is even more unrealistic. Experience, and litigation, has made land exchanges essentially unavailable for mining projects.

In 1994, ASARCO proposed a land exchange with the BLM to acquire land adjacent to its Ray Mine in Arizona for waste rock storage and other ancillary facilities. Asarco had mining claims on all of the lands that it sought to acquire. BLM completed an EIS in 1999 and issued a record of decision approving the land exchange in 2000. Then the litigation began.

First, the Center for Biological Diversity, the plaintiff in the *Rosemont* case, together with two other environmental groups filed a protest of exchange with the BLM. That protest was denied in May, 2001. The same parties filed an administrative appeal with the Interior Board of Land Appeals. In August, 2004, the IBLA denied the appeal and affirmed the BLM. The same parties then filed a complaint in United States District Court in Arizona. In June, 2007, the court upheld BLM's decision. The plaintiffs then appealed to the Ninth Circuit. In 2010, in a 2-1 opinion written by Judge Fletcher, the same judge who wrote the majority opinion in the *Rosemont* case, the court reversed BLM's decision approving the exchange because BLM did not require and evaluate a detailed mining plan for the lands that would be transferred to BLM.[22] In other words, the court required that BLM essentially evaluate a mining plan of operations for the lands that would be exchanged.

In a dissenting opinion, Judge Richard Tallman said that "the majority's holding is shortsighted and unreasonably impairs the BLM's ability to effectively manage the public lands in a manner that we all desire. In practice, the new minted quasi-[Mining Plan of Operations] requirement will unquestionably stifle, if not altogether stymie, land exchanges, especially whenever mining companies are involved or mining-related activities are contemplated. Indeed, this judicially created obstacle would be, in application, an impenetrable wall."[23]

But Asarco and BLM continued to pursue the exchange. **Nine years later**, a supplemental environmental impact statement was published and in October, 2019, BLM issued a record of decision approving the exchange. Another BLM protest followed, filed by the Center for Biological Diversity and the Arizona Mining Reform Coalition (also plaintiffs in the *Rosemont* case). That protest was denied, and in May, 2020, **twenty-six years after the exchange application was filed, the land was transferred**.

Another land exchange, proposed in 1994 by the J.R. Simplot company in Idaho and seeking only 719 acres of public land, still has not been completed. BLM initially approved the

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[22] Center for Biological Diversity v. U.S. Department of Interior, 623 F.2d 633 (9th Cir. 2010).
[23] Id. at 665.

exchange under an Environmental Assessment and Finding of No Significant Impact in 2007. That was followed by a protest and appeal to the IBLA. The protest and appeal were denied, but the plaintiffs challenged the BLM's decision in Federal District Court in Idaho. In May, 2011, the Federal District Court reversed BLM's approval of the exchange and required preparation of an EIS.

If ancillary uses cannot be effectively and efficiently reviewed and approved by the federal land managers, those uses and the mines they support will not happen. That is the inescapable reality. In the bills under consideration today, Senator Cortez Masto's Mining Regulatory Clarity Act would reestablish the understanding of the Mining Law that has been settled law for 100+ years, until the *Rosemont* court upset it, and Senator Heinrich's Clean Energy Minerals Reform Act also makes efforts to address the problems created by the *Rosemont* decision. Legislation is absolutely necessary. If *Rosemont* is not addressed effectively by Congress, you will be leaving in place a problem that will ensure years of litigation and delay, a result that is contrary to the goal of using domestic minerals to address climate, economic and defense needs.

Rosemont and its progeny leave the federal land managers and the mining industry with a permitting system that is unworkable for most mines in most circumstances. The prior interpretation and the existing regulations provide the cradle-to-grave framework necessary for rational regulation and operation. If Congress fails to clarify the regulatory requirements and return the federal land permitting regulations to the status quo before the *Rosemont* decision, domestic exploration and mineral production will not increase, they will decline.

S. 1742 - The Clean Energy Minerals Reform Act

Barrick applauds some aspects of S. 1742 but cannot support other provisions of the bill. To Barrick, the most important feature of S. 1742 is that it recognizes and retains the core principles of the Mining Law: self-initiation and security of tenure. Barrick appreciates that Senator Heinrich seeks to build on those two important Mining Law features instead of replacing them.

S. 1742 also retains most of the existing claim maintenance and location fee system, while putting into place a mechanism for both fees to be adjusted to keep up with inflation. This system has worked well since the 1990s. However, Barrick does not believe this system needs to be included into this new legislation, particularly in the manner proposed. S. 1742 incorporates some parts of the existing regulatory language but not others, which would cause problematic confusion in an otherwise well-understood program.

Barrick also appreciates that, unlike other Mining Law reform proposals, S. 1742 does not attempt to insert separate environmental protection standards into the Law. Barrick applauds and supports the bill's recognition that – like every other industry in the U.S. – the mining industry must already comply with all of the federal, state, (and sometimes tribal and local) environmental and historic/cultural protection requirements. An obvious mark of anti-mining sentiment in Mining Law advocacy is the contention that the Mining Law is outdated because it contains no environmental standards. By that logic, legislation governing other American industry also must be deficient. The mining industry – like every other industry in the U.S. – is subject to the many

environmental laws and rules that have been adopted at the federal and state levels since the 1960's. S. 1742 acknowledges this reality.[24]

- **Royalty and Fees.**

As I already noted, Barrick supports a reasonable net royalty, but is opposed to the imposition of a gross royalty as proposed by S. 1742. Initially, it is important that this royalty discussion not be muddled by nomenclature. Rather, it is important to actually examine how the royalties are applied. Coal and oil and gas royalties are commonly described as "gross" because they nominally attach at the mine mouth or wellhead, but in application are "net" of any downstream processing costs because those costs are deducted before the royalty is calculated. In fact, the DOI's rules have always allowed deductions for "processing" when calculating the royalty on gas, and transportation costs for both oil and gas. *See* 30 C.F.R. §§1206.109, 110, .111 (transportation deductions for oil); §1206.156 (transportation deductions for gas); §§ 1206.158., 159 (processing deductions for gas). Similarly, DOI allows deductions for transportation and washing of coal. 30 C.F.R. §§ 1206.262, -.263, -.264 (transportation deductions for coal); §§ 1206.267, -.268, -269 (washing deductions for coal). Of course, coal washing is an expense incurred to make the coal saleable, akin in the hardrock world of processing that the raw ore must undergo to become a saleable product.

The proposed gross royalty also ignores that different ores are of different qualities and require different kinds of extraction techniques and, more importantly, bespoke processing facilities to make them into the end metal product. Hardock geologic deposits are incredibly metallurgically complex, and often different ore bodies carrying the same commodity (such as copper or gold for example) require completely different processing facilities (i.e., "mills") to convert the raw ore into a commodity product that can be sold. Creating such bespoke processing facilities is an enormously expensive and complex undertaking, requiring hundreds of millions of dollars and sometimes billions of dollars in engineering, pilot mill design and construction, full-scale mill design and construction, and commissioning. A gross royalty is a tax burden on all that massive capital investment. Rather than assessing the royalty on the value of what the miner separates from the ground, the proposed royalty is assessed at the end of the refinery. It is akin to assessing the oil & gas royalty on gasoline instead of on crude oil.

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[24] Among others, mining operations must comply with the following federal laws, which belies the oft-repeated argument that the mining law is "old" or has not been "updated:" Federal Land Policy and Management Act 43 U.S.C. § 1703(b); Forest Service Organic Act 16 U.S.C. § 478; National Environmental Policy Act 42 U.S.C. § 4321 et seq.; Clean Air Act 42 U.S.C. § 7401 et seq.; Clean Water Act 33 U.S.C. § 1251 et seq.; Safe Drinking Water Act 42 U.S.C. § 300f et seq.; Resource Conservation and Recovery Act 42 U.S.C. § 6901 et seq.; Emergency Planning and Community Right to Know Act 42 U.S.C. § 11001 et seq.; Toxic Substances Control Act 15 U.S.C. § 2601 et seq.; Mercury Export Ban Act; 15 U.S.C. §§ 2607, 2611; 42 U.S.C. § 6939f; Endangered Species Act 16 U.S.C. § 1531 et seq.; Wilderness Act; 16 U.S.C. § 1131 et seq.; Wild and Scenic Rivers Act, 16 U.S.C. § 1271; National Historic Preservation Act, 54 U.S.C. §§ 300101.

By asking that any royalty be "net" the mining industry is simply asking that we be treated fairly and that the investment we make in converting the rock into saleable product be recognized, just as Nevada's Net Proceeds of Minerals Tax does. One positive aspect of S. 1742's royalty provisions is that they would be imposed prospectively, and not on operating mines with commercial production existing on the date of enactment. These are mining operations whose economics were determined without counting a federal royalty as a cost; imposing a royalty on existing producing mines would be especially disruptive and could be viewed as a taking of large capital investments.

To be clear, the foregoing are not arguments against imposing a royalty; Barrick believes the federal government should receive compensation for its minerals. Barrick and other miners supported a net royalty that was included in a 1995 budget reconciliation package passed by Congress, but which was vetoed (on other grounds) by President Clinton. But Barrick believes firmly that is short-sighted and bad policy to focus on just the royalty, which is only one aspect of the government's "take." Governments around the world choose the manner in which they take a share of mineral production for the nationally owned resource. In doing so there are three basic levers: equity, taxes (including fees and duties) and royalties. In deciding what is an appropriate share for the government to receive, Congress should be looking at "total government take", the sum of all three levers. Also, in our federal system, Congress cannot ignore taxation at the state level.

Barrick appeared before the full Committee in a hearing on October 5, 2021, and submitted testimony and responses to written questions that explained in detail the policy and economic underpinnings of our position on royalties. Rather than repeating those arguments in this limited space, we recommend those materials and incorporate them here by reference. *See* Responses of Rich Haddock, General Counsel of Barrick Gold Corporation, Questions for the Record of the October 5, 2021 Hearing of the Senate Energy and Natural Resources Committee to Examine and Consider Updates to the Mining Law of 1872 (October 29, 2021).[25]

In addition to the gross royalty discussed above, S. 1742 would require a land use fee of four times the amount of the claim maintenance fee (in addition to the claim maintenance fee), and a reclamation fee of between 1% and 3% of the gross value of mine production. This reclamation fee as proposed is just additional gross royalty. Combined with the primary gross royalty, location fees, and claim maintenance fees, these additional fees will impose a significant and

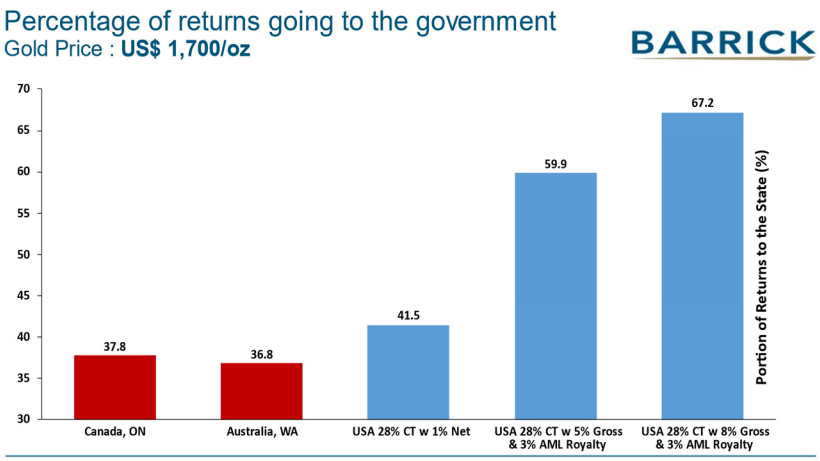
[25] S. 1742 authorizes the Secretary to set royalty rates (within a range), and to offer royalty relief. Both provisions suggest an understanding that hardrock minerals are diverse, and that royalty relief is sometimes necessary in an industry characterized by price cycles. A net royalty addresses both of these problems, and in a way that involves significantly fewer administrative burdens than those caused by the gross royalty in S. 1742. First, a net royalty "normalizes" for ore grade, differences in mineral processing costs, global market prices, and other variables. In that way, a net royalty makes it unnecessary to conduct and periodically updated complicated rulemaking processes to determine appropriate royalty rates for different hardrock minerals. Second, a net royalty accounts for price cycles, ensuring that royalties are not the cause of mine closures in down cycles, and making it unnecessary for the Secretary to engage in the factfinding necessary to determine if royalty relief is warranted.

unworkable cost burden on U.S. hardrock mines. As Congress considers Mining Law amendments and the imposition of royalties and fees, it must remember that the overall goal is to incentivize and grow the domestic mining industry, which creates jobs and tax revenue, and the minerals the country will need in the coming decades.

The amounts of royalties and fees matter a great deal. These are policy choices as much as revenue choices for the United States. If government taxes, royalties, and fees are excessive or punitive, they will raise the cost of investing in the United States too much and discourage, not ensure, future domestic mining, at a time when the U.S. government has recognized that it needs a domestic supply chain.

As mentioned above, Congress should not ignore that miners, like any other businesses, evaluate the "total government take" in deciding where to invest their capital. Mineral economists have developed an approach that allows the total tax burden (all forms of taxes, fees, royalties, duties, etc.) in one jurisdiction to be compared to that in others. This provides a standardized way in which to compare the government tax burden in different countries. When considering changes to the Mining Law, and especially the appropriate level of royalties and fees, Congress must understand how the U.S.'s total government takes compares to other favorable mining jurisdictions, and how that figure may result in more- or less- future mining investment in the United States.

To evaluate the impacts of the proposed royalties and fees in S. 1742 we created a hypothetical mine in order make an apples-to-apples comparison between jurisdictions. We compared what the total government economic take would be if the mine were in Australia or Canada and what it would be in the U.S. (Nevada) under the type of royalty proposed by Barrick and the royalty and fees proposed by S. 1742. The hypothetical mine is a "tier one" gold mine, which means it has more than 10 year of mine life with at least 500,000 oz. of annual production. This mine would be a very robust mine. A less robust mine would see even a greater percentage of government take. The percentage of Government take would increase at lower metal prices if royalties are gross. Note we assumed a corporate income tax rate of 28%, well below even the 40 year average rate. The graph speaks for itself.



In short, the royalties and fees proposed by S.1742 would be hugely more than governments receive in the developed world, leaving the miner little incentive to invest or develop here and forcing Americans to leave home if they want to work in mining, or worse stifling the development of American know-how. In the west, where public lands dominate, this reduces the ability of U.S. citizens to access good-paying mining jobs and acts as a socioeconomic penalty.

- **Exploration Permits**

S. 1742 would require an exploration permit for all mineral exploration on federal lands. BLM currently allows exploration to proceed under a notice (i.e., does not require a plan of operations) if the total surface disturbance is five acres or less and the operator has an approved reclamation plan with financial assurance. S. 1742 would eliminate notice-level exploration. This provision would create a severe disincentive to the most necessary and basic form of grassroots exploration in the U.S., reducing the opportunity for, and the value of, the Mining Law's self-initiation principle. Notice-level activity is the geologic equivalent of a litmus test, the most basic exploration activity, that gives a geologist some real information, but nowhere near full information, to begin to develop a geologic understanding and plot the next (expensive) geologic investigations. Finding valuable ore deposits takes a huge amount of exploration activity, and a lot (perhaps most) of that exploration is performed by smaller companies or even individuals that prospect and locate deposits and then sell them or enter into joint ventures with larger operators (like Barrick). Ultimately, less than 1 in 10,000 exploration projects become mines.[26] Requiring each one of these exploration activities to obtain a permit will burden the exploration process and

[26] "Mining 101," Ontario Mining Association, at https://oma.on.ca/en/ontario-mining/Mining101.aspx (accessed Dec. 4, 2023).

delay, not enhance, the discovery of promising mineral deposits. Even on the very conservative assumption that the Ontario Mining Association was off by a factor of 10 it would still take 1,000 notice-level exploration projects to lead to a mine, and with an added cost of $100,000 to each to obtain the permit, which is also a conservative cost figure for the development and processing of an exploration permit application with NEPA compliance, you have added at least $100 million dollars to the capital cost of the next mine project (10^3 x 10^5). That added cost alone would kill many projects. Eliminating notice-level activity would also create a severe administrative burden for the BLM, which already struggles to keep up with its Mining Law and NEPA responsibilities. Indeed, it would impose the same magnitude of costs on the BLM.

Further, eliminating the notice system is unnecessary. The existing system already requires miners to notify BLM of its activities, to avoid cultural resources and sensitive species, to reclaim completely at the conclusion of the notice-level work, and to provide financial assurances. If the notice-level activity is proposed in a sensitive area or would otherwise pose unusual risks or raise significant environmental issues, BLM already has the authority to require that a full plan of operations be submitted.

Some critics complain that the existing notice system does not keep tribes, communities, and other stakeholders informed, leaving them in the dark about mineral activities that may affect them. S. 1742 may be trying to address that concern by requiring public notice before an exploration permit is issued. However, such a statutory requirement is simply not necessary to inform the public. The information is already public; BLM just needs to make it more accessible. Notices are public documents and could be shared by BLM creating a publicly accessible database, such as a web-based register of notice-level operations. BLM already has the information necessary about notice-level activities to inform the public, and Barrick supports prompt delivery of that information to stakeholders and the public.

- **Status of the General Mining Laws.**

Barrick is concerned about the potential for confusion, delay, and litigation arising from Section 506(c)(2) of the bill, which provides that the Act "supersedes the general mining laws, except for the provisions of the general mining laws relating to the location of mining claims that are not expressly modified by this Act." The provision is so ambiguous and vague that the reader is left to figure out what it is intended to eliminate and what it is intended to preserve. In any event, this language ensures disagreement and litigation about its meaning. Barrick believes that changes to the Mining Law should be specific and surgical, and that the parts of the Law that are working well should be left in place, along with the decades of administrative and judicial precedent that surround and support them. An example (also noted above) are the claim maintenance provisions in Section 102, which appear to restate existing law but also exclude some provisions. The significance of the inclusions and exclusions here and elsewhere in the bill will translate into administrative confusion, delay, and litigation.

- **"Undue Degradation".**

Another most troubling concern is the bill's definition of "undue degradation," which is a *sub rosa* amendment of the Federal Land Policy and Management Act Section 302(b)'s "unnecessary

or undue degradation" standard. The definition would displace decades of administrative and judicial interpretation of FLPMA by grafting into it the "substantial irreparable harm" standard that mining opponents have sought for decades. Section 306(c) of the bill then finishes the job by declaring that the Secretaries must withhold permission for any mineral activity that will result in undue degradation – the "mine veto."

Barrick cannot support this radical and unwarranted change to FLPMA and the Mining Law. It is fundamentally inconsistent with the other provisions of S. 1742 that purport to keep the existing mining claim system in place. The new standard will be a cudgel for opponents of any and all mine projects on federal lands; it will result in project delays and litigation that will make today's permitting problems seem modest by comparison. And that assumes that major mining investments will continue to happen. It is more likely that mining companies simply will not invest the capital necessary to bring a mine into production when the project can be stopped apparently at any time, even after hundreds of millions of dollars have been spent and all standards and requirements of state and federal environmental laws are met.

- **Withdrawals**

The appropriate way to identify lands unsuitable for mining is via the land use planning process and withdrawal of such lands, before significant capital is invested. FLPMA provides for administrative withdrawals and millions of acres have been withdrawn from mining under that authority. Section 307 of the bill proposes to build on that process, but it does so in an expansive way.

Rather than taking a measured approach, the withdrawal portion of the bill will vastly expand the lands considered and eligible for withdrawal. For example, the bill specifically calls out "National Conservation Areas" for withdrawal. But National Conservation Areas are designated for a completely different purpose—to make federal funds available for the U.S. Fish & Wildlife Service to purchase conservation easements on private land. Those designations are often outsized because they are meant to make as much private land as possible eligible for the federally funded easements. As such, they should not be used for land management planning for *public* land, which is of course addressed in a robust way under the land management statues, such as FLPMA for BLM managed lands. The recently proposed Missouri Headwaters Conservation Area in Montana is a perfect example—the U.S. Fish & Wildlife Service has designated almost 6 million acres to enable conservation easement purchases of only 125,000 acres of private land. But under this bill, that full 6 million acres is specifically called out for withdrawal because it would be a National Conservation Area.[27] But now is not the time to withdraw massive tracts of land from mineral exploration. Indeed, the United States Geological Survey announced in July 2023 a plan to conduct geological surveys for critical mineral resources in a portion of this very same area in Southwest Montana.[28]

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[27] Another example is the Dakota Grassland Conservation Area, which covers approximately 30 million acres of North and South Dakota—vast portions of each state—to enable conservation easements on 2 million acres of private land. Land Protection Plan, Dakota Grassland Conservation Area, North Dakota and South Dakota, https://www.govinfo.gov/content/pkg/GOVPUB-I49-PURL-gpo38042/pdf/GOVPUB-I49-PURL-gpo38042.pdf.

[28] Press Release, U.S. Geological Survey, Bipartisan Infrastructure Law Funding Helps Map Critical Mineral Resources in Montana (July 13, 2023), https://www.usgs.gov/news/national-news-release/bipartisan-infrastructurelaw-funding-helps-map-critical-mineral.

- **Mine Veto**

Section 306 of S. 1742 appears to contain a new mine veto mechanism whereby BLM can veto a mine plan of operations after all of the investment has been made and the permitting completed. This language is closely related to the definition of "unnecessary or undue degradation." This language requires significant clarification before we can provide meaningful comments. At best, the vague and ambiguous nature of this language would lead to uncertainty, risk, and litigation, and as a result diminish and discourage mineral investment.

Conclusion

Barrick welcomes the opportunity to work with Senator Heinrich and other members of the Committee to refine the suggested approach of screening and protecting sensitive lands via land use planning. The "mine veto" is not the answer nor is expansive but vague withdrawal power outside the land management statutes; both will discourage mining investments and undermine the goal of establishing domestic sources of minerals.

United States House of Representatives
Committee on Natural Resources
Subcommittee on Energy and Mineral Resources

Hearing to Receive Testimony on Pending Legislation
H.R. 2925, H.R. 6862, H.R. 7003, and H.R. 7004

January 31, 2024, 2:00 PM

Statement of Rich Haddock
Senior Advisor
Barrick Gold Corporation

Chairman Stauber, Ranking Member Ocasio-Cortez, and Members of the Subcommittee, thank you for inviting me to appear before you on behalf of Barrick Gold Corporation and give testimony on H.R. 2925, the Mining Regulatory Clarity Act of 2023, and H.R. 6862, to amend the FAST Act. We are pleased to support both bills, which in different ways address the problem of persistent and intractable permitting delays that keep the domestic mining industry from moving forward to meet national mineral needs. H.R. 2925, introduced by Nevada Congressman Mark Amodei, and cosponsored by Congresswoman Mary Peltola, would resolve severe permitting uncertainty and litigation delays caused by a 2019 outlier court decision known as the "*Rosemont*" decision. Congressman Doug Lamborn's H.R. 6862 would block an ill-considered proposal by the Federal Permitting Improvement Steering Council to keep mining operations from accessing Fast 41's expedited permitting tools.

The House Natural Resources Committee and this Subcommittee have been leaders in investigating the reasons for permitting delays, and in proposing solutions, all with the goal of strengthening the United States' capacity to supply its own mineral needs. Your hearings have identified the need for expanded domestic mineral production, including mineral processing, so that the U.S. is not dependent on supply chains based in countries that may not remain reliable partners. The Committee has devoted significant time and attention to important permitting reform legislation, including Chairman Stauber's H.R. 209, the Permitting for Mining Needs Act of 2023, which includes the provisions of H.R. 2925. Barrick is grateful for your attention to these issues.

Barrick Gold Corporation

Barrick is the second largest gold producing company in the world and biggest gold producer in the United States. Barrick has gold and copper mining operations and projects in 13 countries in North and South America, Africa, Papua New Guinea, and Saudi Arabia.

Most of our U.S. gold production comes from Nevada where we operate Nevada Gold Mines LLC, a joint venture of Barrick and the Newmont Mining Corporation. Nevada Gold Mines is the largest gold-mining complex in the world, with more than 7,000 employees and 4,000 contractors, who employ thousands more people, in Nevada and around the country. These jobs pay average annual wages of $94,000 – higher than any other industry in Nevada.

Most of Nevada Gold Mines' operations take place on unpatented mining claims on public lands managed by the Bureau of Land Management. About 85% of the land in Nevada is owned and managed by the Federal Government, more than any other state. Not all of this federal land in Nevada is open to mining exploration and development. About 22 percent of the federal lands in the State is withdrawn from mineral entry and another five percent has been proposed for withdrawal for Greater Sage Grouse management.

Barrick is proud of the progress it is making globally on its sustainability objectives and practices. It is a process of continuous improvement. Of particular note in North America is our now decades-old dialogue with the Native American communities in northern Nevada, Southern Idaho and Western Utah. Our efforts have resulted in improved communications about a range of issues, including our future planned operations, processes for financially supporting community projects, cultural resources and cultural understanding. We have increased Native American employment. But I am proudest of the scholarship foundation we established in 2008 initially with the Western Shoshone tribes, but which with their generous consent has been extended to students from other Native American Tribes. The scholarship program provides financial assistance for university education and/or vocational/technical training for any eligible student. Over $15 million has been donated to the foundation so far, with over 2,760 scholarships awarded. Graduates have moved forward to enter all walks of life. We are also proud of our 278 MW solar array in Nevada and work to decarbonize our mining operations. We are grateful for the letter of support we have received from the Native American tribes.

Before retiring as Barrick's General Counsel in 2022, I worked for Barrick for 25 years and was an in-house lawyer in the gold mining industry for 30 of the 39 years I have been practicing law. I also served as Barrick's global Vice-President of Environment for three years.
I continue to serve as a Senior Advisor to the company.

H.R. 2925 – The Mining Regulatory Clarity Act of 2023

Simply stated, H.R. 2925 is absolutely necessary because of one court's misreading of the Mining Law, federal land management authorities, and regulations implementing those laws. The "*Rosemont*" court vacated a plan of operations for the Rosemont copper mine because the Forest Service failed to confirm the "validity" of mining claims before it approved the mining plan.[1] That decision wreaked havoc on 100+ years of Mining Law interpretation, and 40+ years of federal permitting and land management regulations. The additional permitting burden and additional uncertainty caused by *Rosemont* and its growing progeny threatens to add years of litigation delay to virtually any proposed mining project on federal lands in the U.S., and in the worst case could make some mines unfeasible. This result has to be avoided. It is starkly contrary to Congress' and the Biden Administration's expressed desire to expedite mine permitting and to build up domestic mineral supply chains.

[1] Center for Biological Diversity v. U.S. Fish and Wildlife Service, 409 F. Supp. 3d 738 (D. Ariz. 2019), *aff'd* 33 F.3d 1202 (9th Cir. 2022).

- **Mining Claims and Claim "Validity" Under the Mining Law of 1872**

The Mining Law made lands in the public domain "free and open" to mining and activities reasonably related to mining.[2] Under the Law, a prospector can "locate" a lode mining claim on federal land.[3] The prospector's right in that mining claim is a property right, enforceable against third parties, and subject to diminution or defeasance only by the ultimate title holder: the United States.[4] Relying on the doctrine of *pedis possessio*, courts have recognized these property rights in unpatented mining claims for more than 100 years. Miners can use and occupy those claims for mining operations, subject, of course, to federal permitting requirements. Similar Mining Law provisions also allow use of non-mineral land – called mill sites – in certain circumstances.[5]

However, a person cannot locate a claim under the Mining Law for any purpose other than mining or activities directly relating to mining.[6] Such a location is a nullity, void *ab initio*.

Until 1994, prospectors could go further, obtaining fee title in mining claims by applying for a patent. To obtain a patent, a prospector had to be able to prove the claim contained a valuable mineral "discovery."[7] Discovery requires a showing that the deposit can be mined, removed and marketed at a profit. Proof of such a discovery established the mining claim as "**valid**," justifying the issuance of a patent to a prospector. Applying for patent was never required; the Mining Law allows the miner to stake a claim, work it, and remove and sell minerals from it without ever seeking a patent. The important point here is that proper location and maintenance of a mining claim affords the claimant substantial legal rights to use the land for mining purposes, without regard to whether the claim has undergone a validity examination.

Traditionally, claim "validity" as against the United States had to be proven only in two contexts: (1) patenting, as just described; and (2) withdrawal of federal lands from entry under the Mining Laws. The issue no longer arises in the patenting context because Congress imposed a moratorium on new patent applications in a 1994 appropriations bill,[8] and the moratorium has been extended and reimposed every year since, remaining in place until today.

Claim validity remains relevant when the U.S. withdraws federal lands from mineral entry, either legislatively or administratively. After withdrawal, unpatented mining claims can be extinguished by the U.S. *unless* the claimant can show they contain a discovery, i.e., that they were "valid" as of the date of withdrawal.

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[2] 30 U.S.C § 22.
[3] *Id.*
[4] Davis v. Nelson, 329 F.2d 840, 846 (9th Cir. 1964).
[5] 30 U.S.C. §42.
[6] U.S. v. Bagwell, 961 F.2d 1450 (9th Cir. 1992) ("good faith" standard limits possession of public lands to locators exploring for and developing minerals as contemplated by the Mining Law of 1872); John D. Leshy, The Mining Law: A Study In Perpetual Motion, (1987), 62 ("entries on the federal lands under the Mining Law must be made for the purpose of engaging in mineral activity, and not for something else.").
[7] 30 U.S.C. § 29; Cole v. Ralph, 252 U.S. 286 (1920).
[8] Department of the Interior and Related Agencies Appropriations Act of 1995, Pub. L. No. 103-332 §§ 112-113, 108 Stat. 2499, 2519 (Sept. 30, 1994).

- **Permitting Mines on Federal Lands**

For more than forty years, the Bureau of Land Management and U.S. Forest Service have managed hard rock mining on federal lands through permitting regulatory programs that govern mining from initial exploration through mine closure.[9] These similar sets of regulations require that operators submit to the agency a full mine plan of operations for agency review. Both sets of regulations cover mineral activities from initial exploration through production and reclamation, mine closure and post-closure maintenance, compliance with environmental performance standards – including all federal and state environmental laws – and financial assurance at each and every stage of the process for all facilities. The agencies have characterized their programs as "cradle to grave" regulations for mining on federal lands.[10]

Mine plans of operations must include provisions documenting all manner of environmental compliance and protections, including management of waste rock and other mining wastes, as well as placement of haul roads and access roads, power lines, pipelines, truck shops, and other mining-related infrastructure. Mining operations require significant land near the mine site upon which to conduct these mining operations. Some of these facilities can be located on mill sites, but the majority of them are located on mining claims. Throughout the long history of the Mining Law, miners put together land packages of lode claims and mill sites as made sense based on the geology and to support the operations necessary to for the mine. Pre-*Rosemont* the law was clear that a miner could use the surface of any lode claim for mining purposes – prospecting, mining, or processing operations, and uses reasonably incident thereto. Though these latter uses are commonly referred to as "ancillary;" it is a misnomer: without these crucial facilities, mining cannot happen.

Because claim validity is not and never has been a prerequisite to conducting mining activities on mining claims, BLM and Forest Service land management regulations do not require operators to submit information relating to mining claim status as part of a plan of operations, and the agencies have never restricted their review of the mine plan facilities to locations only on "valid" mining claims, or even on claims. Both BLM and Forest Service regulations define mining operations to include all lands of any type that are necessary to implement the approved mine plan.[11]

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[9] Forest Service regulations were initially adopted in 1979 and are published at 36 C.F.R. Subpart 228A and BLM regulations were initially adopted in 1981 and are published at 43 C.F.R. Subpart 3809. Both sets of regulations have been revised and updated since they initially adopted.

[10] The Biden Administration's Interagency Working Group on Mining Laws, Regulations, and Permitting examined these regulatory programs and affirmed their effectiveness in the final report issued in September 2023: "The U.S. has set a high standard for environmental regulations that apply to today's mining operations." IWG Report at p. 14; "Current mining operations occur under environmental policies and laws designed to manage the impact of mining on people and the environment. Environmental laws such as FLPMA, NEPA [and others] have been in place for approximately 50 years and have improved environmental practices associated with mining in the U.S." Id. at 25; "Current mining operations on Federal land must comply with Interior's and USFS's general and specific performance and environmental protection regulatory standards for mining operations." *Id.* at 28.

[11] 43 C.F.R. § 3809.5; 36 C.F.R. § 228.3(a). Of course, as a practical matter, operators stake claims on all lands included in a proposed plan of operations to hold those claims against third parties.

- **The Origins of the "*Rosemont*" Theory**

The *Rosemont* decision that threatens to upset these norms has its roots in the writings of Mining Law critics, who have sought legislative Mining Law reform since the 1980's. Apparently frustrated with the inability to gain traction for their preferred solution in Congress, a law professor named John Leshy wrote in 1987: "it might even be appropriate for the Interior Department and the courts to **consciously reach results that make [the Mining Law] unworkable."**[12]

Professor Leshy later became Interior Solictor Leshy in the Clinton Administration. His work as Solicitor included two Solicitor's opinions designed to implement the ideas he wrote about in the 1980's. One, the so-called "Ancillary Use" Opinion, concluded a miner could not use the surface of a lode claim for activities that support mining unless that claim was legally "valid," using that legal term as explained above.[13] The other opinion, referred to as the "Mill Site" Opinion, concluded that miners could locate only one 5-acre mill site for each 20-acre mining claim.[14] These opinions, which ignored BLM regulations and decades of practice and precedent under both the Mining Law and the Federal Land Policy Management Act ("FLPMA"), became the blueprint for mining law opponents in attacking the Mining Law administratively and in the courts for the next three decades. Although Solicitors' opinions have no precedential value, they are binding on the Department of Interior while they remain in force, and these opinions clearly were intended to disrupt the administration of rights under the Mining Law. As Professor Leshy suggested a decade before, these legal opinions and related rulemakings were designed to make the Mining Law unworkable, presumably so that Congress would have to take up Mining Law reform as he envisioned it.

Congress did react, but perhaps not in the way Solicitor Leshy expected. In 1999, Congress prohibited the application of the Mill Site Opinion to any mine plan of operations that had been submitted for approval prior to issuance of the Opinion.[15] Subsequent administrations, Republican and Democratic, rejected both Leshy Opinions and restored in rulemakings and policy statements the permitting rules that were in place for decades before Solicitor Leshy set out to disrupt them.

The Leshy opinions represent a short blip in an otherwise uninterrupted decades-long record of interpreting and administering the Mining Law and permitting mining operations on Federal lands. Even though the Department of Interior rejected the Leshy opinion and returned to its prior reading of law and regulations, anti-mining litigants have continued to press Leshy's legal arguments – in lawsuit after lawsuit – to challenge the approval by BLM and the Forest Service of numerous mine plans. Those efforts failed repeatedly and consistently, both in administrative

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[12] John D. Leshy, REFORMING THE MINING LAW: PROBLEMS AND PROSPECTS, 9 *Pub. L. L. Review*, 1, 11 (1988) and John D. Leshy, THE MINING LAW: A STUDY IN PERPETUAL MOTION, 282 (1987).

[13] Department of Interior, Solicitor's Opinion M-37004, Use of Mining Claims for Purposes Ancillary to Mineral Extraction (Jan. 18, 2001).

[14] Department of Interior, Opinion M-36988, Limitations on Patenting Millsites Under the Mining Law of 1872, (1997).

[15] Consolidated Appropriations Act, 2000, Pub. L. No. 106-31, § 3006, 113 Stat. 57.

and judicial appeals, until 2019, when mining opponents challenged the Rosemont copper mine in the Federal District Court for the District of Arizona.

- **The *Rosemont* Decision**

The Rosemont copper mine was a typical large, open pit copper mine proposed to be located on National Forest lands in Arizona. The open pit was on a mix of private land and unpatented mining claims. The Forest Service reviewed the proposed plan under its mining regulations at 36 C.F.R. pt. 228 and prepared an extensive environmental impact statement ("EIS"). The EIS evaluated five different configurations for the storage of waste rock and tailings. In the decision approving the plan, the Forest Service selected a particular alternative that had the smallest disturbance footprint and avoided an important cultural site. The Forest Service also approved a reclamation plan that would require that the waste rock and tailings storage areas be reclaimed and returned to the prior land uses – wildlife habitat and grazing – after mining was concluded. Consistent with practice since the inception of the Mining Law, the Forest Service did not investigate the status of any of the mining claims in the plan of operations and did not constrain its selection of the preferred alternative based on mining claim status. The Forest Service considered alternative locations for the waste rock and tailings without regard for mining claim boundaries or status.

Mining opponents challenged the Forest Service's approval of the Rosemont plan of operation on numerous grounds, including that the Forest Service inappropriately approved the placement of waste rock and tailings on unpatented mining claims whose "validity" had not been established; in other words, an updated version of the long-abandoned Leshy Ancillary Use Opinion. After many defeats before administrative law judges and the courts, for the first time, a federal court agreed. The *Rosemont* court vacated the plan of operations.

The Forest Service and the *Rosemont* operator appealed to the Ninth Circuit Court of Appeals. Two judges in the three-judge panel affirmed the lower court's decision, but on different reasoning. A third judge dissented, finding that the Forest Service properly reviewed the mining plan of operations under its surface management regulations.

- ***Rosemont* Fallout**

The 9th Circuit *Rosemont* majority's holding is narrow but nevertheless problematic, based as it is on an incorrect reading of the agency administrative record. However, of more concern is the majority's long discourse on the Mining Law. Though much of that narrative is unnecessary *dicta* to the court's holding, it is taking hold in lower courts and at the Department of Interior, imposing new requirements and leaving mining regulation on federal lands incredibly muddled. Further litigation over the meaning of *Rosemont* is guaranteed unless Congress acts to remedy the problem.

    - **The *Thacker Pass* Litigation**

The myriad problems unleashed by the *Rosemont* cases are already on display. In a 2023 decision, the United States District Court for the District of Nevada applied *Rosemont* in a case challenging BLM's approval of the Thacker Pass lithium mine in northern Nevada. The judge

did not vacate the plan approval, but she directed BLM to inquire into the validity of certain mining claims on which the company planned to deposit tailings and waste rock.[16] Opponents appealed that decision to the 9th Circuit. During the appeal, mining opponents argued that the Thacker Pass claims in question must be subjected to a detailed validity determination akin to the mineral examination required to support a patent application. The appeals court denied the appeal, concluding that the district court's remand without vacatur was appropriate, and further finding appellants' validity argument to be premature, ruling that those arguments properly should be raised at the district court level first. To date the *Thacker Pass* opponents have not returned to the Nevada district court, but under the general federal statute of limitations, they have six years to do so. This is just one of many legal questions raised but not resolved by the *Rosemont* decision.

- **The *Mount Hope Mine* Litigation**

A more recent Nevada case illustrates even more dramatically the absurd impacts of *Rosemont* in the 9th Circuit. A Nevada Federal District Court relied on *Rosemont* to vacate BLM's approval of the proposed Mount Hope molybdenum mine.[17] The Mount Hope molybdenum mine has been seeking BLM approval for almost two decades. That deposit is considered one of the largest and highest-grade molybdenum deposits in the world.

The history of the Mount Hope Mine is a case study in permitting delays that can be caused by endless litigation. The proposed plan of operations for the Mount Hope Mine was originally submitted to BLM in June 2006. The notice of intent to prepare an EIS was published in the *Federal Register* in March 2007. The Draft EIS was made available for public comment in December 2011, and the final EIS was published in October 2012. The Record of Decision approving the project was issued one month later.

BLM's decision approving the Mount Hope Mine was challenged by Great Basin Resource Watch and the Western Shoshone Defense Project. The Federal District Court for the District of Nevada upheld BLM's decision in July 2014. Notably, in that appeal, the plaintiffs argued that BLM erred when it did not confirm the validity of the Mount Hope mining claims before approving the plan of operations—the *Rosemont* argument. Consistent with every other decision on mining opponents' ancillary use attacks up to that time, the Nevada court applied established precedent and rejected the argument, finding that the Mining Law did not require that BLM inquire into claim validity.

Plaintiffs appealed the 2014 decision to the Ninth Circuit Court of Appeals raising several environmental claims, but they did not pursue the claim validity argument. In December 2016, the 9th Circuit affirmed most of BLM's decision, but remanded the project back to the agency for additional environmental analysis on two air quality issues, and asked BLM to clarify the legal status of certain springs. BLM completed that work and published a Draft Supplemental EIS ("SEIS") for public review in February 2019, and a final SEIS in July 2019. The Record of Decision approving the project was reinstated the following month. The same plaintiffs challenged BLM's decision ***again***. In April, 2023, following briefing on the impact of the new

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[16] Bartell Ranch v. McCullough, 2023 U.S. Dist. LEXIS 19280 (D. Nev. 2023) (the "*Thacker Pass*" case).
[17] Great Basin Resource Watch v. Dep't of the Interior, 2023 WL 2744682 (D. Nev. 2023).

Rosemont decision, the same federal judge who approved the project nine years earlier, vacated the decision and sent the project back to BLM to evaluate the project's mining claims in light of the *Rosemont* decision. Eighteen years after Mount Hope submitted its plan of operations, and two decisions approving the mine plan, the project remains in limbo.

The *Thacker Pass* and *Mount Hope Mine* litigation illustrate just how disruptive and counterproductive the *Rosemont* decision has proven to be, and more litigation is certain. Both cases demonstrate that mining opponents' efforts to pursue "results that make [the Mining Law] unworkable" are bearing fruit. The resulting uncertainty is intolerable for a country that says that it wants to encourage a domestic mining industry. H.R. 2925 is absolutely necessary to fix the *Rosemont* mess.

- **The Department of Interior May 2023 Solicitor's Opinion**

In response to *Rosemont,* the Solicitor of the Department of Interior issued an opinion in May 2023,[18] binding on the agency, that extended the *Rosemont* court's strained reading of the Mining Law beyond the 9th Circuit and applied it to BLM's decision-making nationwide. The Opinion ignored the explicit text of the 3809 regulations and BLM's application of those regulations over the past 40 years. Interior's position is that the Solicitor's Opinion, and perhaps some subsequent guidance that has not yet been made public, can resolve the practical problems created by the *Rosemont* decision, obviating the need for a legislative solution.

Barrick does not agree. Despite Interior's efforts to resolve the many questions raised by *Rosemont,* the Solicitor's Opinion creates more uncertainty, guarantees further legal challenges to mining projects, and undermines the stated policy of this administration and a bipartisan majority of this Congress to encourage domestic mineral exploration and production. Most importantly, the Solicitor's Opinion ensures that mine projects on Federal land will face more permitting hurdles and delays.

The Solicitor's Opinion directs BLM not to approve "plans of operations where the operator proposes to place significant waste or tailings facilities on mining claims where BLM's record lacks evidence of the discovery of valuable mineral deposits underlying those facilities." The Opinion does not advise how BLM should proceed where evidence of validity does not exist. The agency is given no guidance but to reject the proposed plan of operations. In such circumstances, the burden shifts back on to the operators to: 1) submit additional evidence, of the type in a "mineral potential report;" 2) "re-site the ancillary uses on mill sites (as appropriate);" 3) seek a land use authorization under other BLM regulations (i.e., a different permit); or 4) seek to acquire title to the needed land through a land exchange or sale.[19]

The Opinion effectively rewrites the 3809 regulations without any public notice or comment. The current regulations and 40 years of practice are dismissed in a footnote where the Solicitor, giving the "Leshy blip" more weight than its due, "acknowledges that the Department's reading

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[18] Department of the Interior, Office of the M 37077, Use of Mining Claims for Mine Waste Deposition, and Rescission of M-37012 and M-37057, May 16, 2023.
[19] Solicitor's Opinion at 5-6.

of the Mining Law has not remained static in the last several decades, and that BLM may have approved mining plans that, at least in part, are not strictly consistent with this memorandum."[20]

This Subcommittee should not assume that the new Solicitor's Opinion will more effectively survive legal challenges than other prior opinions. For example, the majority opinion in the *Rosemont* case at the 9th Circuit swept aside in two sentences a 2020 Solicitor's Opinion that comprehensively evaluated the Mining Law and BLM practice and interpretation, according the Opinion no deference because "the Solicitor has taken inconsistent positions" on the issue.[21] The new Opinion is simply another inconsistent position that courts may well ignore.

The *Rosemont* decision left many questions unanswered—targets for further legal challenges. The Solicitor's Opinion attempts to limit the *Rosemont* decision to its facts: an inquiry into claim validity is necessary only where an operator proposes to ***permanently*** occupy land with significant waste rock or tailings facilities. But mining opponents have already challenged that attempt to limit *Rosemont* impacts.

In the *Thacker Pass* litigation, for example, some plaintiffs argued that the *Rosemont* decision applied to every facility in the plan of operations, not just large "permanent" features as suggested by the Solicitor's Opinion. If this argument were adopted by courts, pipelines, transmission lines, roads, stockpiles, processing facilities, and all other such uses could be sited only on valid mining claims. The *Thacker Pass* appeals court refused to entertain these arguments, but only because plaintiffs first raised them on appeal. This expansive interpretation of *Rosemont* remains on the table for further litigation.

The same *Thacker Pass* litigants complained to the 9th Circuit that BLM must conduct a full claim validity examination, like those that used to be conducted for patent applications, for each claim included in a plan of operations, and that the Nevada District Court's decision instructing BLM to search for evidence of validity in its record is inconsistent with the 9th Circuit's *Rosemont* ruling. As noted above, the 9th Circuit concluded that such an argument should be made in the first instance at the court below. Whether *Thacker Pass* opponents eventually challenge the BLM's validity review remains to be seen, but it is certain that the issue will be litigated, whether in *Thacker Pass* or elsewhere.

Thus, despite the Department of Interior's assurances, the Solicitor's Opinion has resolved nothing. Mining opponents are challenging its reasoning and limits, and courts are not likely to be bound or even persuaded by the Opinion. The Opinion does not obviate the need for H.R. 2925.

The alternatives suggested by the Solicitor's Opinion will also result in further uncertainties and delays, frustrating rather than speeding mine approvals. The BLM's 3809 regulatory program was designed to review mining operations holistically. Requiring different permits and/or use authorizations – not to mention land sales or exchanges – for individual mine features will result in an absurd fragmenting of the permitting process, which can only mean more complexity, permitting delay, uncertainty, and metastasizing grounds for litigation. Under BLM's 3809 regulations, mine plans are approved if the BLM finds that those plans include adequate

[20] Solicitor's Opinion at p. 9, n.7.
[21] Center for Biological Diversity, 33 F.4th at 1216.

measures to prevent "unnecessary or undue degradation," the standard imposed by FLPMA and defined in the regulations. Rights-of-way and other permits are intended for different kinds of projects, such as discrete roads, and have different standards; they afford BLM more discretion in making decisions, and litigants more opportunities to challenge. *Rosemont* – and Interior's attempt to address it – requires mine proponents to engage in a guessing game to determine which facilities should be permitted under which regulations. Issuing special use permits or rights-of-way for mining facilities, rather than permitting them through the mining-specific regulations governing plans of operations (as intended under FLPMA and done for decades) is a recipe for gridlock.

- **Criticism of H.R. 2925**

I have reviewed letters and statements – provided to this Subcommittee and also submitted to the Senate Subcommittee on Public Lands, Forests, and Mining – criticizing H.R. 2925 (and its Senate companion S. 1281) and predicting dire consequences, including mines of unlimited size, unlimited land grabs, location of claims for non-mining purposes, and mining in National Parks and wilderness areas. These criticisms are misplaced. H.R. 2925 is a straightforward fix to a mine permitting problem created by a court decision that is an outlier in the jurisprudence. It simply restores the *status quo* that existed for decades before the *Rosemont* decision. It does not replace the Mining Law with a new framework. Rather it is a surgical amendment that restores the original intent of the Mining Law and keeps all other provisions and their relationship with other statutes, like FLPMA, intact. The opposition's arguments are all based on the false premise that *Rosemont* was always the law and that it somehow was the sole governing principle that prevented their list of problems. H.R. 2925's purpose is to cut off the harmful and counterproductive litigation over the meaning and extent of *Rosemont*, which, as I have illustrated above, is already underway. Nothing more, nothing less.

Every mine plan approval from the BLM or the Forest Service includes language disclaiming any decision on mining claim validity, emphasizing the long-established distinction between mining claims and rights, as determined by the Mining Law, and mine permitting as authorized and required by Interior and Forest Service land management statutes and rules. The definition of "operations" in H.R. 2925 tracks the regulatory definitions in the BLM and Forest Service regulations.

Arguments that H.R. 2925 will somehow expand mining into parks and other withdrawn areas are simply incorrect. Areas that are withdrawn from the operation of the mining laws – of which parks and wilderness areas are only two examples – remain unaffected by H.R. 2925 and subject to separate laws and regulations. As I explained at the beginning of this testimony, when land is withdrawn from mineral entry, either legislatively or administratively, existing mining claims can be extinguished by the United States, ***except for claims that were "valid" on the date of withdrawal.***[22] Any activity of any kind on such surviving valid claims would be subject to special rules that are more stringent and more restrictive than the rules that govern mining on lands open to mineral entry.

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[22] Lara v. Sec'y of the Interior, 820 F.2d 1535, 1537 (9th Cir. 1987) ("[a] mining claimant has a right to possession [on withdrawn lands] only if he has made a mineral discovery on the claim.").

H.R. 2925 in no way affects – indeed it cannot affect – these surviving valid claims. The whole purpose of H.R. 2925 is to make clear the understanding of the law that existed prior to *Rosemont*: that property rights exist in mining claims even before a mineral discovery is made, and that claim validity need not be established before unpatented mining claims are used for mine-related activities in approved plans of operations. In contrast, any mining claim within a withdrawn area persists ***only because it is valid***, i.e., that its owner has been able to establish a mineral discovery. Any other claim can be contested and extinguished by the United States. Critics make the same mistake as the *Rosemont* court, interpreting rights under the Mining Law as an "all or nothing" approach. In fact, as the Department of Interior and federal courts have recognized since 1872, the Mining Law offers a range of rights: the right to explore open land, the right to exclude rival claimants from properly located claims, the right to use lands to support mining, and, until 1994, the right to patent claims with a proven discovery of valuable minerals. Without the discovery, these rights fall short of the "valid existing right" historically needed to maintain possession of claims in withdrawn areas.

Arguments that H.R. 2925 will somehow make a mine's footprint bigger are likewise incorrect. The miner has a huge economic incentive to minimize the size of its footprint. In the permitting process BLM will evaluate the location of all features, particularly the large features like waste rock dumps and tailings, and choose an alternative that meets the purpose and need of the project, and that is environmentally preferable. Size of waste rock dumps and tailings and their location is always a factor the BLM and the Forest Service consider when they evaluate a proposed mining plan under NEPA and their mining regulations.[23]

Arguments that claims will now be used for non-mining purposes, are likewise spurious. Nothing in H.R. 2925 purports to change the existing law that a mining claim located for a purpose other than exploration and mining purposes is void *ab initio*. Rather the language is clear, tied back to the pre-*Rosemont* law and interpretation, that the surface of a lode claim can only be used for legitimate mining related purposes in an approved mining plan.

In summary, I believe that the intent and language of H.R. 2925 are simple and clear, but acknowledge the concerns that have been expressed. The Committee can easily resolve any such concerns with a belt and braces approach by expanding the savings clause in section 3 of the bill to make clear that H.R. 2925 does not create, change, or expand the rights associated with any mining claim in an area that has been withdrawn or is withdrawn in the future.

H.R. 6862

On September 22, 2023, the Federal Permitting Improvement Steering Council ("FPISC") proposed to amend its existing regulations to limit application of the FAST–41 permitting process to projects that produce or process "critical minerals," as defined by the U.S. Geological

[23] BLM regulations require that an operator "must avoid unnecessary impacts and facilitate reclamation by following a reasonable and customary mineral exploration, development, mining and reclamation sequence." 43 C.F.R. 3809.420(a)(2).

Survey.[24] Congressman Lamborn's bill, H.R. 6862, would block this unjustified and indefensible step. We support H.R. 6862.

The FPISC's proposal is inconsistent with the Biden Administration's expressed interest in expediting permitting of major projects and promoting the growth of the domestic mining industry. It was only four years ago that the FPISC voted to add mining to FAST 41 eligibility, without limiting access to projects that involve critical minerals. Since then, only a handful of mining projects have sought FAST-41 coverage.[25] Meanwhile, mining projects are compatible with the purposes of FAST-41 to expedite permitting of major infrastructure projects, and especially with FAST-41's "objective" criteria: (1) the project is subject to NEPA review; (2) the project is likely to require a total investment of $200 million or more; and (3) the project does not qualify for abbreviated review under any other law.[26]

The FPISC offers no data that would justify limiting access for the mining industry to FAST-41 benefits. Few mining companies have asked to participate in FAST-41; there is no evidence that the process is being abused, or that FAST-41 is being burdened by too many requests for inclusion. There is simply no rational basis for the proposal.

Indeed, by limiting the type of mining projects eligible for the FAST-41 permitting process to those involving critical minerals identified by the USGS, the Biden administration would be barring projects to recover minerals identified on the Department of Defense's Strategic and Critical Materials List and the Department of Energy's Critical Materials List. Differentiating these high-priority minerals from those listed by USGS is the definition of arbitrary, and is inconsistent with the Administration's national defense and energy security priorities. H.R. 6862 would prevent this exercise of bad policy.

In addition to opposition from the National Mining Association, Barrick, and others in the mining industry, the FPISC proposal is opposed by the National Infrastructure Alliance – a coalition of leading construction unions – and by a large contingent of bipartisan and bicameral Members of Congress. Further, during consideration of H.R. 4664, the FY2024 Financial Services and General Government Appropriations Act before the full House of Representatives, an amendment offered by Rep. Blake Moore (R-Utah) – which is nearly identical to H.R. 6862 – was adopted unanimously by voice vote without opposition.

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[24] Revising the Scope of the Mining Sector of Project That Are Eligible for Coverage Under Title 41 of the Fixing America's Surface Transportation Act, 88 Fed. Reg. 65350 (September 22, 2023)
[25] 88 Fed. Reg. at 65352-53.
[26] 88 Fed. Reg. at 65351.

Responses of Rich Haddock,
Senior Advisor
Barrick Gold Corporation

Questions for the Record
Of the December 12, 2023 Hearing of the
Public Lands, Forests, and Mining Subcommittee,
Senate Energy and Natural Resources Committee

To Receive Testimony on Pending Legislation

January 12, 2024

The following are responses of Rich Haddock, Senior Advisor, Barrick Gold Corporation, to questions posed for the record by Members of the Subcommittee on Public Lands, Forests, and Mining, Senate Energy and Natural Resources Committee, following the Subcommittee's December 12, 2023 hearing to receive testimony on S. 1281 and S. 1742.

I appreciate the opportunity provided by Chairwoman Cortez Masto and Ranking Member Lee to testify at the Subcommittee hearing and to present Barrick's views on legislative changes to the Mining Law. Addressing the disruption caused by the *Rosemont* case is the most urgent priority, and Barrick is grateful for the leadership of Senator Cortez Masto and Senator Risch in introducing S. 1281, which would restore long-understood Mining Law precedents and curtail unnecessary litigation over the meaning and extent of *Rosemont*.

Barrick continues to support changes to the Mining Law, including a reasonable net royalty to compensate the United States, increased claim maintenance fees, and provisions to address abandoned mine lands. As I testified on December 12, Barrick appreciates Senator Heinrich's recognition in S. 1742 of the two most important aspects of the Mining Law: self-initiation and security of tenure. These must be preserved in any Mining Law legislation. We are encouraged by the productive and constructive exchange that occurred during the Subcommittee hearing.

Finally, Barrick also supports "Good Samaritan" legislation – as part of or separate from Mining Law reform – which addresses existing disincentives for mining companies to assist in the cleanup of abandoned mine lands. Barrick and other mining companies have crucial expertise that could be applied to the abandoned mine lands problem. We support S. 2781 – the Good Samaritan Remediation of Abandoned Hardrock Mines Act – introduced by Senator Heinrich and supported by 25 bipartisan cosponsors. The bill would create a pilot program pursuant to which the Environmental Protection Agency could issue up to 15 permits and grant certain liability relief for project participants. S. 2781 is a thoughtful and sensible first step in promoting abandoned mine land cleanups and addressing stakeholder concerns. The pilot program would create a valuable database of experience with mine cleanups and liability relief that can inform further congressional action.

Note: The responses below refer to the following court cases:

- *Center for Biological Diversity v. United States Fish and Wildlife Service*, 409 F. Supp. 3d 738 (D. Ariz. 2019) (the "*Rosemont*" case).
- *Center for Biological Diversity v. United States Fish and Wildlife Service*, 33 F.4th 1202, 1212 (9th Cir. 2022) (the *Rosemont* appeal to the 9th Circuit. The 9th Circuit affirmed the District Court's ruling).
- *Bartell Ranch v. McCullough*, 2023 U.S. Dist. LEXIS 19280 (D. Nev. 2023) (the "*Thacker Pass*" case).
- *Western Watersheds Project v. McCullough*, 2023 U.S. App. LEXIS 18063 (9th Cir. 2023) (the *Thacker Pass* appeal to the 9th Circuit. The 9th Circuit affirmed the District Court's ruling to remand the Thacker Pass plan of operations without vacating BLM's decision).
- *Earthworks v. United States Department of the Interior*, 496 F. Supp. 3d 472 (D. D.C. 2020) ("*Earthworks"*).
- *Earthworks v. United States Department of the Interior,* No. 20-5382 (D.C. Cir.) (the *Earthworks* appeal to the D.C. Circuit. The appeal concerns the interpretation of the mill site provision of the Mining Law).

Questions from Chairman Joe Manchin III

Question 1: In your view, what is the intended purpose and what is the effect of the "fair market value" clause of S. 1281 (subparagraph "(2) – Fulfillment of Federal Land Policy Management Act of 1976")?

Response: The purpose and effect of this clause are to discourage further litigation over the "Rosemont" issues that are corrected by S. 1281. In *Earthworks v. U.S. Department of the Interior*, the same plaintiffs and plaintiffs' counsel who participated in the Rosemont and other related litigation challenged the Bureau of Land Management's ability to review and approve mining plans under its 3809 regulations without first determining whether claims were valid. Plaintiffs argued that FLPMA required payment of fair market value for the use of any claims that were not determined to be valid. The District Court rejected that idea in a decision directly at odds with the Ninth Circuit's *Rosemont* decision:

> [T]he Mining Law, its implementing regulations and related case law have never required Interior or BLM to verify the validity of a claim by independently confirming discovery. Additionally, as the Supreme Court has recognized, a claim of unknown or undetermined validity is not a legal nullity. An operator on a claim of unknown validity can have rights against rival claimants under the doctrine of *pedis possessio*, and the government cannot find such a claim invalid without a degree of process."

496 F. Supp. 3d at 492 (*citing Cameron v. U.S.* 252 U.S. 450, 460 (1920)) .

The District Court found that plaintiffs' interpretation of the law would "have quietly upended the current claim system under the Mining Law . . . [and] the Court [would] not strain to read . . . FLPMA as silently working such a fundamental change to longstanding practice under the Mining Law." *Id.* at 493 (emphasis added).

Plaintiffs appealed the *Earthworks* decision to the D.C. Circuit Court of Appeals, but dropped their appeal of the "fair market value" theory during appellate briefing. The clause in S. 1281 would prevent plaintiffs from shopping for a different judicial forum that might revive that theory.

Question 2: Section 4 of the July 23, 1955 Surface Resources Act says that "any mining claim *hereafter* located … shall not be used, prior to issuance of a patent therefor, for any purposes other than prospecting, mining, or processing operations and uses reasonable incident thereto." (30 U.S.C. 612). It is my understanding that approximately 2,700 mining claims pre-date the enactment of that Act.

If S. 1281 were in effect, how would the "right to use, [and] occupy…with or without the discovery of a valuable mineral deposit" interact with these pre-Surface Resources Act claims? Would the statutory right of use and occupation under S. 1281 for a pre-Surface Resources Act claim allow for uses other than mining?

Response: S. 1281 would not allow any claimant to use any claim for uses other than mining. The savings clause of S. 1281 makes it clear that nothing in the act "diminishes any right (including a right of entry, use, or occupancy) of a claimant." Thus, any rights associated with pre-1955 claims would be unaffected. Further, the definition of "operations" in S. 1281 conforms to longstanding interpretation of the appropriate use and

occupancy of mining claims, consistent with the Surface Resources Act and allows for no uses other than mining.

Questions from Senator Martin Heinrich

Question 1 (also posed by Senator John W. Hickenlooper): Would it be possible to achieve the goals of S. 1281, and alleviate concerns around the bills "without the discovery of a valuable discovery of a valuable mineral deposit" provision, by instead amending the mill site provision of the Mining Law to clarify and codify the use of multiple mill sites in connection with a valid mining claim, while changing the non-contiguous, 5 acre and "non-mineral" limitations to make mill sites useable? Would other changes be necessary as well?

Response: The goals of S. 1281 cannot be achieved by amending 30 U.S.C. § 42(a) (governing mill sites). Changes to the mill site provisions would not address the problems created by the *Rosemont* decision, as explained in more detail below, and in my response above to Senator Manchin's Question 1. Changing the "non-contiguous, 5 acre and 'non-mineral'" limitations of the existing statute would require a rewrite of the entire mill site provision, creating new legislative language that must be implemented and interpreted by BLM. That entirely new language and BLM's efforts to implement it would surely be tested in litigation by anti-mining litigants, resulting in further uncertainty and delay for mine projects. In contrast, S. 1281 is narrowly drafted (1) to restore the long-settled understanding of the Mining Law that existed before the *Rosemont* decision, and (2) to avoid permitting delays caused by unnecessary litigation over *Rosemont* and its progeny. Rather than creating new legal issues to be resolved in litigation, as amending the mill site provision would do, S. 1281 would restore the *status quo ante*, which has been applied by the regulations, guidance, and practice of BLM for decades.

- **Amending the Mill Site Provision Does Not Solve the Problems Created by the *Rosemont* Case**

Amending the mill site provision would not resolve the central problem created by the *Rosemont* decision: the requirement to establish claim validity before using mining claims for an ancillary use such as tailings or waste rock storage. The decision reversed BLM's regulations and settled interpretations of its authority under the Mining Law, and decades of established practice in the hardrock mining industry in complying with those regulations.

Addressing the issue via changes to the mill site provision of the Mining Law would encourage further litigation. The requirement to show claim validity applies with equal force to mill sites and lode claims. As discussed above in response to Senator Manchin's Question 1, the Mining Law and BLM regulations do not routinely require validity determinations for lode claims that are mined. The *Rosemont* case creates a great deal of uncertainty – which inevitably will be litigated – on numerous remaining issues, including whether mill sites under existing or amended law would still require some kind of validity determination.

Other *Rosemont* issues similarly remain unresolved. In the *Rosemont* case, the court ruled for the first time that tailings and waste rock cannot be placed on lode claims unless the miner first demonstrates that the claims are "valid," i.e., that each claim contains a discovery of a valuable mineral. The administrative record in *Rosemont* was clear that the claims in question did not contain valuable minerals. In the *Thacker Pass* litigation, in contrast, the Nevada district court noted that the administrative record contained *some* evidence that claims intended for tailings and waste rock storage were mineralized, and remanded to BLM to conduct an "analysis"

to determine whether the record demonstrated that "Lithium Nevada has discovered valuable minerals." In May 2023, BLM responded, affirming its earlier approval of the Thacker Pass plan of operations and concluding that 99 out of 107 lode claims intended for tailings and waste rock storage contained valuable minerals. *See* Thacker Pass Project, Plan of Operations and Reclamation Permit Record of Decision, NVN098586 (May 16, 2023).

Importantly, BLM clarified that its decision about Thacker Pass claims was not based on a formal mining claim validity determination, and that such a determination was not required by the District Court or by the *Rosemont* court. At the same time, the Interior Solicitor published an opinion concluding that no formal validity determination is required when approving the use of mining claims for ancillary uses; "it is enough for plan approval that there is some evidence of discovery." *See* Solicitor's Opinion M-37077, *Use of Mining Claims for Mine Waste Deposition, and Recission of M-37012 and M-37057* at 2, 5-6 (May 16, 2023).

The plaintiffs in the *Thacker Pass* case made it clear in their 9th Circuit filings that they reject the May 2023 Solicitor's Opinion insofar as it allows a lower quantum of proof than a full claim validity determination for patenting. *See* Attachment A (excerpts of *Thacker Pass* environmental plaintiffs' reply brief in *Western Watersheds Project v. McCullough*). The *Thacker Pass* appeal before the 9th Circuit related only to whether the District Court had erred by refusing to vacate the BLM approval. The Court of Appeals concluded that the remand without vacatur was appropriate. It further ruled that arguments about the sufficiency of BLM's claim analysis were premature and could only be raised after BLM concluded its analysis of Thacker Pass claims. The *Thacker Pass* plaintiffs have not yet appealed BLM's validity determination; whether they will do so remains to be seen – they have six years to decide. However, it is clear that this issue is not resolved, and remains for future litigation.

Accordingly, based on the above discussion, in the case of mill sites, mining opponents are likely to argue that a formal showing is required that mill sites are non-mineral in character before a plan of operations including them can be approved.

The foregoing examples make clear that addressing the *Rosemont* decision by amending the mill site provision will not suffice to resolve uncertainties and limit litigation. The only way to eliminate the uncertainty created by *Rosemont* is to directly reverse the decision, which S. 1281 does.

- **Mill Sites Are Not Practical or Appropriate for Placement of Tailings and Waste Rock**

Using only mill sites for locating waste rock and tailings is impracticable because that would ignore geologic reality. A mill site has to be located on ground that is "nonmineral land." 30 U.S.C. § 42(a). Locatable mineral deposits generally do not exist along bright lines where one side of the line is mineral in character and the other side of the line is non-mineral in character. Rather, they usually exist where there is an "economic" mineral deposit – minerals in form and concentration that can be recovered economically – surrounded by areas that, though mineralized, are non-economic. The distinction between economic and non-economic mineral deposits can change based on mineral prices, the development of more efficient or cheaper recovery technologies, and other factors. Only at a distance from the economic part of the mineralization does the ground finally become definitively "nonmineral land" as required by 30 U.S.C. § 42(a).

For example, porphyry copper deposits such as those in Arizona, New Mexico, and Utah are typically surrounded by a large mineralized area that can extend for miles in every direction from the deposit itself. *See* David A. John, ed., 2010, *Porphyry Copper Deposit Model*, United States Geological Survey, Scientific

Investigations Report 2010-5070-B. The following figure from the USGS report illustrates a porphyry deposit surrounded by a "skarn" of mineralized sedimentary material, and associated mineralized fragments of the porphyry deposit that extend several miles from the deposit itself.

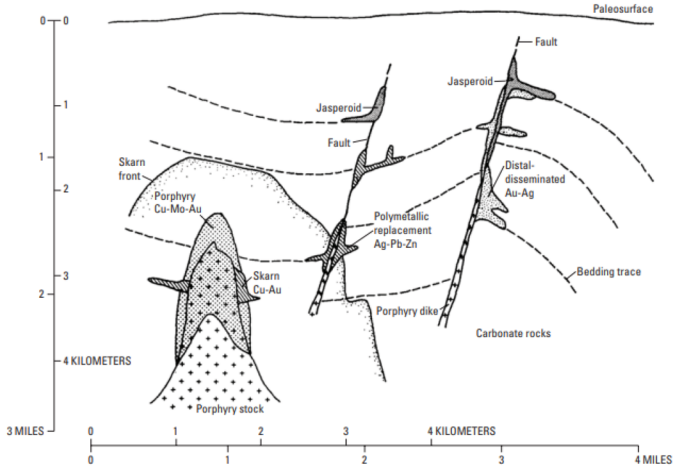

Figure B1. General setting of porphyry copper and associated deposit types (modified from Sillitoe and Bonham, 1990).

Disseminated gold deposits such as those in Nevada are similarly frequently surrounded by a mineralized, though subeconomic halo. Finally, as the *Thacker Pass* litigation has illustrated (addressed in the next section of this response), lithium deposits similarly do not have bright line cut-offs between the target deposit and surrounding mineralized lands.

Relying only on mill sites would mean that tailings and waste rock would need to be deposited at some distance from the actual economic ore body. This would have at least two undesirable outcomes. First, the tailings and mined overburden and waste rock would have to be transported miles from the economic deposit, which adds significant costs to the operation. Added costs have the effect of shrinking or eliminating the economic ore body, a result that is contrary to federal policy promoting domestic mining. Second, use of mill sites in this way would result in significantly greater and more dispersed land disturbance instead of more compact mine operations, with attendant greater environmental impacts and land use conflicts with recreation and other surface uses of the public lands.

- **Other Infrastructure Cannot Be Located Solely on Mill Sites**

Anti-mining litigants have made it clear that they also intend to challenge the use of the surface of lode claims for other mine infrastructure beyond placement of waste rock and tailings. Other mine infrastructure includes such things as roads, power distribution lines, truck shops, crushers, conveyors, and pipelines. Even if it

somehow made sense to site waste rock and tailings facilities far away from the mine itself (and most of the time it does not), roads, conveyers, and other kinds of mine infrastructure by their nature must be at or near the mine and the ore body that is being actively mined. Those facilities could never be located entirely on mill sites.

The *Thacker Pass* plaintiffs attempted to challenge the use of lode claims for mine infrastructure during their appeal of the District Court decision to the 9th Circuit Court of Appeals. *See* Attachment B (excerpts of Bartell plaintiffs' opening brief in *Western Watersheds Project v. McCullough*). The court did not consider the challenge, but only because plaintiffs did not raise it in a timely fashion. This remains an issue that will be used in future litigation brought to oppose mine projects, and amending the mill site provision would not fully resolve it, at least without the specter of more litigation and years of legal uncertainty. S. 1281 resolves the issue, by narrowly restoring the pre-*Rosemont* status of the law allowing ancillary uses to be sited on lode claims without requiring a validity determination. The simplest and most targeted way to address such support infrastructure is to restore "ancillary use" as it has been understood and implemented under the Mining Law for more than a century before the *Rosemont* decision, which is what S. 1281 does.

Question 2: Under current law, when a claimant in an area withdrawn subject to "valid existing rights" wants to permit a mining project, current regulations require the agency to determine if a valid right exists at the time of application and at the time of withdrawal.

How would S. 1281's right to "use, occupy, and conduct operations on public land, with or without the discovery of a valuable mineral deposit", including "any… reasonably incident… activity, regardless of whether that incidental activity is carried out on a mining claim…" change the requirements for activity in the case of a mining claim in an area previously withdrawn "subject to valid existing rights", such as wilderness or a National Park?

Would the answer be different for future withdrawals because it would affect what "valid existing rights" applied at the time of withdrawal?

Response: Current practices and regulations, including 43 C.F.R. 3809.100 (relating to operations on withdrawn or segregated land) would be unaffected by S. 1281. That regulatory provision requires a formal validity determination before approving a plan of operation for mining claims within segregated or withdrawn areas. Other statutes and regulations addressing specific areas withdrawn from location, including 36 C.F.R. Part 6 (mining in the Parks), 36 C.F.R. § 228.15 (mining in Forest Service Wilderness areas); 43 C.F.R. Subpart 3809 (mining on lands in BLM Wilderness review), and 43 C.F.R. 6304 (mining in BLM Wilderness areas), would also be unaffected. No change in management of claims in areas withdrawn from location is intended or expected.

Future withdrawals would be unaffected by S. 1281. S. 1281 does not create new "valid existing rights," but restores the law prior to the *Rosemont* decision.

If appropriate, simple language could be added to the savings clause of S. 1281 to confirm that withdrawn lands are unaffected.

Questions from Senator John W. Hickenlooper

Question 1: Would it be possible to achieve the goals of S. 1281, and alleviate concerns around the bills "without the discovery of a valuable discovery of a valuable mineral deposit" provision, by instead amending the mill site provision of the Mining Law to clarify and codify the use of multiple mill sites in connection with a valid mining claim, while changing the non-contiguous, 5 acre and "non-mineral" limitations to make mill sites useable? Would other changes be necessary as well?

Response: See response above to Senator Martin Heinrich's Question 1.

ATTACHMENT A to
Barrick Responses to Questions for the Record of December 12, 2023 Hearing

Excerpt, Reply Brief of Appellants Great Basin Resource Watch, Basin and Range Watch, Wildlands Defense, and Western Watersheds Project in *Western Watersheds Project v. McCullough* (9th Cir. 2023), filed May 26, 2023

pp. 50-57

A. BLM's Errors Are Serious and the District Court Abused Its Discretion When it Remanded Without Vacatur.

While this Court reviews the district court's decision to remand without vacatur for abuse of discretion, "[a] misapplication of the correct legal rule constitutes an abuse of discretion." Pauma Band of Luiseno Mission Indians of Pauma & Yuima Reservation v. California, 813 F.3d 1155, 1163 (9th Cir. 2015). A district court abuses its discretion if it "base[s] its ruling on an erroneous view of the law or on a clearly erroneous assessment of the evidence." Inst. of Cetacean

Research v. Sea Shepherd Conservation Soc'y., 725 F.3d 940, 944 (9th Cir. 2013).[15]

The district court misapplied the law here when it treated BLM's responsibility to determine whether LNC had discovered valuable minerals on each mining claim it plans to permanently occupy with waste rock and tailings as a simple procedural error that could be easily "fixed." *See* Order, 1-WWPER-61-62. It is "undisputed" that BLM never determined whether LNC had discovered valuable minerals. Order, 1-WWPER-26. This is a serious error because BLM approved the entire Project based on the erroneous assumption that LNC had valid existing rights under the Mining Law, which eliminated BLM's discretion over the Project. Establishing the existence of valuable minerals is a fact-intensive, substantive inquiry that cannot be done on this record.

A locatable mineral, like lithium, is not "valuable" unless it is shown that it can be "extracted, removed, and marketed at a profit." Rosemont, 33 F.4th at 1209, quoting U.S. v. Coleman, 390 U.S. 599, 602 (1968). "[T]he finding of some mineral, or even of a vein or lode, is not enough to constitute discovery – their extent and value are also to be considered." Converse v. Udall, 399 F.2d 616, 619

[15] LNC erroneously asserts that that case stands for the proposition that a "court abuses discretion *only* if ruling rests on clearly erroneous evidentiary assessment." LNC Resp. 104 (emphasis added). That is a mischaracterization of precedent.

(9th Cir. 1968). "[P]rofit over cost must be realizable from the material itself and it is that profit which must attract the reasonable man." Ideal Basic Indus., Inc. v. Morton, 542 F.2d 1364, 1369 (9th Cir. 1976).

The district court held that "some evidence" of general mineralization in the Project area established a "serious possibility" that BLM will be able to "substantiate" its decision on remand. Order, 1-WWPER-61-62. That is not the test under the Mining Law for BLM to determine whether all the claims contain the requisite "discovery of s valuable mineral deposit."

Valuable minerals must be discovered on each claim and "[a] discovery without the limits of the claim, no matter what its proximity, does not suffice." Waskey v. Hammer, 223 U.S. 85, 91 (1912). Evidence of "general mineralization" thus cannot meet the marketability test. "Each lode claim must be independently supported by the discovery of a valuable mineral within the location as it is marked on the ground." Lombardo Turquoise Mining & Milling v. Hemanes, 430 F.Supp. 429, 443 (D. Nev. 1977) *aff'd* 605 F.2d 562 (9th Cir. 1979). *See also* Henault Min. Co. v. Tysk, 419 F.2d 766, 768 (9th Cir. 1969)(valuable mineral deposit requirement cannot be met on one claim by relying on minerals on other claims).[16]

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[16] LNC continually, and erroneously, argues that WWP "conceded" that LNC has "discovered a valuable mineral deposit" in the mine pit. LNC Resp. 6, 15, 18. This argument highlights LNC's misreading of what constitutes a "valuable mineral deposit" under controlling law, including Rosemont, as mere "mineralization" does not qualify as a "valuable mineral deposit."

LNC argues this this long-established precedent only applies when a claimant is seeking a patent or proposing to mine in a withdrawn area (like a National Monument). LNC Resp. 102. That is not true. As Rosemont held, to have any right to occupy a mining claim post exploration, a claimant must show they have discovered "valuable minerals" on that claim. These cases all define what qualifies as a "valuable" mineral deposit. Rosemont dealt with the same situation here – requiring that the claimant show that all of its claims are valid before having any rights under the Mining Law and federal public land law to use and occupy those claims. Like here, the Rosemont mine was proposed on non-withdrawn lands open to claiming.

LNC also posits various theories that its claims are valid, or that it may file "millsite claims" that might support its assertions of the "valid rights" it needs to avoid most of the RMP provisions. LNC Resp. 100-101, 125-26. But as BLM concedes, any adjudication or review of the validity of LNC's claims and purported "rights" under the Mining Law is for a future case on a future record.[17]

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[17] The National Mining Association (NMA), in its amicus brief, largely argues that this Circuit got it wrong in Rosemont when it found that post-exploration use and occupancy rights on mining claims can only be based on valid claims under the Mining Law. Dkt. 71. But neither BLM nor LNC appeal the district court's application of Rosemont to this record, and thus NMA's arguments are inapplicable to this case.

The question is not, as BLM frames it, whether the evidence "foreclose[s]" existence of valuable minerals on each claim to be occupied by waste rock and tailings, it is whether it *establishes* their existence. BLM Resp. 105. BLM/LNC rely heavily on the fact, that in Rosemont, there was no evidence that valuable minerals had been found on the claims. But as the Circuit recognized, "that is legally irrelevant. The question is whether valuable minerals have been 'found' on the claims, not whether valuable minerals might be found." 33 F.4th at 1222.

Here, just as in Rosemont, "[i]t is undisputed that no valuable minerals have been found." Id.; *see* BLM Ans. ¶119, 1-WWPFER-30 (admitting that BLM has not determined whether waste dump claims contain valuable minerals, as alleged in ¶119 of WWP's Complaint). "[D]iscovery of valuable minerals is essential to the right to any occupancy—temporary or permanent—beyond the occupancy necessary for exploration." Rosemont, 33 F.4th at 1220. The district court thus misapplied Rosemont in its decision not to vacate the illegal ROD.

Indeed, if any minerals exist on the waste dump/tailings claims, they cannot be credibly considered "valuable." LNC made the economic decision to permanently bury them under 190 million tons of waste rock and tailings, essentially eliminating any future potential for mining. *See* LNC SJ Reply at 4, 2-WWPER-103. That was the situation in both Rosemont (Ninth Circuit and district court) and the recent Great Basin Resource Watch decision, 2023 WL 27444682,

as the courts relied on the mining company's plans to bury the waste dump lands as evidence that they did not contain valuable minerals: "As a threshold matter, Rosemont's proposal to bury its 2,477 acres of unpatented mining claims under 1.9 billion tons of its own waste was a powerful indication that there was not a valuable mineral deposit underneath that land." Center for Biological Diversity v. U.S. Fish and Wildlife Service, 409 F. Supp. 3d 738, 748 (D. Ariz. 2019). *See also* Great Basin Resource Watch, 2023 WL 27444682, at *5 (noting company's plans to dump waste on its mining claims "suggests that the land does not contain the requisite valuable mineral deposits."). On this record, and on these directly-relevant court rulings, LNC cannot rebut the presumption that its claims are invalid under the Mining Law, based on its own plans to forever bury these lands under 190 million tons of waste.

BLM's new and rushed claim validity determination cannot cure BLM's error because BLM does not deny that it was required determine whether LNC held valid existing rights *before* approving the Project. In Rosemont, this Circuit rejected the argument that an agency may determine whether a mining claimant holds valid existing rights *after* authorizing the claimant to occupy federal lands. *See* Rosemont, 33. F.4th at 1221 (rejecting argument that "the court erred in holding that the Service must assess the validity of Rosemont's mining claims before approving Rosemont's mining plan."). Allowing BLM to backfill its ROD

conflicts with Rosemont, and is another way in which the district court abused its discretion when it decided not to vacate the illegal ROD.

Where there is an "absence of analysis," rather than a "flawed analysis," by the agency, "the Court cannot determine whether there exists a serious possibility that the [agency would] be able to substantiate its decision on remand." Wildearth Guardians v. Bureau of Land Mgmt., 457 F. Supp. 3d 880, 897 (D. Mont. 2020) (citing Allied-Signal, Inc. v. U.S. Nuclear Regulatory Comm'n, 988 F.2d 146, 151)(D.C. Cir. 1993)(internal quotation marks omitted).

The existing record does not support claim validity and LNC's "rights," especially due to the presumption that LNC's decision to cover 1,300 acres with 190 million tons of waste shows that the claims do not contain the requisite discovery of valuable minerals. The district court thus abused its discretion when it ignored controlling federal caselaw, and the facts of this case, in believing that BLM could easily substantiate the unlawful ROD.

The district court also failed to recognize the on-the-ground and practical nature of BLM's errors. BLM could not lawfully approve a mine Project with no legally-valid plan for disposing of waste rock and tailings. The ROD's approval of blasting, ground clearing, facility construction and other operations (in addition to the 1,300 acres of the waste and tailings dumps) is premised on approval of a full and complete mine Plan of Operations (PoO) authorized pursuant to rights under

the Mining Law. But, as BLM admits, the ROD was legally invalid. The district court correctly held LNC had no legal right to use or occupy these 1,300 acres. As such, the ROD essentially approved what is now an incomplete and illegal mine.

As the Rosemont district court held, "the Forest Service accepted, without question, that those unpatented mining claims were valid. This was a crucial error as it tainted the Forest Service's evaluation of the Rosemont Mine from the start." Center for Biological Diversity, 409 F. Supp. 3d at 747 (emphasis added). The same is true here, where BLM based its decision not to apply the ARMPA, as well as its overall review of the Project, on its illegal and unsupported assumption that BLM's discretion over the Project was severely limited because LNC held statutory rights to occupy all of public lands at the site. The district court's decision not to vacate the decision was deeply flawed, legally and factually.

ATTACHMENT B to
Barrick Responses to Questions for the Record of December 12, 2023 Hearing

Excerpt, Opening Brief of Appellants Bartell Ranch, LLC and Edward Bartell in *Western Watersheds Project v. McCullough* (9th Cir. 2023), filed March 24, 2023

pp. 54-57

A. *Rosemont* Extends to LNC's Water and Power Lines.

To start with, the district court got the scope and reasoning of *Rosemont* wrong. In *Rosemont*, this Court correctly explained that "discovery of valuable minerals is essential to the right to any occupancy—temporary or permanent—beyond the occupancy necessary for exploration." 33 F.4th at 1220 (emphasis added). Accordingly, *Rosemont* extends to all project components of a mining project, contrary to the district court's holding.

The Mine includes guard shacks, fencing, water wells, waste rock piles, a tailings stack, lithium processing facility, sulfuric acid plant, water pipelines, transmission lines, and more. 4-ER-613—619. All of these project features will occupy BLM land on Thacker Pass. The FEIS explains that LNC's mining claims on Thacker Pass provide the surface estate necessary to justify this occupancy. 4-ER-612. Yet, LNC did not prove, and BLM did not find, that LNC's mining claims are valid. 1-ER-15. Instead, BLM assumed validity based on the fact that much, though not all, of the Mine is located upon the McDermitt Caldera, which BLM assumed contains valuable lithium deposits. 1-ER-15; 4-ER-621. However, parts of

the Mine, in particular the water and transmission lines, are located outside the caldera, which is devoid of known mineralization. *Compare* 4-ER-605 *with* 4-ER-606. Appellants raised this issue with the district court. 3-ER-479—480; 2-ER-254—255.

The district court held that *Rosemont* extended only to the waste rock piles and CTFS associated with the Mine, and not other project features. 1-ER-17. The district court justification was merely that *Rosemont* only addressed legality of the Forest Service's approval of a copper mine's massive waste pile and, thus, the case should be extended no further. 1-ER-17. However, nothing in *Rosemont* supports limiting its holding to only waste rock piles.

This Court explained that "discovery of valuable minerals is essential to the right to any occupancy—temporary or permanent—beyond the occupancy necessary for exploration." 33 F.4th at 1220. The cases relied on by this Court in *Rosemont* stand for the same rule of law. *See Union Oil Co. of Cal. v. Smith*, 249 U.S. 337, 346, 39 S.Ct. 308, 63 L.Ed. 635 (1919) (to "create valid rights ... a discovery of mineral is essential."); *Davis v. Nelson*, 329 F.2d 840, 844–45 (9th Cir. 1964) (the mining law grants two rights: "(1) the right to explore and purchase all valuable mineral deposits in lands belonging to the United States; and (2) the right to occupation and purchase of the lands in which valuable mineral deposits are found."); *see also Barrows v. Hickel*, 447 F.2d 80, 82 (9th Cir. 1971) ("In order for

a mineral claim on public lands to be valid it is necessary that the discovered mineral deposits be 'valuable.'"); *United States v. Rice*, 886 F.2d 334 (9th Cir. 1989) (evidence that claim is not located where actual deposit exists demonstrates lack of valid claim).

This Court's broad holding in *Rosemont* means exactly what it says: that *any* mine-related occupancy of mineral claims must be preceded by a discovery of valuable minerals on each claim, which is clearly lacking here. Focusing on the water and power lines, BLM approved these project features, which are outside known zones of mineralization, simply because LNC had asserted mining claims over those lands.[30] 4-ER-612; 4-ER-621; 4-ER-746. Pursuant to *Rosemont*, BLM should have first determined whether LNC's claims were valid, before allowing LNC the right of occupation and effectively waiving RMP requirements.

There is no dispute that BLM's approval of the water and power lines as part of the Mine constitutes "occupancy" of BLM's lands. There is also no dispute that a

[30] Whether the water and power lines were approved under BLM's regulations at 43 C.F.R. § 3809 et seq. or 43 C.F.R. § 3715 et seq. is irrelevant. 43 C.F.R. § 3809.420(a)(3) requires that mining plans of operations be operated "[c]onsistent with the mining laws[.]" 43 C.F.R. § 3715.1 explains that any occupancy must be allowable under the mining laws. Therefore, whether approved pursuant to 43 C.F.R. § 3809 et seq. or 43 C.F.R. § 3715 et seq., the water and power lines must be consistent with the mining law. Because this Court determined that discovery of valuable minerals is a necessary prerequisite of occupancy under the mining law, occupancy approved pursuant to 43 C.F.R. § 3809 et seq. or 43 C.F.R. § 3715 et seq. must be preceded by a discovery of valuable minerals.

discovery of valuable minerals has not occurred on the mining claims providing the surface estate for the water and power lines. 1-ER-15. Pursuant to *Rosemont*, then, LNC has no right to occupy BLM's lands with its water and power lines pursuant to 43 C.F.R. § 3809 et seq. or 43 C.F.R. § 3715 et seq. until valuable minerals are discovered on the claims underlying the water and power lines. Here, though, such a discovery of valuable minerals is likely impossible because the water and power lines will be located outside the McDermitt Caldera, admittedly beyond zones of lithium mineralization. 4-ER-621; 4-ER-746; *compare* 4-ER-605 *with* 4-ER-606.

This Court should affirm its holding in *Rosemont* that any mine-related occupancy of mineral claims must be preceded by a discovery of valuable minerals *on that claim*. Therefore, the Court should hold that BLM's approval of occupation for the water and power lines was arbitrary and capricious.

Responses of Rich Haddock,
General Counsel of Barrick Gold Corporation

Questions for the Record
Of the October 5, 2021 Hearing of
The Senate Energy and Natural Resources Committee
To Examine and Consider Updates
To the Mining Law of 1872

October 29, 2021

The following are responses of Rich Haddock, General Counsel of Barrick Gold Corporation, to questions posed for the record by Members of the Senate Energy and Natural Resources Committee, following the full Committee's October 5, 2021 hearing on updates to the Mining Law of 1872.

Questions from Chairman Manchin

Your testimony noted that the mining industry recently worked together with stakeholders to institute a new excise tax earmarked for education.

Response/Background on Nevada Mining Excise Tax: The new Nevada excise tax on mining revenue is a direct result of the COVID-19 pandemic. Nevada was in dire economic straits in 2020 as a result of the pandemic, which decimated tourism—the state's largest industry, employer, and economic driver. Mining was one of the only large industries in the state able to operate at a (relatively normal) capacity. Nevada Gold Mines took a proactive and cautious approach to the pandemic, but was able to continue employing its workforce without layoffs or slowdowns, and to continue producing gold.

In a series of emergency special sessions called during the summer of 2020, the Nevada legislature considered various measures to increase the Nevada Net Proceeds of Minerals Tax (NNPT), in an effort to address the state's severe budget shortfall. However, since the NNPT is in the Nevada Constitution, it cannot be altered solely by legislation.[1] Additionally, the state Constitution was amended in 1987 to cap the NNPT at five percent. Any amendment to the Constitution requires a multistep process that includes legislative action in two successive legislative sessions, and subsequent approval by Nevada voters in a general election. The process would have taken at least three years to complete, which would have done nothing to address the State's acute budget crisis. As a partner to the State, we recognized this was not in anyone's best interest.

Nevada's legislative leadership and the Nevada mining industry worked together to find a solution that could pass constitutional muster, provide immediate revenue to the State and be directed towards education. The product of this collaboration is the Nevada Mining Education Tax. This excise tax – applicable only to gold and silver mines – is in most respects a gross tax, and as a result is regressive, creates significant problems for the industry at the lower end of the metals price cycle and has all of the problematic elements of a gross royalty explained in my testimony at the hearing and further discussed in the following responses. Certain of this new tax's features – including an earnings threshold below which the tax does not apply, and a lower tax rate for certain operations – were included to blunt the harshest impacts of the tax on smaller gold and silver producers and marginal ore deposits. This tax is applied on top of the 5% net proceeds tax, and as a result effectively increases Nevada's mining-specific taxes from 5% of net proceeds to 8%. That figure does not include other state taxes paid by the mining industry in Nevada.

The Nevada Mining Education Tax is a response to a fiscal emergency in the State of Nevada, and to unique constraints on the legislature's taxing authority imposed in the Nevada Constitution. The deleterious effects of the tax on industry are currently blunted because of strong precious metals prices. When the price of gold drops, as it inevitably will, the negative impacts of the tax will become more apparent. Moreover, the existence of the excise tax would make a federal gross royalty even more

[1] When Nevada achieved statehood in 1864, its Constitution included authority to tax the "net proceeds" of mines. THE CONSTITUTION OF THE STATE OF NEVADA. ORDINANCE. The Nevada Constitution was approved by President Lincoln on October 31, 1864. *Id.*

damaging to the Nevada industry. As you can see from the graphs contained in my response to Senator Cortez-Masto's second question below, gross royalties and taxes have a significant distorting effect on the government "take" at low gold prices. The excise tax is not a model for a federal royalty.

Manchin Question 1: What does this excise tax apply to and on what basis is this excise tax calculated?

Response: The tax applies to gold and silver mines that gross more than $20 million annually. The tax rate on revenues from $20 million to $150 million is 0.75%. Revenues greater than $150 million are taxed at 1.10%. The threshold and the lower rate were included to mitigate the regressive impacts of the excise tax.

Manchin Question 2: Does this excise tax apply to all mines or only new mines?

Response: The tax applies only to gold and silver producers and is on existing and new operations earning more than $20 million annually in gross revenue.

Manchin Question 3: How long was the delay between enactment and implementation of the tax?

Response: The tax is effective immediately upon enactment – June 1, 2021 – and is payable in 2022. Implementing regulations are under development.

Questions from Ranking Member Barrasso

Barrasso Question 1: As Congress considers imposing a royalty on minerals under the mining law of 1872, why is a (prospective) net royalty more appropriate than a (prospective) gross royalty for these minerals? Why should Congress treat these minerals differently than minerals subject to a gross royalty under the Mineral Leasing Act?

Response:

As I explain in more detail below, a net royalty would recognize that most hardrock minerals are different in fundamental ways from leasable minerals such as oil, gas, and coal, including that they are much more difficult to find, and that they require significantly more processing to make a saleable product. A net royalty also can better address the significant differences in geology, processing, and economics among the locatable minerals, which range from precious metals and rare earths to bentonite and uncommon varieties of building stone.

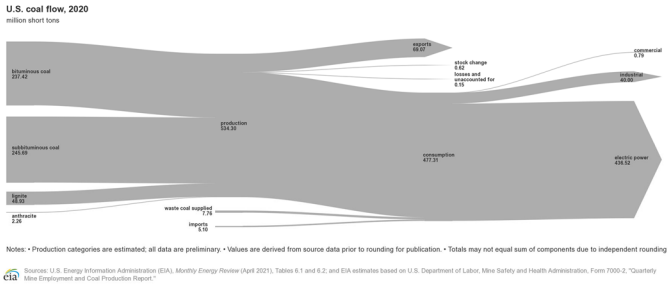
Mining Law Versus the Mineral Leasing Act. Locatable minerals such as gold should not be treated the same as oil and gas or coal under the Mineral Leasing Act because they are fundamentally different kinds of minerals. Oil, gas, and coal are easier to find than gold, copper, lithium, and other hardrock minerals because they occur over much larger geographic areas, and they require no (or relatively little) processing before they can be valued and marketed. With an exception in the case of gas (processing), these minerals are sold as they are removed from wells or mines. Hardrock minerals, on the other hand, are in most cases difficult and expensive to find, and they often cannot be marketed at or near the mine

mouth because they require significant processing.[2] Imposing a gross royalty on hardrock minerals would in effect be a tax on that processing.

Coal, Oil, and Gas Royalties are Not True Gross Royalties. Even the federal "gross" royalties for oil, gas and coal allow deductions for processing and transportation costs. In that respect, it is inaccurate to refer to them as true gross royalties, because they are "net" of these costs. The Department of Interior's (DOI) rules have always allowed deductions for "processing" when calculating the royalty on gas, and transportation costs for both oil and gas. *See* 30 C.F.R. §§ 1206.109, 110, .111 (transportation deductions for oil); §1206.156 (transportation deductions for gas); §§ 1206.158., 159 (processing deductions for gas). DOI rules have also recognized different royalty values based on different types and qualities of crude oil. 30 C.F.R. §1206.104 (index prices for like-quality oil); -.113 (adjustments/allowances to oil valuation). Similarly, DOI allows deductions for transportation and washing of coal. 30 C.F.R. §§ 1206.262, -.263, -.264 (transportation deductions for coal); §§ 1206.267, -.268, -269 (washing deductions for coal).

Coal Markets are Primarily Local or Regional, and Royalty Costs are Passed On. Coal deposits at different locations in the U.S. command widely varying prices. *See* https://www.eia.gov/coal/markets/ (accessed October 28, 2021). In 2019, transportation costs accounted for about 40% of the total delivered cost of coal. In some cases, transportation costs exceeded the mining costs and the value of the coal at the mine. *See* U.S. Energy Information Administration, "Coal Transportation Rates to the Electric Power Sector," May 12 2020, available at https://www.eia.gov/todayinenergy/detail.php?id=43695 (accessed October 28, 2021). High transportation costs mean that coal markets in the U.S. are very localized.

Finally, despite policy discussions about exporting U.S. coal, as illustrated in the chart below from the U.S. Energy Information Administration, the vast majority of coal in the U.S. is still sold locally for electricity generation. *See https://www.eia.gov/totalenergy/data/flow-graphs/coal.php* (accessed October 28, 2021).



[2] Some locatable minerals, such as building stone, *are* primarily marketed near the mine site because of high transportation costs. On the other end of the spectrum from precious metals, the fact that both are "locatable" under the Mining Law illustrates the enormous diversity of minerals that would be subject to any federal royalty.

The royalty for coal sold is passed on through power generated and becomes a part of the variable fuel cost paid by rate payers. *See, e.g.*, *Penn. Power & Light Co.*, 69 FERC P 62135, Docket No. FA92-8-000, 1994 WL 722952, at **5 - **8 (Nov. 8, 1994); *Delmarva Power & Light Co.*, 68 FERC P 62128, Docket No. FA92-39-000, 1994 WL 517519, **6 - **7 (July 28, 1994); Alamito Co., 37 FERC P 63036, Docket No. ER79-97-002, 1986 WL 79259, **1 - **10 (Dec. 31, 1986); *In the matter of PacifiCorp, dba Pacific Power*, OR Pub. Utilities Comm'n, Docket No. UE 374, Order No. 20-473, 2020 WL 7658074, at *6, (Dec. 18, 2020); *In re Southwestern Electric Power Co.*, Docket No. 3716, 7 Tex. PUC Bull. 78, at 8-9 (1981), 1981 WL 723266. In effect, the royalty on coal sold for power generation becomes a user tax on the rate payer.

Oil and Gas Royalties Can Be Passed On. Oil and gas markets also typically allow producers to pass along all or a substantial portion of the royalty to consumers. In the case of oil, global prices are heavily influenced by OPEC, which often limits production to support prices. *See* https://www.eia.gov/energyexplained/oil-and-petroleum-products/prices-and-outlook.php (accessed October 27, 2021). Accordingly, global oil prices usually are higher than marginal costs, and royalties can be passed on to customers. *See* https://www.nber.org/system/files/working_papers/w23801/w23801.pdf, Figure 4(a) (accessed October 27, 2021). Because gas is costly to process and transport, gas prices are set in regional markets, and in deregulated markets like the U.S., producers are able to pass on their costs (including royalties) to end users. *See* https://www.geoexpro.com/articles/2020/12/why-is-natural-gas-priced-differently-around-the-world (accessed October 27, 2021). Also, margins for oil and gas generally are much higher than for metals. Accordingly, when the producer cannot fully pass through the royalty, it is still much better positioned to absorb the royalty cost.

Hardrock Mineral Royalties Cannot Be Passed On. In contrast, hardrock miners are "price takers." In other words, metals prices are fixed daily in global markets, without regard to transportation, processing, royalties, or other costs. The costs of royalties for gold, copper, lithium, and other hardrock minerals cannot be passed on to buyers. Thus, royalties on these minerals become an additional cost of production, 100% of which must be absorbed by the producer.

Hardrock Minerals are Extremely Diverse. In comparison to Mineral Leasing Act minerals such as oil, gas, and coal, hardrock minerals are a very large and diverse group, ranging from precious metals to limestone, building stones, and gemstones. The most valuable locatable minerals – including platinum, palladium, gold, and silver – are difficult and expensive to find. For example, Nevada Gold Mines has invested over $450 million in exploration costs alone to establish our Goldrush project in Nevada.

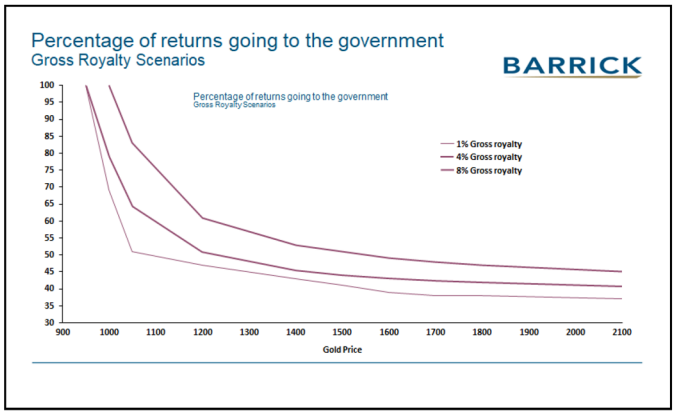
Additionally, hardrock minerals are usually sold in highly processed or fabricated forms (gold dore bars, copper cathodes, sheets, wire, rods, etc.), often far from the mine where they were extracted, and are subject to global market prices which do not allow for royalty costs to be passed through. Some hardrock minerals are sold and priced locally or regionally, and do not require the extensive processing necessary for gold, copper, and other metals, but mining claims on federal lands for these minerals are a small fraction of those claims that would be subject to a federal royalty. Most hardrock minerals – especially the metals – require significant and expensive processing. As I explain below in response to

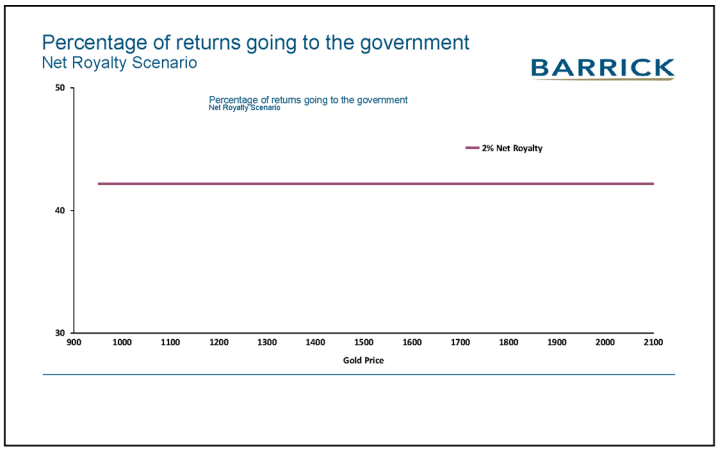
Senator Cortez-Masto's third question, Nevada Gold Mines has invested billions of dollars in processing technology and facilities at just one of its properties in Nevada—the Carlin complex – in order to process the rock that comes out of the mine into a saleable product. To be consistent with existing federal royalties for oil, gas, and coal, a federal hardrock royalty must allow deductions for processing costs. Also, it must be flexible enough to address the vast differences in nature, location, markets, prices, and other factors that exist among hardrock minerals. As I describe below, a net royalty would better recognize and adjust for this diversity. Please see also my response below to Senator Daines' fourth question for more on the diversity of hardrock minerals.

Gross Versus Net. As a cost, any royalty on a mineral deposit will reduce the amount of ore by making marginal ore uneconomic. A gross royalty, however, is particularly problematic for hardrock minerals because at lower prices it will lead to premature closures and disincentivize investment. If prices fall to low enough levels, a gross royalty could result in a government "take" of more than 100%.

1. A gross royalty is not just a tax on the gold or other hardrock mineral removed from federal lands. Gold, copper, lithium, and other hardrock ores cannot be sold into international markets as they come out of the mine, in the way oil, gas, and coal can. Because these minerals require billions of dollars of investment before they can be sold in global markets, a gross royalty becomes a tax on all that investment, rather than just on the mineral. The gold dore bar, as an example, can be analogized to refined gasoline. Charging the royalty on the gross sales price of a gold dore bar would be like charging the oil royalty on gasoline instead of on crude oil. It ignores the realities of and investments in concentrating and processing hardrock minerals.

2. A gross royalty is regressive. This is illustrated by the following graphs.





Under a gross royalty (first graph), the government take (state and federal taxes plus royalty) becomes dramatically higher as the commodity price goes down, which it inevitably will. For every percent of a gross royalty added, there is a dramatic non-linear effect of the gross royalty on the operator's share of the take. Moreover, with a gross royalty, the operator must continue to pay the royalty even when the government's take exceeds 100% of the revenue from the mine. In sharp contrast, under a net royalty (second graph), the government's take remains the same proportionally throughout the commodity cycle, hence the flat line.

3. A gross royalty "shrinks" the mineral resource faster by making more marginal mineralization uneconomic to mine. Rock that was "ore" stays in the ground, or is stockpiled as subgrade because the company would lose money processing it. The higher the gross royalty percentage, the more ore stays unmined and unprocessed. A gross royalty accelerates the rate at which the resource shrinks with a reduction in the gold price, making it very difficult for companies to plan the investment and manage investment risks.

4. A gross royalty eliminates a return on this marginal mineralization for the federal and state governments, and eliminates jobs unnecessarily early. The mine's breakeven point, or more accurately, its shutdown point, occurs at higher commodity prices. More mines will close early, less product will be available for commerce, fewer miners will be employed, and less personal and corporate tax revenues will be generated. See the discussion and graph below regarding the concept of "optimal government take," in response to Senator Daines' second question.

5. A gross royalty increases the risk of (and disincentivizes) capital investment because as the available return is reduced, the risk of investing significant capital into a project becomes higher, especially given expected fluctuations in the prices of gold and other minerals. Gold, copper,

lithium, and other types of hardrock mines require very large upfront investments, and continuing large capital investments to operate and maintain them. Thus, an unreasonable gross royalty will cause some companies to close operations and shift capital to other places. U.S. domestic minerals are left in the ground, generate no return for the company or governments, and provide no employment and generate no tax revenues. The U.S. remains or becomes more dependent on foreign production.

6. A gross royalty picks winners and losers because the deposits that have high enough grade can better absorb a gross royalty, while a lower grade or marginal deposit, which would otherwise still generate taxes, jobs and minerals, becomes uneconomic. To avoid this outcome, other nations – which like the U.S. produce many different types of minerals – have multiple royalty rates depending on mineral type/category: Brazil (5 rates), China (over 15 rates), India (over 30 rates), and Russia (5 rates).[3]

A gross royalty is inappropriate for the broad range of minerals that are locatable under the Mining Law. The economics of gold, uranium, copper, lithium, and bentonite, just to name a few locatable minerals, are completely different from one another. A gross royalty most severely disadvantages commodities that are low margin.

Given the negative impacts of gross royalties described above, Barrick has always advocated for a reasonable net royalty. A net royalty is more appropriate for hardrock and other locatable minerals because:

1. A net royalty allows the miner to keep operating and recoup capital investments in inevitable periods of low metals prices.

2. A net royalty "normalizes" for ore grade, differences in processing costs, and other variables. Stated differently, mines with lower margins can continue to operate when metals prices are low, and can operate longer. The mine life is extended because the miner can afford to mine and process marginal ore during periods of low prices.

3. A net royalty allows the industry to survive the inevitable dips in the commodities cycles while giving the U.S. the benefit of the peaks in the cycles. In other words, when revenues are low due to the price (which is out of the miner's control), operations would pay less, allowing them to reduce costs and maintain production and employment and generate tax revenue during tough times. Conversely, when net revenues are high, the royalty revenue returned to the government is higher. When looked at this way, the industry and the government win in both cases: (1) preserved employment, tax revenues, product output, and some returns in cycle troughs; and (2) higher returns, tax revenues, and employment in cycle peaks.

[3] Ishita Kapoor, *Mineral royalty rates in India: Comparison with other countries,* Centre for Social and Economic Progress (September 23, 2020), https://csep.org/discussion-note/minerals-royalty-rates-in-india-comparison-with-other-countries/; *see also* Tozzini Freire, Advogados, *Changes to the CFEM, the Brazilian Mining Royalty* (December 22, 2017), https://tozzinifreire.com.br/en/boletins/changes-to-the-cfem-the-brazilian-mining-royalty?utm_source=Mondaq&utm_medium=syndication&utm_campaign=LinkedIn-integration.

4. A net royalty also recognizes and automatically adjusts for the differing nature of minerals and mineral economics across a broad range of commodities. Investments and margins differ widely for gold, silver, copper, lithium, chemical-grade lime, and the dozens of other locatable minerals. The net royalty automatically adjusts to an equitable revenue-sharing level for mineral deposits with low capital outlay/low margin, low capital/high margin, or extraordinary capital/medium margin. A single gross royalty cannot appropriately adjust for these differences, and processing requests for relief from a gross royalty on a case-by-case basis would be unworkable for administrative agencies. With a net royalty, there is no need for commodity-by-commodity or mine-by-mine consideration of economics.

5. Perhaps most importantly from a fundamental fairness perspective, a properly designed net royalty allows for deductions and adjustments that recognize the miner's investment to get the mineral out of the ground. This is an especially important point for gold, copper, lithium and other hardrock mining that is ignored in the House's proposed gross royalty, which is based on the incorrect assumption that hardrock mineral production is comparable to coal, oil, and gas production. In truth, they are fundamentally different. A net royalty recognizes and compensates for the value (the gold ore in place the U.S. is contributing to the equation). In other words, the net royalty is approximated to the value of the rock.

In contrast to gross royalties, net royalties take into account a mine's ability to pay. The type of mineral produced, whether it uses underground or surface mining, the unique economics of the operation, and the price cycles do not have to be analyzed by lawmakers or policymakers. A net royalty is in some ways similar to an income tax – it is based on a specialized calculation of profitability. If the mine is profitable, it pays; if not, it does not. This means that when prices cycle lower, marginal mines are more likely to stay open because their costs will be lower, thus reducing the likelihood of boom-and-bust economics in local communities. Major mining countries like Chile and Peru that tax at the federal level apply net proceeds type of royalties, as do many provincial and state governments in Australia, Canada and the U.S.

Barrasso Question 2: During the hearing, Senator Heinrich stated: "there is no way for the Forest Service, under the 1872 mining act, to determine that a mine in [a] particular location is not in the best interest of the public." He went on to say that: "under [the] 1872 [mining act], there is simply no step in the process where the public's interest in the location of a particular mine is considered." Later in the hearing, you stated that: "I would point out is that we have land use planning and it's part of the Federal Land Policy and Management Act and it is an amendment to the [1872] mining law that came into being in the 1970s. And so there are big swaths of the United States and Nevada – in Nevada's case 85% of [Nevada is] federal land, 25% of that [federal] land – is not available for mine exploration." Would you expand upon your comments?

Response:

The 1976 Federal Land Policy and Management Act (FLPMA), 43 U.S.C. §§ 1701 *et seq.*, is one of many federal statutes that have amended or changed the Mining Law of 1872. In FLPMA, Congress directed the Secretary of Interior to develop and regularly update land use plans (called "resource management plans"). 43 U.S.C. § 1712. FLPMA directs both BLM and the Forest Service in their land-use planning processes to identify lands with resource conflicts and, where appropriate, recommend to

the Secretary that those areas be withdrawn, subject to valid existing rights. 43 U.S.C. § 1712(e)(3). The land use planning processes include substantial opportunities for the public to identify sites that may be withdrawn. Areas may also be legislatively withdrawn by Congress subject to valid existing rights. Where land is withdrawn, new mining claims may not be located and the mining industry will not spend time and money on exploration.

According to the Nevada Division of Minerals, as of 2018, 15.6 million acres of Nevada federal lands have been withdrawn from location under the mining law—more than 22% of all lands in Nevada. Nevada Division of Minerals, *Nevada Land Withdrawals from Mineral Entry A Historical Perspective*, (May 2018 update). In contrast, according to the Government Accountability Office (GAO) in 2018, hardrock mining disturbance for 143 operations in Nevada was less than 200,000 acres. General Accounting Office, *Mining on Federal Lands: More Than 800 Operations Authorized to Mine and Total Mineral Production is Unknown*, GAO 20-461R (June 25, 2020) (2020 GAO Report).

The identification of additional lands for withdrawal is a continuing process addressed during development and amendment of land use plans. For example, as a result of the land use plan amendments for Greater Sage Grouse in 2015 (subsequently amended and presently in litigation), the Secretary of the Interior is considering withdrawing about 10 million additional acres across the West, including 2.8 million acres in Nevada and 250,000 acres in Wyoming. *See* 86 Fed. Reg. 44742 (August 13, 2021).

Federal agencies may also impose limitations on actions on federal lands that are not withdrawn, again through the land use planning process. Using the 2015 Greater Sage Grouse plan amendments as an example, BLM imposed a long list of limitations on activities on public lands, including a requirement that mine operators provide compensatory mitigation for impacts to certain habitat categories. The land use plan amendments require that miners avoid and minimize impacts to Greater Sage Grouse to the extent practical and then compensate for any unavoidable impacts. *See* https://www.blm.gov/programs/fish-and-wildlife/sagegrouse/blm-sagegrouse-plans (accessed October 19, 2021). Both Barrick and Newmont, the joint venture partners in Nevada Gold Mines, have negotiated compensation frameworks for impacts to sage grouse habitat from operations in Nevada.

BLM and the Forest Service may use legal authority under their surface management regulations and other applicable laws, including the National Environmental Policy Act, National Historic Preservation Act and Endangered Species Act, to limit or mitigate impacts to sites and resources. This may include relocating mine facilities to avoid specific sites or resources or modifying reclamation plans to include certain post mining land uses. In Nevada, we work constantly with federal land managers, Tribes, local governments, and the Nevada Department of Wildlife to develop and implement mining plans that avoid or limit impacts to environmental resources, cultural sites, and wildlife.

An agency may not use its regulations, the land use planning process, or withdrawal authority to negate "valid existing rights." In the context of mining plans, that means that where an operator has proposed a plan of operations that complies with all applicable legal requirements, including federal and state environmental and reclamation laws and regulations, an agency may not, as a matter of discretion, deny approval of the plan because of a perceived resource conflict. Resource conflict decisions can and should be made during the land use and withdrawal processes, not on a case-by-case basis. This is an important legal and policy limitation because agencies should not be able to withhold approval of a mine on lands that are open to entry under the mining laws after the miner has invested years and millions –

often hundreds of millions – of dollars in exploration, design and engineering, and permitting to bring the mine to the stage where a final plan of operations has been submitted for agency approval.

Barrasso Question 3:

a. Please discuss how Canada and Australia have been able to maintain comparable environmental standards to the U.S. and complete the permitting process for new mines on dramatically shorter timelines than the U.S.

b. How can the U.S. repeat the success of Canada and Australia in reducing delays in the permitting process while maintaining high environmental standards for new mines?

Response:

Environmental Review. Based on our permitting experience in Canada and Australia, the permitting process is shorter because regulatory agencies typically review, rather than write, environmental documents. In the U.S., pursuant to the National Environmental Policy Act (NEPA), an agency must prepare an environmental impact statement (EIS) to accompany any major federal decision that may have a significant impact on the environment. In practice this means that an EIS must be prepared for every mining operation on federal lands. The NEPA process is the most time-consuming aspect of every mine permitting decision—the critical path that drives the permitting schedule.

Federal agencies typically engage third party contractors (paid for by the applicant) to consider baseline data, engineering and technical analysis and other information and prepare the document for agency review. The Draft EIS is then released for public review and comment and the agency, assisted by the third-party contractor, must respond to every substantive comment, revise the EIS where appropriate, and publish a Final EIS. The agency's decision is then subject to administrative and/or judicial appeal and may be reversed if the EIS is found to be inadequate. The agency must supervise preparation of this document while it fulfills all of its other statutory obligations. For BLM and the Forest Service, review and approval of mining plans and the associated NEPA obligations is only one part of their much broader land management obligations. Mining EIS's must compete with all of the other priorities of the land management agencies. For example, in Nevada during wildfire season, all available agency personnel may be devoted to firefighting and managing fire responses. Action on mining EIS's (and all other lower priorities) must be deferred until agency resources are available.

In other jurisdictions, including in Canada and Australia, environmental impact documents are usually prepared by the applicant and submitted to the agency for review and approval as part of the mining permit application. The environmental impact document must satisfy the agency and applicable legal requirements, but these documents are typically shorter and more focused than NEPA documents in the U.S.

In Canada, the federal and some provincial environmental impact assessment laws provide that significant portions of the impact assessment review process must be completed within fixed timelines.[4]

[4] Impact Assessment Act (Canada), S.C. 2019, c. 28, s. 1, ss,37 and 37.1; Prescribed Time Limits Regulation, adopted pursuant to the Environmental Assessment Act (British Columbia), B.C. Reg. 372/2002; Regulation respecting the environmental impact assessment and review of certain projects, adopted under the Environment Quality Act (Quebec) chapter Q-2, r. 23.1.

In addition, where there is the possibility of overlap of federal and provincial impact assessment processes, legislation allows for the substitution of a process as well for cooperation and coordination agreements between various levels of government or decision-making bodies so as to avoid duplication. The federal government also in Canada also provides administrative support through The Major Projects Management Office (MPMO) who is tasked with overarching project management and accountability for major resource projects in the federal regulatory review process.[5]

Division of Regulatory Authorities. In Australia, the states are primarily responsible for regulation of mining operations. The Commonwealth government's authorities focus on environmental issues of national significance, which are often matters covered in international treaties. The authorities of states and Commonwealth governments are clearly defined, and they cooperate using bilateral agreements that generally work well.

Litigation. The U.S. is more litigious than other countries, and EIS's and plans of operation for mining projects are frequently challenged. Our own review shows that a mining project in the United States is about three times more likely to face a litigation challenge than in Canada, and about 15 times more likely to face litigation than in Western Australia. Australia places some limits on judicial review. Decisions of state environmental regulators cannot be appealed; the pathway and grounds to challenge a project are narrower than in the U.S. Faced with the likelihood of litigation (and the possibility of paying attorneys' fees to a successful challenger), U.S. agencies naturally become more cautious and take more time in an effort to "bulletproof" the EIS.

Recommendations.

Project Proponents Prepare EIS's. The Council on Environmental Quality's NEPA regulations were updated in 2020 to allow project applicants to prepare NEPA documents, subject to agency review and adoption. This change would make the NEPA process more like the environmental reviews in Australia and Canada. It is one of the ways the U.S. has tried to tackle the problem of permitting delays for major infrastructure projects. As you noted in your question, Canada and Australia are advanced countries that have environmental protection standards generally comparable to those in the U.S. In those countries, these kinds of applicant-prepared environmental documents have been successful, and contribute to faster permitting timelines. There is insufficient experience with this new provision in the U.S. to determine whether it can be implemented successfully, and whether it might speed up mine permitting. However, whether through this or other measures, the U.S. has to wrestle with the difficult problem of permitting delays, if it wants to encourage domestic mining of critical minerals.

Modify Review Procedures at the Department of the Interior. The Department of Interior (DOI) could reduce the time for permitting mines, wind farms, solar arrays, and other major projects requring an EIS by months or years with one simple and sensible administrative change. DOI should delegate the authority to publish *Federal Register* notices associated with EIS's back to BLM State Directors. Prior to 2001, such notices were routinely approved by BLM state offices and submitted to the *Federal Register* for publication. The notices are essentially boilerplate—informing the public that the agency is preparing an EIS, summarizing the process and issues and identifying agency contacts and opportunities for public input.

[5] https://mpmo.gc.ca/home.

In 2001, in an effort to monitor administrative actions initiated in the prior administration, DOI required that such notices be reviewed in Washington before publication. That review step, linked to the *Federal Register* notices, has been kept in place by every administration, regardless of party, for twenty years. In Barrick's experience with numerous mine EIS's during that period, the review has added ***delay of between 9 and 16 months for every mine plan approval in the past 20 years***. These delays also apply to every other project that needs a BLM EIS, including solar and wind renewable energy projects.

While it is understandable that Washington officials want to monitor projects and decisions in the field, especially major ones like mines and wind farms, there is no reason to tie that review to EIS *Federal Register* notices. Each EIS requires three NEPA notices: a notice of intent to prepare the EIS, which must be published before the agency can begin public scoping; a notice of availability of the Draft EIS, which must be published before the agency can release the draft document for public review and comment; and a notice of availability for the Final EIS, which must be published before the agency can issue a record of decision. In each case, the NEPA process stops until the *Federal Register* notice is published, allowing the agency to move to the next step.

Administrations have followed different strategies for review, but no administration has uncoupled the project review process from the *Federal Register* notices. DOI can monitor projects, requiring the same level and types of review but separately from the *Federal Register* notice process. That would be a simple change, does not require an Act of Congress, and should be done immediately.

Assure that Federal Land Managers Have Adequate Resources to Process Mining Permits.
Congress must provide the resources necessary to speed up the agency review of mining permits. Similarly, BLM and the Forest Service need to assure that their offices in the field have adequate resources – human, technical and technological – to process mine permit applications together with all of their other land management responsibilities. Under current regulations permit applicants reimburse the agencies for processing costs, including costs associated with preparation of environmental impact statements. But local field offices do not always have resource specialists with experience in reviewing mining plans of operations, or qualified specialists are burdened with competing obligations. In Nevada, for example, during wildfire season, most employees in BLM field offices are assigned to wildfire management as the top priority. Mine permitting and NEPA reviews may be put on the back burner for months. Land management agencies have also been affected by the retirements of agency staff with mining engineering backgrounds and experience, and are not able to review mining and reclamation plans. Meeting critical mineral production goals will require addressing these systemic issues.

Question from Senator Risch

Risch Question: In his opening statement, Chairman Manchin noted that one of the concerns he perceives with the Mining Law is that it mandates a claim system. Can you explain why the claim location system works for hardrock mining? And conversely, why a leasing system similar to coal, oil and gas would not work?

Response:

With the claim maintenance fees imposed over the last couple of decades, the Mining Law and its base tenure – the mining claim – has already taken on one primary attribute of a leasing system: the annual

fee for use. The maintenance fee – a major 1994 amendment to the Mining Law – replaced the Mining Law's annual work requirement.

Unlike oil and gas prospects, which are large targets in identifiable geologic settings (and in many cases treated as "known geologic structures"), or coal fields, which are well known and long since identified, hardrock mineral deposits are very small targets, widely scattered, often very deep in the earth compared to coal, and much more difficult to find and reach. While there is a database to support rational identification and leasing of large tracts for oil, gas, and coal, no similar database exists for the wide array of locatable minerals. Accordingly, the data do not exist to inform a federal leasing program for locatable minerals. The government would have no way with its current lack of data to identify or prioritize areas for mineral exploration, the amount of land for a particular mineral, or the geologic constraints for a given mineral.

The argument is often made that states have mineral leasing systems for hardrock minerals and the federal government could do the same. GAO recently published a report surveying systems for obtaining mineral rights on state trust lands. Government Accountability Office, *Hardrock Mining Management: Selected Countries, U.S. States, and Tribes Have Different Governance Structures but Primarily Use Leasing*, GAO-21-298 (June 30, 2021), available at https://www.gao.gov/products/gao-21-298. As expected, the Report documents that U.S. western states use leases to grant mineral rights on their lands. However, the GAO Report does not evaluate the success of these leasing programs. One measure of their success would be the number of hardrock mining operations on state trust lands, or the amount of royalty revenue from such operations. As it happends, there is very little hardrock mineral production from state lands. In comments submitted to GAO for consideration in preparing its report, Barrick noted that it could identify only one large mining operation primarily on state lands: The Kinross Fort Knox Mine in Alaska. Otherwise, our research revealed only minor hardrock mining activity on state trust lands, usually in concert with much larger blocks of mining claims on federal lands. The *de minimis* amount of hardrock mining on these lands undermines any argument that state leasing programs could be a model for federal mining law because there is no record of success by which to evaluate them.

Leasing system proponents also claim that in jurisdictions like Australia that are viewed as favorable for mining investment, the mineral tenement is sometimes called a "lease." That argument ignores the most significant aspects of that mineral right, i.e., that it is based on self-initiation and preserves tenure. The GAO Report I described above, in addition to its summary of state mining laws, also looked at the mining laws of Australia, as well as laws in Chile and Canada. That report documents, and Barrick's on-the-ground experience confirms, that in Australia the miner acquires exploration tenements, the boundaries of which they define themselves (subject to statutory size and shape requirements), and through the process of exploration ultimately narrows down the prospective area, defines the boundaries of the prospect they want to develop and then converts it to a "mining lease." Indeed, the Australian example supports the importance of self-initiation rather than undermining it. Furthermore, the Australian approach provides tenure – security of title – because no other miner can take over the fruits of the miner's exploration labors. The miner that discovers the mineral deposit has the sole right to convert the exploration tenement to a mining lease, provided that it has complied with the terms and conditions of its exploration tenement.

Australia and the U.S. are not unique in this respect. Most nations that have hardrock mines have a system that is based on self-initiation through a right to explore (referred to as a claim, license, lease, or concession depending on the jurisdiction) that can result in a right to mine. Also, like in the U.S., many nations have an auction system for oil and gas and coal rights. This reflects the fact that exploration is much more difficult for hardrock minerals and that an approach based on bidding does not work. Countries that have experimented with auctioning hardrock exploration blocks, for example Pakistan, have been disappointed, and have returned to systems based around self-initiation.

The difference between hardrock mineral exploration and exploration for oil and gas or coal is immense. Only about 1 in 10 mineral exploration projects are taken to the drill stage, and 1 in 1000 drill programs unearth viable mineral deposits. Ultimately, less than 1 in 10,000 projects become mines. "Mining 101," Ontario Mining Association, at https://oma.on.ca/en/ontario-mining/Mining101.aspx (accessed Oct. 27, 2021). In 2018, the success rate for exploration of oil and natural gas in the US was more than 60%. "Natural Gas, Oil Drilling and Completions Up More Than 35 Percent Over 2017," American Petroleum Institute (April 19, 2018) at https://www.api.org/news-policy-and-issues/news/2018/04/19/natural-gas-and-oil-drilling-and-completions-up-more-than-35-percent-over-2017 (accessed Oct. 27, 2021). The success rate for wildcat drilling, defined as exploration outside of existing known fields, is estimated to be about 30%. *Wildcat drilling: worth the risk?* Offshore Technology (Feb. 24, 2020) at https://www.offshore-technology.com/features/wildcat-drilling-worth-the-risk/ (accessed Oct. 27, 2021).

The very foundation of hardrock mineral exploration is being able to follow the geology – the notion of prospecting – and identify the limited areas where the explorer believes further expenditure such as geophysics and drilling are justified. Any miner's competitive advantage comes from making the best choice of available land based on superior geologic knowledge and application of the best and ever-evolving technology. Any mining land tenure system must preserve the rights of self-initiation and tenure.

Questions from Senator Daines

Daines Question 1: What specific actions should this committee take to increase domestic production of critical minerals?

Response:

This is a complicated subject with facets that extend far beyond concerns about domestic supplies of the minerals themselves. I am limiting my response here to recommendations to increase domestic mining of critical minerals, which in my opinion should include gold, but the Committee must be aware that even if domestic supplies were available now or in the foreseeable future, processing and manufacturing capacity for many metals – especially certain rare earth elements – have disappeared in the U.S. and have moved abroad, principally to China. At the present time, most rare earths are processed in China, which has invested in decades of research that now give it a competitive advantage. As in other industries, it is difficult for new entrants to compete with established firms that enjoy large economies of scale. China's firms have the technology and scale to provide low-cost processing that firms in the U.S. have not been able to match. Yet, these downstream processing steps are crucial parts of the supply chain to a variety of products, including wind turbines, solar cells, and electric vehicles. In addition to

finding critical minerals in the U.S., this more comprehensive supply chain problem also has to be addressed.

An example of the problem (and potentially an early success story in solving it) is the Mountain Pass mine in California, which has produced rare earth elements periodically since 1952, but which closed in the late 1990's as global prices collapsed and China dramatically increased production. After a series of failed efforts to reopen the mine, it was purchased in 2017 out of bankruptcy by hedge fund investors (including 8% minority ownership by a Chinese state-owned enterprise), and production resumed in 2018. At least for the time being, the mine is producing a rare earths metal concentrate that has to be shipped to Asia for processing and manufacture of permanent magnets (among other uses), because those capabilities do not currently exist in the U.S. However, the mine owners have announced that they will recommission processing facilities at Mountain Pass – possibly as soon as 2022 – and develop capacity eventually to manufacture rare earth elements and permanent magnets.

Preserve Self Initiation and Tenure. As I described in my October 5 testimony, self-initiation and tenure are the two essential pillars of hardrock mining law in the U.S. The most important thing this Committee can do to promote future domestic mineral exploration is to preserve true self-initiation and tenure. These features of The Mining Law incentivize private companies to take risks and invest in exploration activities in the U.S., with the expectation that if a valuable mineral deposit is found, the miner will have the exclusive right to develop it.

Consider the Policy Implications of a Royalty on Hardrock Minerals. As I explain in more detail below in response to your second question, a royalty revenue stream to the U.S. from hardrock mining is just one of several policy concerns Congress must consider. The Mining Law was enacted originally (and without a royalty) to encourage domestic production of minerals. *See* Salvatore Lazzari, *The Federal Royalty and Tax Treatment of the Hardrock Mineral Industry: An Economic Analysis,* Congressional Research Service Reports – Taxation (June 13, 2008). Now, as Congress considers the imposition of a royalty, the U.S. finds itself again in the position of needing to encourage domestic mineral supplies. This is not an argument against imposing a royalty, but rather an admonition that the royalty type and rate matter a great deal. They are policy choices as much as revenue choices for the U.S. If the royalty is punitive, or if it increases the total U.S. government take too much, it will raise the cost of investing in the U.S. and discourage future domestic mining, at a time when the U.S. has recognized that it needs to do the opposite.

Improve U.S. Data Regarding Domestic Mineral Resources. As directed in Executive Order 13817 (A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals), the Department of Commerce prepared a report in 2019 recommending six "Calls to Action" to assure reliable supplies of critical minerals for U.S. needs. United States Department of Commerce, *A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals* (2019). The Commerce Report noted that the U.S. has fallen behind other major mineral-producing countries – including China, Canada, and Australia – in supporting research and developing tools to identify potential mineral resources. Commerce Report at 31. For example, the United States Geological Survey (USGS) estimates that less than 18% of the U.S. has been geologically mapped at the necessary scale. In contrast, China, Australia, and Canada have invested heavily in geologic mapping, geophysical surveys, and other data collection, and have made data readily available to private exploration companies.[6] *Id.* The Commerce Department also found that

[6] For example, in Canada, the federal government announced and implemented the Geo-mapping for Energy and Minerals program

some U.S. mineral resource data, to the extent they are available, are in paper form or otherwise difficult or impossible to access electronically.

Most nations that have significant mining industries invest heavily in basic research and data about geological attributes over large areas that any one company would not be able to generate on its own. These data can then be used by private actors to explore in smaller, more targeted areas. The National Science Foundation is a useful analogy; the federal government invests in basic research that scientists and researchers rely on to develop new technologies.

To a large extent, new hardrock mineral resources in the U.S. today are being identified by private mining companies conducting exploration. Most of that exploration is for gold, copper, molybdenum, silver, tungsten, and uranium. Congressional Research Service, R45810, *Critical Minerals and U.S. Public Policy* at 26 (2019). Increasingly, lithium and other metals used in emerging battery technology will also join that list. The Committee should update and increase the federal investment in identifying mineral resources, especially critical minerals. This would fill gaps in current mineral resource identification, and lay the groundwork for domestic production of critical minerals in the future. One policy option is to reconstitute the Bureau of Mines within the Department of Interior. Congress closed the Bureau of Mines in 1996, and reassigned some of its functions to the USGS and the Department of Energy, but many functions were discontinued. For example, the US Bureau of Mines was the lead US agency for mineral processing research. It developed a technology used to extract gold from low grade ores, and today we use this technology in our mines worldwide. At the same time that China was investing heavily in research to process rare earths and to transform raw silica into silicon wafers for solar panels, the U.S. closed down the Bureau of Mines and its research efforts.

We believe the conclusion that the U.S. does not have supplies of certain critical minerals is a self-fulfilling prophecy. Our vast nation, straddling the entire continent thanks to the westward migration spurred in part by the Mining Law, has significant mineral wealth, including many deposits that have yet to be discovered. Geologically speaking, the U.S. spans multiple geological settings that make the discovery of multiple minerals, including critical minerals, possible.

In some other cases, the U.S. may not have identified critical mineral resources, or those minerals may not be present here in a currently economically extractable form. However, we have not done enough work to know that. The U.S. has not yet come anywhere near investing the resources and exhausting exploration opportunities necessary to find domestic sources of such minerals. As mineral policy takes on more importance, the U.S. must devote more resources to mapping, geophysical surveys, and other data gathering to spur discovery of critical minerals.

(GEM) which was a $200-million geological mapping program that ran between 2008 and 2020 and was administered by Natural Resources Canada's Geological Survey of Canada. The program was designed to significantly advance and modernize geological knowledge in northern Canada to support increased exploration for new resources. The federal government has implemented a similar program known as the GEM GeoNorth program that is to run between 2020 to 2027: https://www.nrcan.gc.ca/earth-sciences/resources/federal-programs/geomapping-energy-minerals/18215. Several provinces have also established mapping and data collection programs that are available on-line. For example: British Columbia: https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/mineralinventory; https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey; Alberta: https://ags.aer.ca/; Ontario: http://www.geologyontario.mndm.gov.on.ca/mines/ogs/indexes/maps_e.html; https://www.mndm.gov.on.ca/en/mines-and-minerals/geology; Quebec: https://sigeom.mines.gouv.qc.ca/signet/classes/I1102_indexAccueil?l=a.

Incentivize Technological Innovation. Technological innovation also is a key aspect of finding "new" mineral deposits and extracting them. The gold industry in the U.S. provides the perfect model of how previously unknown or unrecognized mineral resources are ultimately going to be produced. As recently as the 1990s, the vast majority of gold deposits being discovered and developed were at or near the earth's surface. However, advances in geologic understanding and in exploration technology are enabling us to find and develop deposits deep under cover. The discovery of many other critical minerals will come only as the industry and the U.S. find better ways to look under cover.

Similarly, as recently as the 1980's, gold production was limited to certain kinds of rock, while other rock, also known to contain microscopic particles of gold, stayed in the ground because there was no known economic extraction technology. Those dispersed microscopic gold deposits today form the basis of our current industry, specifically because Barrick and other companies invested in further applied research and development of new extraction technologies that in many instances are customized to the ore body to be mined. The industry then invested billions of dollars to bring these new technologies on-line. Without these innovations, the Nevada Gold Mines operations would have closed in the 1990's. Barrick and Newmont invested in these technological innovations and implemented them in Nevada because of the favorable mineral policy embedded in the Mining Law and its many amendments.

The U.S. will continue to enjoy the benefits of ever evolving exploration and extraction technology only if there is a healthy domestic hardrock mineral industry doing the exploration work and then investing in the development. The prime example of this today is the lithium mining industry, ready to begin developing new mines in Nevada to create more domestic supplies of that mineral that is so important to advancing carbon neutral policy goals.

Expedite Permitting. Permitting delays in the U.S. are a perennial problem, and they are not amenable to a straightforward solution, but we do believe the Committee can and should tackle this problem. The current permitting process has a significant negative impact on the ability of smaller companies to bring a mine to fruition. While large companies like Barrick with cashflow can endure permitting delays, those delays are still part of our calculus about future investments. Smaller firms that do not have cashflow from other operations may be long out business before a permit is issued. This barrier to new entrants is real and significant, and these companies are necessary to create the new investments in domestic minerals the U.S. says it wants.

As you know, the Fixing America's Surface Transportation Act (FAST Act) created the Federal Permitting Improvement Steering Council and a new governance structure intended to streamline and expedite approvals for large infrastructure projects. Pub. L. No. 114-94, 129 Stat. 1312 (2015), codified at 42 U.S.C. §§ 4370m *et seq.* The Steering Council added mines as "covered" projects on January 8, 2021. *See* 86 Fed. Reg. 1281. The Steering Council administers a "dashboard" where qualifying projects are listed and tracked. *See* https://www.permits.performance.gov/. It is too early to know whether the FAST Act provisions will improve permitting timeframes, but they reflect some level of consensus in Congress about the need to address permitting delays across the economy.

I addressed permitting delays above in response to Senator Barrasso's third question. I also recommended an improvement that can be implemented right now: DOI can restore procedures that were in place before 2001 allowing BLM State Directors to approve NEPA notices for publication in the

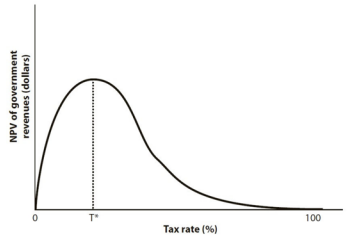
Federal Register, rather than requiring they be approved in Washington. These notices are procedural in nature only; they serve no substantive review purpose, and the current procedures result in significant, measurable, and unnecessary permitting delays. DOI can make this tangible improvement now, with no action by Congress.

Daines Question 2: There was a lot of discussion on the difference between a net royalty and a gross royalty. Can you explain in detail how a gross royalty would hurt your company and why it is not the right policy for hard-rock mining?

Response:

A gross royalty is an additional tax and will add to the overall tax burden borne by mines. The figure below illustrates how if the overall effective tax rate becomes too high, tax revenues will decrease because some mines will become uneconomic during downturns in commodity price cycles (many mines never reopen once closed) and new mines will not be built because companies may choose to invest their capital in lower-taxing nations.

Figure 2.1. Government Tax Revenues as a Function of the Tax Rate



Source: Author J. Tilton.
Note: T* is the optimal tax rate.

Source: The World Bank, *Mining Royalties: A Global Study of Their Impact on Investors,Government, and Civil Society* (2006).

A gross royalty approach is especially burdensome on existing and planned marginally economic mines because it is not based on ability to pay, and mines must pay regardless of whether they are profitable during price downturns. In contrast, a net royalty is based on annual profitability and better accommodates price cycles.

I addressed the importance of a net royalty for hardrock mining above in my response to Senator Barrasso's first question. A gross royalty does not work for hardrock minerals, most of which must be processed at great expense to produce a marketable product. A gross royalty therefore would not just apply to the minerals themselves; it would be a tax on the large investments necessary to extract and process the minerals. A net royalty compensates the government fairly for the mineral, it avoids a tax on the investments necessary to produce minerals, and it works well to account for the significant differences in investments and profit margins among locatable minerals.

Additionally, before imposing a royalty, Congress should be clear about the reason it is doing so. A royalty is a revenue or profit-sharing mechanism, but when imposed by government it is also a policy lever. For example, governments have set royalties at specific rates, or foregone them, in order to encourage resource exploration and production; to encourage westward expansion; to incentivize new technology; or to control or mitigate certain behaviors. Both the profit-sharing aspects and the policy aspects of a federal hardrock royalty would be better realized by a net royalty.

While one purpose of the Mining Law of 1872 was to promote westward expansion and settlement, and is no longer a driving force, its other main purpose – supplying valuable and necessary minerals for the nation – is more relevant than ever. We perceive growing bipartisan consensus that the U.S. must do better to promote discovery and production of minerals domestically that will be needed for electric vehicles, semiconductors, computers, other electronic devices, and other important uses. Thus, any federal royalty must strike a balance between the government's interest in an appropriate return on its mineral wealth and its interest in preserving and growing a domestic mining industry that has the technology, expertise, trained employees, and other resources to find and extract minerals. Any reform of the Mining Law must be consistent with the U.S.'s need for stable domestic supplies of critical minerals, and that includes gold, by the way. Gold mining is ***the*** single most important economic driver in Northern Nevada, and Nevada's gold mining by itself makes the U.S. the fourth largest gold producer in the world, behind only China, Russia, and Australia.

When viewed from the policy perspective, any federal royalty imposed is going to affect the competitiveness of the industry in the U.S. compared to the global industry. Therefore, it should be carefully formulated or it will fail from a policy standpoint because it will stifle domestic production, surrendering the mineral future to foreign governments. The best way to avoid that outcome is to impose a reasonable net royalty.

Daines Question 3: The current Democratic House proposal creates a new $0.07 a ton dirt tax. While the number seems small, its cumulative effects could have a major impact on mining businesses who move material back and forth during the mining, cleaning, processing and reclamation process. Can you explain how this tax could hurt your business and could hinder the work you all do to reclaim an area?

Response:

The "dirt tax" has many problems, including vague statutory language, broad reach, and a complete lack of any economic basis or rationale. The tax is called a "reclamation fee" in Section 70807 of the House Natural Resources Committee Print, but the proceeds would not be dedicated to reclamation, as is the case with the SMCRA AML fee. *See* 30 U.S.C. § 1231 (Abandoned Mine Land Reclamation Fund), §1232 (reclamation fee).[7] Apparently the proposed hardrock dirt tax would go to the Treasury's general fund. The amount of the fee – $0.07 per ton – is arbitrary. It is not tied to current reclamation costs, abandoned mine land inventory, or any other metric.

The legislative language creating the reclamation fee is scant, and leaves numerous details to the interpretation of implementing agencies. The tax would be on "displaced material," defined as any unprocessed ore and waste dislodged from its location at the time hardrock mineral activities begin at a

[7] The reclamation fee is not included in the Rules Committee Print of H.R. 5376, the Build Back Better Act, released on October 28, 2021.

surface, underground, or in-situ mine." Because the bill language offers so little guidance on how to administratively apply the tax, its scope, impacts, and even its applicability, are almost impossible to understand from the text.

Apart from the direct economic impact of the tax, such a taxing regime would also increase mining costs, already high in the U.S. compared to most other countries. Material movement of all types would have to be tracked because it would become necessary to distinguish between "displaced materials" and other moved earth. Modern hardrock mining operations require enormous amounts of earthmoving, and while miners obviously track the amounts of basic material moved, such as tons mined and processed, tracking "displaced material" – however that term is eventually defined – would add reporting and compliance burdens not tied to any regulatory or environmental purpose.

Most egregiously, this "reclamation fee" could be read to apply to reclamation activities themselves. In other words, depending on how it is implemented, the reclamation fee could become a tax on reclamation. As such, it could increase the costs of reclamation and disincentivize the miner from moving earth needed for sound reclamation. Taxing salutary company behavior is unusual policy. Indeed, the dirt tax would be a direct tax on *required conduct.* Taxing reclamation would be terrible policy.

Like a gross royalty, the dirt tax would be regressive, most severely burdening – and further imperiling the viability of – marginal operations. The reclamation fee is not tied to the economics of particular mining operations. Many hardrock mines, especially surface mines, are low-margin operations that rely on moving large amounts of material. Applying such a tax without regard to the economics of the mine will result in the closure of low-margin mines. The hardrock minerals stay in the ground, and jobs and tax revenues are lost.

Daines Question 4: One size fits all regulation and laws rarely result in good policy and often result in harms to small businesses and jobs. Can you explain the difference in how precious metals companies like yourself operate compared to industrial minerals companies or other mines and why Congress should examine these differences before making a one size fits all, punitive tax and fee law?

Response:

I have covered some of this subject matter in my response above to Senator Barrasso's first question. Gold is a highly volatile commodity and the price varies significantly over time. This reality makes financing and developing gold mines higher-risk investments. The following figure shows the gold price range of the last 10 years:

The nature of commodity cycles needs to be taken into account in establishing a royalty. Hardrock miners are "price takers;" in other words, metals prices are fixed daily in global markets. The costs of royalties for gold, copper, lithium, and other hardrock minerals cannot be passed on to buyers. This is a key distinction from coal, oil and gas, and some other leasable commodities. Many industrial minerals are priced locally, not globally, because it is not economic to transport them over long distances and thus they are used or processed only locally for the most part.

Additionally, the cost to produce a mineral varies widely from mineral type to mineral type and is also influenced by the mining method used to extract the mineral and a host of other factors. If setting gross proceeds royalty rates, it is important to understand these differing economic factors because they influence the ability of mines to pay royalty. If the rate is set too high, it may impact the ability of mines that produce a certain type of mineral or that use a particular mining method to stay in business. The reality that a gross royalty needs to take into account fundamental factors such as mining method is reflected in U.S. federal coal leases where underground coal has a royalty rate of 8% while surface-mined coal is assessed at 12.5% of gross proceeds. Lawmakers recognized that a rate of 12.5% levied on underground coal mines was not realistic.[8] Royalty rates for minerals managed under the U.S. leasing (non-locatable minerals) system vary based on the mineral. *See, e.g.*, 43 C.F.R. § 3504.21. Phosphate miners pay a minimum of 5%, while sulfur miners pay at least 2%. One size does not fit all, and the various rates set for various leasable minerals reflect this.

In addition to mineral type and mining method, costs and profitability vary greatly from mine to mine based on factors such as distance from infrastructure, the physical attributes of the deposit including the amount of mineral per unit of ore, the cost of financing, wages in the area, electricity tariffs and so forth.

[8] *Federal Coal Leasing Amendments Act of 1975: Hearing on S. 391 Before the Subcomm. On Minerals, Materials and Fuels of the S. Comm. On Interior and Insular Affairs*, 94 Cong. 504 app. (1975).

Many marginally economic mines are unprofitable when commodity prices cycle lower and depend on higher price years in order to sustain operations. A gross proceeds tax does not take a mine's ability to pay into consideration, and during a low in the price cycle when a mine is not profitable, the mine may need to permanently or temporarily close when it cannot pay its royalties and other costs. Jobs, tax losses, and local community impacts can be appreciable.

Question from Senator Murkowski

Murkowski Question: The Biden administration has committed to the goal of transitioning to a 100% clean energy economy and net-zero emissions by no later than 2050. The administration, and many members of Congress, however, do not seem to have a clear view for how such a transition will actually occur. To reach net-zero emissions, we will need to significantly increase our consumption of battery technologies constructed with lithium, graphite, and other critical minerals.

a. Where will the United States have to source the materials needed to fulfill the President's 'zero emissions' agenda, if not able to be produced domestically?

Response:

Please see my response above to Senator Daines' first question for additional observations about critical minerals. The most recent data available on this subject are summarized in a 2021 USGS technical report, prepared to support Section 7002 of the Energy Act of 2020 (which you authored). United States Geological Survey, *Methodology and Technical Input for the 2021 Review and Revision of the U.S. Critical Minerals List,* Open File Report 2021-1045 (2021) *available at* https://pubs.er.usgs.gov/publication/ofr20211045. Section 7002 requires USGS to develop a revised methodology for identifying critical minerals and to update the earlier critical minerals list developed by USGS in 2018 pursuant to Executive Order 13817. *See* 83 Fed. Reg. 23295 (May 18, 2018). The USGS report contains a "heat map" identifying critical minerals with the most supply risk; over a dozen of these minerals have significant supply risks as of 2018. The minerals with the highest supply risks are currently sourced primarily in China, South Africa, Brazil, and the Democratic Republic of Congo. *See* USGS Report at 11. According to the Commerce Department Report cited above in response to Senator Daines' first question, the U.S. relies entirely on imports from these countries for 14 critical minerals, including some of the most important heavy rare earth elements. Commerce Report at 3. The recent resumption of rare earth production at the Mountain Pass mine in California may provide a domestic source for certain of the 14 minerals identified in the Commerce Report, but for the time being, the metal concentrates produced at Mountain Pass still must be shipped to Asia for processing and manufacturing, illustrating significant supply chain problems downstream of mineral production.

b. What legislative steps can the committee take to help meet the President's supply chain security and clean energy objectives?

Response:

As I noted in my response to Senator Daines' first question, Barrick believes the Committee must retain self-initiation and tenure in any Mining Law modifications. These are the Law's most

important inducements to companies to invest in the U.S. in exploring for minerals. Second, the Committee should carefully weigh all policy considerations in developing a hardrock mining royalty that will return revenue to the U.S. without disincentivizing new investments in domestic minerals. Third, the Committee should carefully evaluate the creation and funding of new government efforts to map and survey hardrock mineral resources, whether through a new Bureau of Mines, or via additional authorities for USGS. Finally, the Committee must tackle the difficult problem of permitting delays, which are a real and persistent impediment to promoting mineral development in the U.S.

As I noted above, creating incentives for domestic mining is just one part of the supply chain problem. Over the last 30 years or so, the U.S. has allowed its mineral processing technology and capacity for many metals to be shifted overseas, to China and other growing economies. Smelters, refineries, and other downstream processing and fabrication facilities became increasingly difficult and expensive to site in the U.S., and at the same time growing nations were willing to invest in new processing capacity. The shift made economic sense in a globalizing trade environment, with lowered trade barriers, and in a world mostly at peace. Today, given current trade and national security concerns, and because of the prominence of minerals in addressing energy and climate change problems, the shift out of the U.S. of mineral refining capacity looks much different from a policy perspective. That capacity and those facilities will not migrate back to the U.S. on their own. As Congress focuses on the critical mineral supply chain, it will have to consider ways to restore mineral processing capacity, including tax or other fiscal incentives to restore a domestic supply chain in the most critical minerals.

c. What are the potential human rights consequences associated with shifting mineral production away from the United States to countries such as China?

Response:

U.S. mining jobs pay high wages, and workers are protected by federal and state labor, environmental, mine safety, and other laws. Additionally, Barrick has zero-tolerance for human rights violations. We have adopted the United Nations' Guiding Principles on Business and Human Rights, the Voluntary Principles on Security and Human Rights, and the Organization for Economic Co-operation and Development's Guidelines for Multinational Enterprises. Our vendors must agree to operate in compliance with our human rights and worker standards. All agreements for goods and services must include commitments by vendors to act consistently with our standards. We also perform due diligence on our vendors and suppliers to look for issues, both at the time we first engage with them and then later in a recertification process.

We take these standards with us wherever we operate in the world, as do other western-based major mining companies. Many mining firms operate internationally, so their investment decisions (whether to invest in the U.S.) inevitably will be affected by U.S. mineral and tax policy. Unfavorable policies will result in more mining jobs outside the U.S. However, mining that occurs outside the U.S., especially in less-developed nations, is less likely to provide the same human rights or worker protections.

Questions from Senator Cortez Masto

Cortez Masto Question 1: Nevada has more federal land than any other state except Alaska; about 85% of the land in Nevada is owned by the federal government. Nevada also has the most hardrock mining of any state in the nation, and currently the vast majority of that is gold, although Nevada has rich lithium deposits too and that industry is likely to grow in the future. Generally, how would a federal royalty specifically impact Nevada?

Response:

Using data currently available, it is not possible to quantify the likely impacts on Nevada, but a rough estimate is possible. As I explain below in more detail, we estimate that Nevada companies would pay at least 60% of a federal hardrock royalty, and we believe the proportion almost certainly will be higher, at least for the foreseeable future.

In its analysis of H.R. 2579 – a Mining Law reform bill in the 116th Congress – the Congressional Budget Office estimated that the royalties in that bill would fall mostly on gold miners. Congressional Budget Office, H.R. 2579, Hardrock Leasing and Reclamation Act of 2019, Cost Estimate at 4 (July 27, 2020). As you know, the bulk of gold mining in the U.S. is conducted in Nevada. In its 2020 report (cited above), GAO noted that the U.S. does not track hardrock mineral production on federal lands, making it difficult to quantify what portion of a federal royalty would be paid by Nevada mines operating on unpatented mining claims. However, using data provided to GAO by federal land managers on acreage covered by approved plans of operation, we estimate that at least 60% of a new federal royalty would come from Nevada federal lands.

The GAO Report documents the number of approved plans of operation in each western state, and the acreage associated with each approved plan. *See* 2020 GAO Report at 12, 19. In total, 317,783 acres are subject to approved plans of operation in 12 western states, and of that total, 191,889 acres – or 60% – are in Nevada. That percentage is the basis of our estimate that Nevada operations will pay most of a federal royalty. It is important to emphasize that these acreage figures cannot really function as a proxy for likely royalty shares, most importantly because they do not correspond directly to unpatented lode and placer claims that would be subject to a new federal royalty. Although it is not apparent from the GAO report, the land management agencies typically count all acreage – not just mining claims – within the boundaries of a plan of operations, including private lands and federal lands that do not contain mineral deposits (such as millsites). Additionally, an approved plan of operations does not mean that a mine is actually operating. Most of the approved plans reported by federal land management agencies are for less than 100 acres, and many are for one acre or less. These are almost certainly exploration projects, not operating mines. However, overall, the data do establish that almost two-thirds of all hardrock mineral activities on federal lands are happening in a single state: Nevada. Nevada has over 50 approved plans of operation covering 200 acres or more. No other western state has anywhere close to this much mineral activity on federal lands.

For instance, next to Nevada, California has the largest number of approved plans of operation – 123 – covering 24,571 acres. However, most of these plans are very small – 10 acres or less. A significant active hardrock mining operation would require thousands of acres. We are aware of only three metal mines of any significance operating in California currently: the Mesquite Mine (gold), the Castle

Mountain Mine (gold), and the Mountain Pass Mine (rare earths).[9] At least portions of these mineral deposits are on private lands. California also has significant borate mines (borates are hardrock non-metal minerals), but only one approved plan of operation of any size: 200 acres. *See* Supplemental Material for GAO-20-461R: Data on Solid Mineral Operations on Federal Lands at 9-15 (May, 2020)(GAO Supplemental Material), available at https://www.gao.gov/assets/710/707570.pdf. This data point indicates that most borate production in California is likely on private lands, and would not be subject to a royalty.

Next to Nevada, Wyoming has the most total acreage subject to approved plans of operation: 47,655 acres, and 90 approved plans of operation. 12 plans of operation – accounting for 18,787 acres (37%) – are for uranium, but only one uranium mine is operating in Wyoming currently.[10] Most of the remaining Wyoming acreage – over 21,000 acres – is for bentonite clay. *Id.* at 37-41.

Just as Nevada is known for its gold mines, Arizona is known for its copper mines. The state has a dozen large operating copper mines. *See* Arizona Geological Survey, Active Mines in Arizona: FY2020 (December 2020), available at http://repository.azgs.az.gov/sites/default/files/dlio/files/nid1963/activemines2020_v1.1.pdf.[11] However, only 4,222 acres statewide in Arizona are subject to approved plans of operation for copper. *See* GAO Supplemental Material at 7-9. These data suggest that the vast majority of current copper mining in Arizona is on private lands, and would not be subject to a federal royalty.

The remaining GAO data lead us to similar conclusions for the other public land states. Colorado, an important mining state historically, has only 1,299 acres subject to approved plans of operation. 2020 GAO Report at 19. The largest plan of operations for a metal mine in Colorado covers 80 acres, not enough land to support a major mining operation. GAO Supplemental Material at 16. Idaho has one large plan of operations for gold, one for silver, and one for molybdenum. *Id.* at 17-19. The only molybdenum mine in Idaho is the Thompson Creek Mine, which has not operated since 2014.[12] The plan of operations for silver is likely for the Lucky Friday Mine, owned by Hecla Mining Company. The mine is operating, and approximately half of the mining claims at Lucky Friday are unpatented.[13] Montana has only four large plans of operation (larger than 1,000 acres) – for gold, clay, and zinc. *Id.* at 20-22. Montana also has the only platinum/palladium mines in the U.S. – the Stillwater and East Boulder underground mines, which are on a combination of patented and unpatented claims.[14] New Mexico has no large approved plans of operation. *Id* at 22-23. Oregon has only two plans of operation larger than 1,000 acres, one for gold and one for diatomite. *Id.* at 30-33. However, we are not aware that

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[9] Equinox Gold Website: https://www.equinoxgold.com/ (accessed October 28, 2021); MP Materials Website: https://mpmaterials.com/what-we-do/ (accessed October 28, 2021).

[10] According to the U.S. Energy Information Administration, Lost Creek (Ur-Energy) and Smith Ranch-Highland (Cameco) – both *in situ* mines – were operating at the end of 2020. U.S. Energy Information Administration, *2020 Domestic Uranium Production Report* at 2, 7 (May 2021), available at https://www.eia.gov/uranium/production/annual/pdf/dupr2020.pdf. However, according to information at the Cameco website, Smith Ranch-Highland is ***not*** operating currently. *See https://www.cameco.com/businesses/uranium-operations/suspended/smith-ranch-highland* (accessed October 28, 2021).

[11] The report includes a link to a map showing the location of Arizona copper mines. *See* https://arcg.is/1844Hi0.

[12] *See* https://www.centerragold.com/operations/thompson-creek-metals/thompson-creek/history (accessed October 28, 2021).

[13] Hecla Mining Company, 2020 Annual Report at 23, available at https://s1.q4cdn.com/702437152/files/doc_financials/2020/ar/HMC_2020_AnnualReport.pdf.

[14] Sibanye-Stillwater, 2020 Mineral Resources and Mineral Reserves Report at 32, available at https://www.sibanyestillwater.com/sustainability/reports-policies/.

these or any other major hardrock mines are operating in Oregon. Utah has one large plan of operations, for copper. *Id.* at 33-36. Washington has none. *Id.* at 36-37.

In contrast, in Nevada there are ***26 approved plans of operation*** for gold projects larger than 1,000 acres, 1 large plan of operation each for molybdenum and copper, and another 26 approved plans that cover between 200 and 1000 acres for gold. *Id.* at 23-30. Nevada also has the only operating lithium mine in the U.S. (on private lands), and at least two large lithium projects on public lands (Thacker Pass (Lithium Nevada) and Rhyolite Ridge (ioneer)) under development but not yet approved by BLM.

As these data show, major mineral activity on federal lands in Nevada dwarfs that of every other public land state. While states like Arizona have major mines, they are for the most part on private lands and would not pay royalties. Next to Nevada, Wyoming has the most mineral activity on federal lands (measured by size of approved plans of operation). Most of these operations are bentonite; Wyoming's major uranium projects are not operating (with one exception). Other states have several large approved plans of operation, but only a handful have operating mines. These facts suggest strongly that Nevada share of a federal royalty would be more than 60%.

Cortez Masto Question 2: In your testimony you talked about other developed countries like Australia and Canada, and how the U.S. compares in terms of what you referred to as "the total economic take" of a government.

a. Can you elaborate on that? I am interested in how you can compare different systems, with different tax and royalty structures, and how a federal royalty in the U.S. would change things.

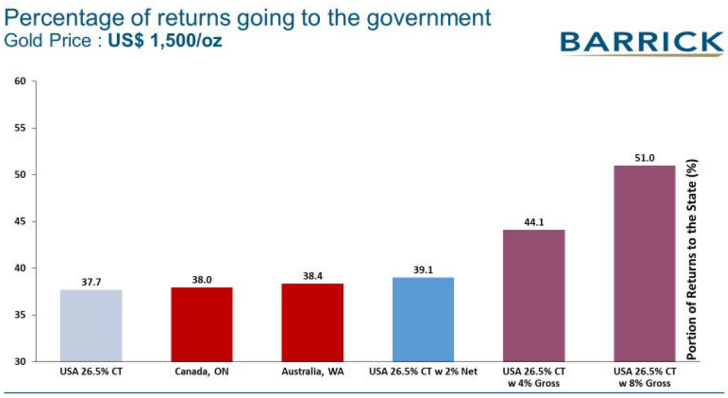
b. Would the House's mining reform proposal create a disadvantage to the U.S. when comparing these other systems and would it discourage domestic mining investment?

Response:

Mines pay many taxes and fees to various levels of government. Mineral economists have developed an approach that allows the total tax burden (all forms of taxes, fees, royalties, duties, etc.) in one jurisdiction to be compared to that in others. A computer model is developed of a typical mine's cash flow over the life of the project that reflects estimated revenues and costs. Then all the significant taxes, royalties and fees are added in. Using the model it is then possible to calculate the total effective tax rate – a measure of the after-cost "profit" that goes to government. This is done for each jurisdiction of interest and provides a standardized way in which to compare the tax burden in different countries. Knowing the total tax burden is important because if only one type of tax is compared (such as royalty rates), it does not give the whole picture. For example, a country that has very low royalties may have a high income tax.

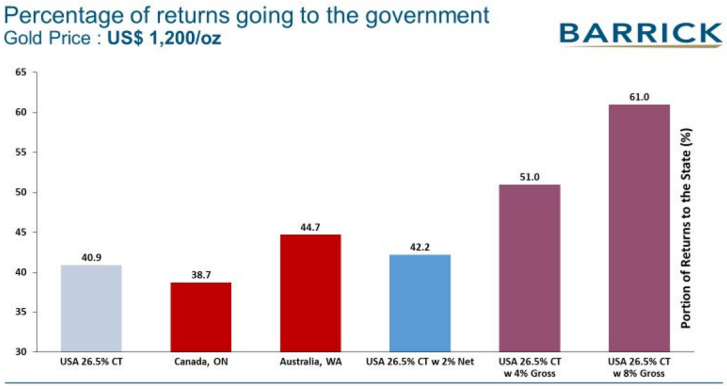
To evaluate the impacts of a federal royalty, we created a "synthetic" or "hypothetical" mine in order to generate an apples-to-apples comparison between jurisdictions. We looked at: (1) what would be the total economic take (total tax and royalty burden or total effective tax rate) if that mine were in Australia, Canada, or the U.S. under current conditions (i.e., no royalty in the U.S.); and (2) how different federal royalty scenarios would change the comparative picture. This "synthetic mine" is a Tier 1 mine, which is a gold mine that has more than 10 years of mine life, at least 500,000 ounces of annual

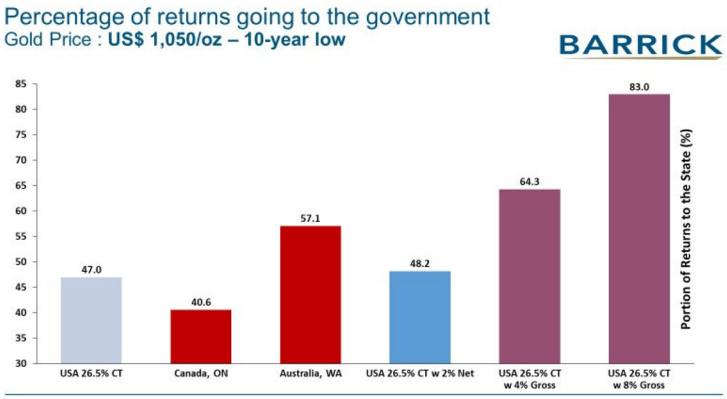
gold production, and low cash costs. Our Carlin mine, which you visited recently, is a Tier 1 mine. A Tier 1 mine is a very economically robust operation, hence it should be recognized that the impacts of U.S. royalties would be even greater than the chart illustrates on less productive mine operations. The graphs below show the results of our analysis at three different gold prices: $1,500/oz, representing long term consensus, $1,200/oz., a common price during the last decade, and $1,050/oz., the low for the decade.



The first three bars on this chart show total economic take of the U.S., Canada, and Australia under current conditions[15] and assuming a $1,500 oz. gold price, which is near the long-term consensus price. As reflected by the fourth bar, the 2% net royalty that Barrick has supported increases the US take to about 39%, which is slightly higher but still competitive with Canada and Australia. The fifth bar shows that with a 4% gross royalty, currently proposed by the House for existing mines on federal lands, the total U.S. take increases to about 44%, significantly higher than Australia and Canada. And finally, the last bar shows the U.S. total take at an 8% gross royalty, currently proposed by the House for new mines on federal lands. With an 8% gross royalty, the total take for the U.S. would exceed 50%.

[15] Note that we have assumed the corporate income tax rate of 26.5% given that the tax rate is in flux. We believe this reflects a reasonable historical average and represents at least one of the proposals we understand to be currently before the Congress.





As two charts above demonstrate, as the gold price drops, the percentage of government take in jurisdictions with a net royalty such as Canada (Ontario) stays fairly constant, demonstrating the wisdom of that approach. Jurisdictions with a gross royalty, such as the state of Western Australia, begin to take a much larger share. In comparison, the U.S. (Nevada), assuming a new 2 percent net royalty, falls somewhere in the middle, but is nevertheless no longer competitive with Canada.[16] As the $1,050 gold

[16] The Nevada "mine" does not move in sync with Canada because of the new Nevada mining excise tax, described above in my response to Chairman Manchin's questions.

chart above compellingly demonstrates, the U.S. under the House royalty proposal is punishing. Even our robust synthetic mine would be giving between 64% and 83% of revenue to the U.S. if gold prices were to drop to 2015 levels of $1050/oz.

Cortez Masto Question 3: Can you help us understand the processing costs in hardrock mining and how that differs from production of other natural resources like oil, gas, coal, and even other commodities?

Response:

As I described above in my response to Senator Barrasso's first question above, coal, oil, and gas are marketed in the form they are removed from the mine or well (or with at most minimal processing). Hardrock minerals almost never can be marketed at the mine mouth. Gold ore removed from our mines is essentially dirt; the gold particles are invisible and microscopic. There are few places to sell that rock both because of transportation costs and processing capacity. To produce a gold dore bar that can be marketed, we have to invest billions of dollars to design and build facilities that crush and mill the rock, remove naturally-occurring substances that interfere with gold recovery, leach the gold from the ore, concentrate the gold and finally, refine it into a gold dore bar.

Designing these facilities begins during the exploration process. We perform various tests to determine how the ore we are finding can be extracted from the rock. From this information we perform laboratory or bench-scale tests to determine the optimal extraction process. Then, through detailed and expensive engineering studies we design industrial scale extraction facilities. The facilities are a combination of physical and chemical processes designed to extract the gold and they are usually customized to the type of ore we will be mining. Gold ore from different mines – and even from different portions of a single mine – is not homogeneous. Often companies build separate recovery plants using different technologies to process the ore from one mine.

Our processing facilities are also designed to the highest environmental standards. It is not unusual for 50% of the cost of these facilities to be for environmental controls. At our Carlin Complex, which you, your staff, and committee staff recently visited, we have several processing facilities. The cost of those facilities would be about $4 billion in 2021 dollars. Our total initial initial investment at the Carlin Complex, including the mines and processing facilities, was $7.5 billion.

After ore is brought from the mine and is ready for extraction ("Run-of-Mine Ore"), it goes through our processing facility at considerable expense per ounce of gold. What we do in our processing facilities is analogous to what happens to a barrel of crude oil shipped to a refinery through a pipeline or by truck. Yet, the oil producer does not pay royalty on the enhanced value it creates by paying to have the oil refined. The House proposal and indeed any true gross royalty proposal would require us to pay royalty not on the value of the product of the mine, but on the value created by our extraction and processing. It should make no difference that the oil refinery is remote from the wellhead, while our analogous facilities must be at the mine site.

To cite another example particularly relevant to Nevada, lithium ore also requires significant processing. According to Lithium Nevada, which is building the Thacker Pass lithium project, 85% of operational costs and more than 85% of capital investment are directed at processing the ore into a saleable lithium product. Less than 15% of capital investment and operating costs are devoted to mining, including

extraction, ore stockpile management, waste rock management, and separating waste rock from ore that can be processed.

To summarize, unlike oil, gas, and coal, most hardrock mines have substantial processing costs that the carbon minerals do not. It is for this reason that I believe a hardrock royalty must be a net royalty. Unlike a gross royalty, a net royalty is based on ability to pay because it takes into account revenues less the many costs, including processing and environmental costs, that are unique to each mine. While I believe that a net royalty is the better approach, if a gross proceeds royalty is assessed, rates can be set taking into account the general situation for mines that produce similar types of minerals.

Cortez Masto Question 4: Would you please expand upon the royalties applied to oil and gas production from federal lands and whether those are "gross" royalties, or "net" royalties with certain costs deductible in determining the "value" for purpose of calculating the royalty payments?

Response:

Please see my response above to Senator Barrasso's first question for more detail on this question. Federal oil and gas royalties are in fact not true gross royalties. By regulation there are authorized deductions designed to produce a royalty on the value of the oil or gas at the wellhead, net of the costs incurred for processing or transportation to markets. Processing costs to extract natural gas liquids and other products are deductible in calculating a royalty on gas. 30 C.F.R. §§ 1206.158-.159. Transportation costs from the wells to the point of sale are deductible in calculating royalty on both oil and gas. 30 C.F.R. §§ 1206.110 (oil), 1206.156-.157 (gas). In the same way, the enormous costs of processing hardrock minerals should be deductible in calculating any royalty. In the hardrock mining context, the ore as it is removed from the mine (run-of-mine ore) would be analogous to oil, gas, and coal at the wellhead or mine mouth. Without the processing to follow, the hardrock ore would have essentially no market value; it could not be marketed in that form. It is our investments in processing that makes the difference.

Cortez Masto Question 5: One criticism of net royalties is that they can be difficult for the government to administer and audit, and that the cost deductions create opportunities to cheat. If a net proceeds royalty were to be enacted, how can the federal government be certain that it is receiving its fair share?

Response:

It is not overly difficult for governments to calculate and monitor a net proceeds royalty. Most of the "deductions" in a net royalty scheme are the same as or similar to deductions used to calculate income tax. One need only look to the many hundreds of mines in Australia, Canada, Chile and Peru that pay net proceeds-types of royalties to see that net royalties can be practically and effectively administered. If developing countries like Peru can effectively apply net proceeds royalty, the U.S. with its well-developed tax administration can too.

Nevada has successfully managed the Net Proceeds of Mineral Tax, with its deductions, for decades. The deductions are transparent and auditable. The Federal government already administers and audits oil and gas royalties, which allow deductions for processing costs. Finally, on the issue of cheating, Barrick is proud to be a part of the IRS's Compliance Assurance Program real-time audit, in which the IRS

reviews our books and the roll-up to our taxes every year on a real time basis. Our financial records are and have been completely transparent to the U.S. Government for many years now.

Cortez Masto Question 6: What tools are available to federal land managers to protect special sites or resources from potential adverse effects of mining?

Response:

First, it should be recognized that our most significant sites and resources – national parks, monuments, wilderness areas and other designated lands – are already closed to the location of new mining claims and mines. Exploration and mining can occur only on lands that are open to location under the mining laws and managed by the Bureau of Land Management ("BLM") and U.S. Forest Service. Those agencies have sufficient tools to protect special sites and resources on such lands.

BLM and the U.S. Forest Service have each adopted regulations that govern the surface impacts of hardrock mining on federal lands and resources. These regulations have been in place now for almost forty years and the agencies and the industry have considerable experience in exploration, mining, and reclamation under these rules. A 1999 report by the National Academy of Sciences found that the regulations were generally effective and recommended a few changes which have been implemented in the BLM regulations. National Research Council, *Hardrock Mining on Federal Lands*, (1999).

The agencies have also developed handbooks and guidance documents that supplement the regulations with detailed instructions on collecting and analyzing baseline data, predicting potential impacts, and designing, operating, and closing mine facilities to reduce surface impacts. These guidance documents are being constantly updated to incorporate changing regulations and to account for new technology.

Both Forest Service and BLM rules require that mineral activities comply with federal and state environmental laws and regulations. All mines must meet air and water quality standards, including state standards applicable to ground water. Mines that cannot meet these standards will not be approved.

Mines are also subject to federal laws that protect cultural resources, including the National Historic Preservation Act, and wildlife, such as the Endangered Species Act. Mining activities must comply with these statutes to the same degree as any other use of federal land. In practice, this means that mines may be required to avoid cultural sites or mitigate for adverse effects to cultural resources and avoid habitat for protected species and/or provide compensatory mitigation.

Federal decisions to approve mining plans are also subject to the requirements of NEPA. The permitting agency must identify, evaluate and disclose the potential impacts of a mining operation in an EIS or an environmental assessment (EA) and release that document for public review and comment. NEPA also requires that agencies identify potential measures to mitigate environmental impacts, and the surface management regulations give the agencies authority to require that those mitigation measures be implemented. Mitigation measures may include changes to mine design or schedule, relocation or reconfiguration of mine facilities, timing of mine operations, replacement or restoration of impacted resources, or compensation for impacts. In my response above to Senator Barrasso's second question, I described the example of BLM's 2015 amendments to numerous land-use plans to protect the Greater Sage Grouse, including mitigation and compensation requirements for activities on lands open to

mining, and proposed withdrawal from mining entry of millions of acres of federal lands in Nevada and across the West.

Finally, Congress has given federal agencies (through the Secretary of the Interior) the authority to withdraw lands from entry under the Mining Law where the Secretary determines that no exploration or mining should occur. The agencies can use their land use planning processes to identify lands that should be withdrawn from entry under the mining laws. FLPMA Section 302(b) specifies procedures for lands to be withdrawn from mining claim location for up to 20 years. Tens of millions of acres have been withdrawn from mining to protect scenic, recreational, scientific, cultural, historic and other resources. Together with the congressional designated withdrawals (parks and wilderness areas), almost a third of all public lands nationally are presently closed to mining. In Nevada, according to the Nevada Division of Minerals, as of 2018, 15.6 million acres of Nevada federal lands have been withdrawn from location under the Mining Law—more than 22% of all lands in Nevada. The Secretary is currently considering the withdrawal of an additional 2.8 million acres in Nevada for habitat for the Greater Sage Grouse.

Because agencies must acknowledge and protect "valid existing rights," a federal land manager may not, as a matter of discretion, deny approval of a mining plan on lands open to mining that otherwise complies with all applicable laws and regulations. This is an important legal and policy limitation because agencies should not be able to withhold approval of a mine on lands that are open under the Mining Law after the miner has invested years and millions – often hundreds of millions – of dollars in exploration, design and engineering and permitting to bring the mine to the stage where a final plan of operations has been submitted for agency approval. Any arguments against the appropriateness of an area for mining could (and should) have been made long before that point in time.

Questions from Senator Hyde-Smith

Hyde-Smith Question 1: How would a gross royalty on new or existing projects, as well as a new dirt tax, affect how your company approaches decisions related to current operations, as well as new or prospective projects?

Response:

A new royalty or any other financial burden on existing operations self-evidently changes the financial assumptions on which the investment was made, and negatively affects the return on investment. That is why, though Barrick has long supported a reasonable net royalty, we also believe that it should only be prospective and should not apply to existing investment. If the royalty is prospective, the miner can take it into account in its investment decision. If that new cost is imposed on existing projects, it automatically will reduce the size and longevity of an existing deposit by making the marginal ounces uneconomic. As I explained above in my response to Senator Barrasso's first question, the ore boundary is fluid, and moves based on costs, including royalties. Existing mines were rationalized based on a set of known or projected costs that did not include a royalty owed to the federal government.

A royalty of any kind (especially a gross royalty) does more than shrink the existing orebody. It also disincentivizes future growth. Precious metals orebodies are not just discovered as they may have been in the 19th Century, when prospectors often could find a visible outcrop of minerals on the surface.

Discoveries of gold, copper, lithium, and other hardrock minerals today are made by the application of technology and investment. Gold ore in place has value only to the miner willing to take risks and invest in bringing the mine into being. In our current operations, we are constantly making decisions about what investments to make going forward. Even on existing mines and mills we are making capital decisions, such as whether to continue exploration drilling in a certain area, whether to construct additional underground infrastructure to make additional material accessible, whether to expand an open pit by removing overburden, whether to modify a processing plant to accommodate changed chemical conditions in the orebody, or whether to replace expensive processing components that have worn out or otherwise need replacement. An affirmative decision to make any of these investments extends the life of the mine, creates and preserves jobs and generates tax revenue. Decisions not to invest further have the opposite effect. The higher the rate of any additional royalty or other burden, the earlier the mine shutdown.

Hyde-Smith Question 2: In her testimony, Ms. Sweeney described total royalties, taxes and other fees paid by mining companies as "government take," and that the current government take in the U.S. is on average above 40% or more, similar to other major mineral producing countries. A punitive royalty and dirt tax would most certainly push the U.S. well above the upper limit of that range, putting the U.S. at a significant disadvantage and discourage mining investment. How much of Nevada Gold Mines and planned future operations are on federal land?

Response:

About 50% of our current operations are on unpatented mining claims. Many of the rich gold deposits identified to date in Northern Nevada occur along the path of the transcontinental railroad that was constructed in the 19th Century. In order to encourage and subsidize railroad construction, the federal government granted railroads every other section of land along the rail corridor for miles on either side of the corridor. Much of Nevada Gold Mines' private lands are former railroad sections.

Going forward, and looking to the new projects in our development pipeline, it is clear that a much larger portion of Nevada Gold Mines' future production will be from federal lands.

a. Can you discuss the real-world impacts of this to your U.S. operations?

Response:

As I explained above, and in responses Senator Barrasso's first question and Senator Cortez-Masto's second question, imposition of a federal royalty on an existing operation results in an earlier shutdown. With respect to future projects, they will be reduced in size at the margins, and some lower-grade deposits may not make the cut at all. Our company has been very public that our "hurdle rate-of-return" for capital investment – the minimum rate of return on Barrick investments – is a minimum of 15%. For many mining companies the hurdle rate-of-return is lower. There is a misconception that mining projects have massive rates of return. They don't. A project that has a 20% rate of return is a very good mine development prospect. It doesn't take much royalty to turn a project that otherwise had an acceptable rate-of-return into a marginal project or an unacceptable investment. From my thirty plus years in this industry, I can tell you that we are constantly making decisions about capital allocation. While we

cannot move our existing mines themselves quickly, we can and do move capital investment to favorable projects and jurisdictions very quickly.

b. Would the new royalties and fees in the House reconciliation bill disproportionately affect states with higher amounts of federal land?

Response:

Yes. Please see my answer above to Senator Cortez-Masto's first question. Any federal royalty will have a greater impact in Nevada than in any other state.

Hyde-Smith Question 3: Can you explain the processing costs in hardrock mining and how that differs from production of other natural resources like oil, gas, coal, and even other commodities?

Response:

Please see my responses above to Senator Cortez-Masto's third and fourth questions, and also to Senator Barrasso's first question. Oil, gas, and coal are valued for royalty purposes at the wellhead or mine mouth, and Interior regulations allow deductions for processing costs (and transportation costs). The purpose of these deductions is to approximate mineral value at the wellhead or mine mouth. Hardrock minerals are fundamentally different; in almost all cases, they cannot be valued at the mine mouth or have very low value at the mine mouth, and they require significant processing to create a valuable product. A federal royalty for hardrock minerals also must allow appropriate deductions for processing costs.

Hyde-Smith Question 4: How would Nevada Gold Mines be able to further contribute to mine reclamation if Congress would enact Good Samaritan legislation?

Response:

Barrick and our joint venture partner Newmont have a long history of partnering with organizations and communities to achieve positive environmental outcomes. In Nevada Barrick and Newmont have partnered extensively with Trout Unlimited on stream restoration projects. We have funded abandoned mine closures undertaken by the Nevada Department of Minerals. In the Dominican Republic Barrick and Newmont have a joint venture that has developed a mine in partnership with that country's government, and in the process have remediated an environmental mess left by an historic operation. That project would not have been possible in the U.S. under our existing legal framework. Mining companies will not engage directly in the U.S. at major abandoned mine sites because of strict, joint and several liability pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) and in some cases the Clean Water Act. Good Samaritan legislation would enable us to directly deal with significant abandoned mine issues, and in some cases even to remine minerals left behind and remedy environmental degradation in the process. The expertise and technology to address abandoned mine sites is found in the hardrock mining industry, but the industry is kept away from any significant involvement because of these major liability concerns. With our extensive experience in mine reclamation, nobody would be better suited to partner with communities and organizations to address abandoned mine land issues.

Hyde-Smith Question 5: In Nevada, the state legislature recently passed an excise tax legislation on mining operations. The new excise tax brings millions of dollars annually to state and local communities to support school and education services. Will the imposition of a new federal gross royalty and dirt tax impact the income base that states like Nevada use to calculate and levy taxes?

Response:

Yes. By imposing additional burdens on operations, the federal government is in effect shrinking the pie, and reducing the amount that the state would otherwise receive through its taxes. See my responses above to Senator Barrasso's first question and Senator Cortez Masto's third question for further explanation.

The CHAIRMAN. Thank you, Mr. Haddock.
We will hear from Mr. Somers next.

STATEMENT OF BRIAN SOMERS, PRESIDENT, UTAH MINING ASSOCIATION

Mr. SOMERS. Chairman Lee, Ranking Member Heinrich, and other members of the Committee, thank you for the invitation to testify.

Mining is a critical industry in Utah, contributing $7.7 billion to the state's GDP, supporting nearly 57,000 direct and indirect jobs, and powering Utah's broader economy by producing the coal which provides 62 percent of Utah's low-priced electricity. Mining jobs in Utah are family- and community-sustaining jobs, with mining salaries averaging 46 percent more than the average Utah wage. The recent actions of China to ban or restrict the export of critical minerals or mineral processing technologies, which they control, should highlight the need to strengthen our domestic mining and mineral processing capabilities and reshore critical mineral supply chains. Of the ten minerals or mineral groups currently subject to Chinese export bans or restrictions—rare earth elements, antimony, germanium, gallium, graphite, tungsten, tellurium, bismuth, molybdenum, and indium—Utah has the capacity to produce nine. Utah is currently producing the rare earth elements tellurium and molybdenum. Utah has proven and very rare primary resources of germanium, gallium, and indium and significant historical production of antimony, tungsten, and bismuth.

As the Chairman mentioned, Utah hosts 40 of the 50 critical minerals on the Department of the Interior's current critical minerals list—40 of the 50 critical minerals in just one state, admittedly one with an unusually rich and diverse mineral endowment. Add occurrences of critical minerals in other states, and there is little reason the U.S. should be as dependent as it is on foreign critical mineral supply chains, again, with our geopolitical adversary, China, as the dominant global producer. Our current situation is the result of a lack of investment in and support of our domestic mining and mineral processing industries as well as outright market manipulation by China and other foreign mineral producers. The U.S. mining industry is committed to responsibly developing our mineral resources, and it is appropriate that the U.S. has stringent labor, safety, financial, and environmental regulations. However, these regulations must also be rational, stable, economically feasible, and not misaligned with the regulatory environments of other free and developed nations with major mining industries—nations like Canada and Australia.

The Chairman also mentioned the report from S&P Global that found that the U.S. has the second longest timeline in the world for developing a new mine—29 years—the worst record of any country in the world, except for Zambia. That report states, "The development of a mine in the U.S. is not only long and costly, it is unusually uncertain. While developing a mine in Canada or Australia can also take a long time . . . those mines do reliably enter production. In the U.S., even if mines receive all required permits, they are subject to higher litigation risk. Uncertainty and litigation risk may explain why exploration budgets committed by investors

to Canada and Australia over the last 15 years have been 81 percent and 57 percent higher than to the U.S."

If the U.S. is to have any chance of becoming self-sufficient in supplying its own critical mineral needs, Congress and the Federal Government must commit to real permitting reform, litigation reform, ending federal land and mineral withdrawals, renewing the diminishment of state primacy for the enforcement of federal labor and environmental laws, reversing the decline of mining engineering programs at U.S. universities, providing grants for research and to do mineral extraction and processing technologies, and providing incentive to attract more mineral exploration and other mining investment to the U.S. A positive first step is the recent introduction of the Critical Mineral Consistency Act of 2025 by Chairman Lee and Senator Kelly. This act will end the misalignment between the Department of the Interior's critical minerals list and the Department of Energy's critical materials list.

If the act is passed, it will have a positive effect on Utah, as we are a major copper producing state. In fact, Utah is home to one of the largest and most productive copper mines in the world, the Rio Tinto Kennecott Bingham Canyon Mine. Rio Tinto Kennecott is not only a world-class copper operation that has one of only two working copper smelters in the U.S., it is also Utah's largest producer of critical minerals, currently producing tellurium, platinum, and palladium, and with the potential to produce rare earth elements, indium, germanium, gallium, and many other critical minerals through secondary recovery. The example of Rio Tinto Kennecott highlights the fact that many critical minerals are comingled with base metals, precious metals, and other mineral commodities, and why we must not only support and invest in new mines, but also expand production in secondary recovery at existing mines and mineral processing facilities.

I know the Utah success story on this front is the Energy Fuels White Mesa Mill in Blanding, Utah. The White Mesa Mill is the last functioning conventional uranium mill in the U.S., and which is now also processing monazite, a mineral byproduct which contains uranium, but also high concentrations of rare earth elements. Using an existing and already-permitted facility—and a high dose of rural Utah ingenuity—the White Mesa Mill has created the most advanced rare earth element processing operation outside of China, a great step toward ending that nation's stranglehold on the rare earth supply chain.

Again, I appreciate the opportunity to highlight some of Utah's success stories and to discuss how the Federal Government can better support state efforts to lead on the critical minerals front. I look forward to any questions from the Committee.

Thank you.

[The prepared statement of Mr. Somers follows:]

Testimony of Brian Somers
President, Utah Mining Association
Senate Committee on Energy and Natural Resources
Wednesday, March 12, 2025

Chairman Lee, Ranking Member Heinrich, Senator Curtis, and other members of the committee, thank you for the invitation to testify. My name is Brian Somers and I am the president of the Utah Mining Association (UMA). UMA was founded in 1915 and advocates for Utah's hardrock, coal, and industrial mineral mine operators and related support industries. UMA works closely with the National Mining Association and other state and regional industry groups.

Mining is a critical industry in Utah, contributing $7.7 billion to the state's GDP, supporting nearly 57,000 direct and indirect jobs[1], and powering Utah's broader economy by producing the coal which provides 62% of Utah's low-priced electricity[2]. Mining jobs in Utah are family- and community-sustaining jobs with mining salaries averaging 46% more than the average Utah wage[3].

The recent actions of China to ban or restrict the export of critical minerals or mineral processing technologies which they control should highlight the need to strengthen our domestic mining and mineral processing capabilities and re-shore critical mineral supply chains. Of the 10 minerals or mineral groups currently subject to Chinese export bans or restrictions—rare earth elements, antimony, germanium, gallium, graphite, tungsten, tellurium, bismuth, molybdenum, and indium—Utah has the capacity to produce nine. Utah is currently producing rare earth elements, tellurium, and molybdenum. Utah has proven—and very rare—primary resources of germanium, gallium, and indium, and significant historical production of antimony, tungsten, and bismuth.

According to the Utah Geological Survey, Utah hosts 40 of the 50 critical minerals on the Department of Interior's current critical minerals list. 40 of the 50 critical minerals in just one state—admittedly one blessed with an unusually rich and diverse mineral endowment.[4] Add proven resources, occurrences, and historical production of critical minerals in other states and

[1] McCarty, T.J., Wang, Z., Kim, M., and Evans, J., 2022, The economic contribution of Utah's energy and mining industries: Utah Geological Survey Miscellaneous Publication 176, 12 p., 4 appendices, https://doi.org/10.34191/MP-176

[2] https://www.nei.org/resources/statistics/state-electricity-generation-fuel-shares

[3] https://jobs.utah.gov/jsp/utalmis/#/industry/list

[4] Mills, S.E., and Rupke, A., 2023, Critical minerals of Utah, second edition: Utah Geological Survey Circular 135, 47 p., https://doi.org/10.34191/C-135

there is little reason the U.S. should as dependent as it is on foreign critical mineral supply chains—again, with our geopolitical adversary, China, as the dominant global producer.[5]

Our current situation is the result of a lack of investment in and support of our domestic mining and mineral processing industries, as well as outright market manipulation by China and other foreign mineral producers. The U.S. mining industry is committed to responsibly developing our mineral resources, and it is appropriate that the U.S. has stringent labor, safety, financial, and environmental regulations. However, these regulations must also be rational, stable, economically feasible, and not misaligned with the regulatory environments in other free and developed nations with major mining industries—nations like Canada and Australia.

A report last year from S&P Global found that the U.S. had the second longest timeline in the world for developing a new mine. The report found that it takes an average of 29 years for a mine "…to go from discover to production in the United States, longer than any other country except Zambia." The report states:

> "The development of a mine in the U.S. is not only long and costly, it is unusually uncertain. While developing a mine in Canada or Australia can also take a long time…those mines do reliably enter production. In the U.S., even if mines receive all required permits, they are subject to higher litigation risk. Uncertainty and litigation risk may explain why exploration budgets committed by investors to Canada and Australia over the last 15 years have been 81% and 57% higher than to the U.S."[6]

If the U.S. is to have any chance of becoming self-sufficient in supplying its own critical mineral needs, Congress and the federal government must commit to real permitting reform, litigation reform, ending federal land and mineral withdrawals, reviewing the diminishment of state primacy for the enforcement of federal labor and environmental laws, reversing the decline of mining engineering programs in U.S. universities, providing grants for research into new mineral extraction and processing technologies, and providing incentives to attract more mineral exploration and other mining investment in the U.S.

A positive first step is the recent introduction of the Critical Mineral Consistency Act of 2025 by Chairman Lee and Senator Kelly. This act will end the misalignment between the Department of Interior's critical minerals list and the Department of Energy's critical materials list. If the act is passed, it will have a positive effect on Utah as we have proven fluorine resources (fluorine is on the DOE list but not the DOI list) and because Utah is a major copper-producing state.

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[5] U.S. Geological Survey, 2025, Mineral commodity summaries 2025 (ver. 1.2, March 2025): U.S. Geological Survey, 212 p., https://doi.org/10.3133/mcs2025

[6] https://cdn.ihsmarkit.com/www/pdf/0724/SPGlobal_NMA_DevelopmentTimesUSinPerspective_June_2024.pdf

In fact, Utah is home to one of the largest and most productive copper mines in the world, the Rio Tinto Kennecott Bingham Canyon Mine. Rio Tinto Kennecott is not only a world-class copper operation—and has one of only two working copper smelters in the U.S.—it is also Utah's largest producer of critical minerals, currently producing tellurium, platinum, and palladium, and with the potential to produce rare earth elements, indium, germanium, gallium, and many more critical minerals through secondary recovery.

The example of Rio Tinto Kennecott highlights the fact that many critical minerals are co-mingled with base metals, precious metals, and other mineral commodities, and why we must not only support and invest in new mines, but also expand production and secondary recovery at existing mines and mineral processing facilities.

Another Utah success story on this front is the Energy Fuels White Mesa Mill in Blanding, Utah. The White Mesa Mill is the last functioning conventional uranium mill in the U.S. and which is now also processing monazite, a mineral byproduct which contains uranium but also high concentrations of rare earth elements. Using an existing and already-permitted facility—and a high dose of rural Utah ingenuity—the White Mesa Mill has created the most advanced rare earth element processing operation outside of China, a great step toward ending that nation's stranglehold on the rare earths supply chain.

Again, I appreciate the opportunity to highlight some of Utah's success stories and to discuss how the federal government can better support state efforts to lead on the critical minerals front. I look forward to any questions from the committee. Thank you.

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The CHAIRMAN. Thanks, Mr. Somers.
Mr. Wood, you are next.

STATEMENT OF CHRIS WOOD,
PRESIDENT AND CEO, TROUT UNLIMITED

Mr. WOOD. Chairman Lee, Ranking Member Heinrich, and other Committee members, thank you very much for inviting me to testify today.

Trout Unlimited has been involved in mining issues for a long time, from protecting special places, such as Bristol Bay in Alaska, to working with the mining industry and other partners to clean up legacy pollution from abandoned mines. Domestic mineral production helped to build our nation. It won two world wars. It fueled westward expansion and provides the raw materials for modern society. At the same time, historic mining left hundreds of thousands of abandoned mines that dot the landscape, leeching their toxic brew of lead, zinc, cadmium, arsenic, and other pollutants into our rivers and streams. To be certain, there is no constituency for acid mine waste and orange rivers. There is, however, a bipartisan commitment to clean up abandoned mines, to encourage responsible mining, and to propel the needs of a clean energy future while making our rivers and streams cleaner and our communities healthier. Working together, we have an opportunity to craft a path forward that is collaborative, innovative, and responsible.

In 1872, the General Mining Law helped to spur settlement of the West. Today, it is an anachronism in need of modernization. The EPA estimates that 40 percent of western headwater streams are negatively affected by abandoned hardrock mines. These are, by and large, not contemporary mines. They were built many decades or even a century ago. An analysis conducted by Trout Unlimited scientists found that approximately 110,000 miles of streams, enough to encircle the earth four times, are listed as impaired, and abandoned mines are a major source of these impairments. Thanks last year to the leadership of Senator Heinrich, Senator Risch, and many other members of this Committee, Congress passed the Good Samaritan Remediation of Abandoned Hardrock Mines Act of 2024. The new law is proof that the mining industry and conservation interests can find common ground and pass common-sense mining legislation.

Tens of thousands of abandoned mines negatively affect our nation's waters. The reality is that this is a completely solvable problem. Just about every commodity produced from our public lands has an associated royalty or fee that helps to address remediation from legacy development. I appreciate that mining companies must make years and often millions of dollars in investments before they can mine, but there should be a common-sense royalty once new mines are up and running to help pay for the cleanup of legacy mines. The coal industry alone has paid more than $12 billion in royalties since 1977 to help clean up abandoned coal mines across Appalachia and parts of the West. If we can do it with coal, we can do it with hardrock minerals, especially given the immense need.

Finally, professional land managers should be able to deny a mine if it is proposed in a community drinking water supply, a sacred site, or an exceptional fish and wildlife habitat. But that de-

nial should happen early in the process, before a mining company has invested tens of millions of dollars in exploration or development. Between the industry's desire for certainty, the confusion caused by the Rosemont decision, the obvious need for a royalty, and the equally obvious need for some measure of discretion as to where mining can and should occur, there is an agreement to be had. We have fought and bickered and disagreed over mining on public lands for over 100 years. Certainly, there is a common-sense compromise within our reach that would provide sufficient, dedicated funding for abandoned mine cleanups, allow that certain landscapes are inappropriate for mining, and at the same time, address the legal and regulatory certainty needed for investment by the mining industry. You have Trout Unlimited's commitment to continue working in good faith to strike that balance.

Thank you for the opportunity to be here today.

[The prepared statement of Mr. Wood follows:]

Testimony of Chris Wood
President and CEO of Trout Unlimited
United States Senate Committee on Energy and Natural Resources
March 12, 2025

Chairman Lee, Ranking Member Heinrich and Committee Members:

My name is Chris Wood. I am the President and CEO of Trout Unlimited (TU). Thank you for inviting me to testify before the Committee. Today I am providing testimony on the *Mining Regulatory Clarity Act* (S.544); the *Critical Materials Future Act of 2025* (S.596); the *Critical Minerals Security Act of 2025* (S.789); and the *Mining Waste, Fraud, and Abuse Prevention Act of 2025* (S.859).

TU's mission is to bring together diverse interests to care for and recover rivers and streams so our children can experience the joy of wild and native trout and salmon. In pursuit of this mission, TU has long been involved in mining issues, from advancing policies to foster responsible mining to protecting special places such as Bristol Bay in Alaska to working with the mining industry and other partners to clean up legacy pollution from abandoned mine lands (AML).

Domestic mineral production helped to build our nation, won two world wars, fueled westward expansion, and provides the raw materials for modern society. Domestic mining of critical minerals is crucial to strengthen national defense, necessary across numerous economic sectors, and integral to our country's evolving energy portfolio. At the same time, mining that often occurred before the era of modern environmental laws left hundreds of thousands of abandoned mines that dot the landscape, many of which pollute our waterways and communities in a nasty brew of lead, zinc, cadmium, arsenic, and other toxins.

How we proceed from this point forward to meet our Nation's demand for critical minerals is one of the most important policy questions before Congress and we thank the Committee for its focus on these important issues. There is no constituency for acid mine waste and orange rivers. They do not have a lobby shop working for them here in the nation's capital. There is, however, a bipartisan commitment to clean up abandoned mines, encourage responsible mining, and propel the needs of a clean energy future, while making our rivers, streams, and communities cleaner.

Working together, we have an opportunity to craft a path forward that is collaborative, innovative and responsible. Trout Unlimited stands ready to help the bill sponsors and Congress achieve these objectives and I offer the following testimony on behalf of TU and its more than 350,000 members and supporters nationwide.

Historic mining left widespread pollution that must be addressed

In 1872, the General Mining Law was a progressive law designed to help spur settlement of the West. Anyone with a claim was able to mine with little oversight – polluting waterways, stripping mountainsides and changing the landscape of the West with little regard to, nor knowledge of, health, safety or environmental impacts. The impacts of those legacy mines pollute our lands and waters today. In fact, the EPA has estimated that 40 percent of western headwater streams are deleteriously affected by abandoned hard rock mines. To be certain, improvements in environmental regulations have helped stem many of the worst effects of mining, but reforms remain important for funding abandoned mine

clean up and the protection of the most sensitive fish and wildlife habitats, sacred sites, and drinking water supplies.

A 2020 Government Accountability Office report[1] estimates there are at least 533,000 abandoned hardrock mines on lands within Forest Service, Bureau of Land Management, Park Service, and Environmental Protection Agency (EPA) jurisdictions. On average, these agencies have collectively spent approximately $287 million annually identifying, cleaning up, and monitoring abandoned hardrock mines—adding up to approximately $2.9 billion in spending between 2008 and 2017.

An analysis conducted by TU scientists found that approximately 110,000 miles of streams – enough to circle the Earth four times – are listed as impaired for heavy metals or acidity, and abandoned mines are a major source of these impairments. Of these impaired stream miles, 20 percent are in areas that contain native trout and salmon while 52 percent are in areas that are important drinking water sources.

The path forward starts and ends with collaboration

We can do better. Last year Congress took a historic step in the right direction when it passed the *Good Samaritan Remediation of Abandoned Hardrock Mines Act of 2024* (S. 2781/H.R.779). Led by Senators Martin Heinrich and James Risch in the Senate, this new law is proof positive that the mining industry and conservation interests can not only find common ground on mining issues, but that we can come together to build bipartisan coalitions and advance important policies.

Over 75 House and Senate cosponsors worked together to pass this legislation – including an overwhelming majority of members on this committee – showing that there can be a path forward on mining policy that is grounded in trust and compromise. I want to personally thank Senators Heinrich and Risch for their determined leadership passing Good Samaritan legislation and showing us all what is possible when we apply common sense to common problems for the common good.

In 2004, I established TU's abandoned mine reclamation program. Over the years, we have completed over 50 abandoned hardrock mine reclamation projects across six western states in cooperation with state and federal agencies, mining, foundation, industry, and other philanthropic partners. This is in addition to our work reclaiming abandoned coal mines in Appalachia, and recently expanded efforts to restore streams impacted by placer mining in Alaska, and we aspire to do even more in the coming years. To date, these projects have restored more than 200 stream miles across the West. In most cases, until passage of the Good Samaritan legislation, we were limited to work on public lands so that our public land agency partners could hold the liability for us.

Our technical, partner-based approach has enabled us to become an industry leader in abandoned mine restoration. Many of those projects would not be possible without the financial and technical support from our private industry partners. Foundations such as the Tiffany & Company Foundation and companies such as Freeport McMoRan, Newmont Mining, Integra Resources, Kinross Gold Corporation, and Ouray Silver Mines Incorporated, provide valuable financial support and expertise that allows TU to leverage matching funds to accomplish meaningful reclamation, with measurable environmental improvements and positive economic impacts for local communities.

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[1] GAO-20-238, *Information on Number of Mines, Expenditures, and Factors That Limit Efforts to Address Hazards* https://www.gao.gov/products/GAO-20-238

We and our partners have shown that working together we can make a difference on the ground cleaning up the scourge of abandoned mines, and in the halls of Congress affecting policymaking for the common good.

Funding barriers to progress that Congress must address

Tens of thousands of abandoned legacy mines negatively affect our nation's waters every single day. The reality is that this is a completely solvable problem.

Just about every commodity produced off of our public lands has an associated royalty or fee that helps to address remediation or restoration from legacy development. We respect and appreciate that mining companies must make years, and often millions of dollars, in investments before they can mine, but there should be a common-sense royalty once new mines are up and running to help pay for the clean-up of legacy mines. We urge Congress to enact a fair royalty and/or fee structure for minerals extracted from public lands. We do it with oil and natural gas. The coal industry alone has paid more than $12 billion in royalties associated with the Abandoned Mineland Fund to help clean up abandoned coal mine across Appalachia and parts of the West. If we can do it with coal, we can do it with hardrock minerals, especially given the immense need.

To be certain, not all abandoned mines pollute equally, but it is important that any new royalty and/or fees are both fair for the mining industry and generate enough revenue to make substantial progress cleaning up abandoned mines.

The *Mining Waste, Fraud, and Abuse Prevention Act of 2025* (S. 859) would achieve these objectives by establishing an adjustable royalty between five percent and eight percent of the gross income from mining locatable minerals on public lands. I do not claim to be an expert on royalties, but certainly reasonable people can come together and determine a fair royalty that would allow the industry to plan with certainty while providing relief addressing the scourge of abandoned mines. Money generated from these royalties would then be dedicated to the Department of the Interior's Abandoned Hardrock Mine Reclamation Program, including inventorying, reclaiming and remediating abandoned hardrock mine lands.

Importantly, this royalty would only apply to new mining operations. Additionally, royalty relief should be provided if production would not occur without a reduction in royalty. Taken together, this would ensure a fair return on the production of locatable minerals on federal lands, create flexibility necessary for a sustainable domestic mining industry, and generate much needed funding to address abandoned mines. We urge your support for these provisions.

We also note that the *Mining Regulatory Clarity Act* (S.544) would dedicate maintenance fees for mill sites to be used for cleaning up abandoned mines. This is a good start but far from sufficient to address this enormous problem, as I will discuss further below.

Society relies on secure critical mineral supply chains

According to the International Energy Agency, the energy sector's overall need for critical minerals could increase by as much as six times by 2040. Critical minerals such as lithium, cobalt, tellurium and rare earth elements are important in electric vehicles, solar panels and wind turbines, and non-critical base metals such as copper will likewise see increased demand.

Supplying this demand and securing supply chains for these minerals is important for the economic and national security of the United States, including diversifying our energy portfolio. Before seeking new sources of raw materials, we should prioritize and fully utilize alternatives, such as recycling, substitutes to critical minerals, reprocessing old mine waste piles (while cleaning up the remaining abandoned mines) and ash material, and engineering advancements to reduce use and the need for new mines.

The *Critical Materials Future Act of 2025* (S.596) takes a holistic view of the entire supply chain by helping to address shortcomings in processing through innovative financial mechanisms, such as contracts for differences and advanced market commitments. Simply mining more domestically will not meet our national needs and reduce vulnerability if those minerals are shipped overseas for processing.

Additionally, we appreciate that S.596 requires reporting on the potential of critical material recycling to support the domestic critical materials market. This will provide a more complete understanding of how recycling can help meet demand, as well as demand that must be made up through other sources, such as new greenfield mines in unexplored or previously undeveloped areas.

Similarly, the *Critical Minerals Security Act of 2025* (S.789) provides a more complete picture of critical minerals supplies across the world and will aid policymakers in making informed and data-driven strategies to secure supply chains, including advanced recycling technologies and circularity. We recommend, however, that subsection (d) of S.789, Strategy on Development of Advanced Mining, Refining Separation, Processing and Recycling Technologies, be expanded to include reprocessing of historic mine waste. It seems only logical to encourage the use of historic mine waste if it can be put to productive use.

Abandoned mine cleanups have the potential to remediate sites while also recovering minerals from historic mining waste that can help to meet the need for critical minerals. At the same time, mining for both critical and non-critical minerals is likely to increase, and it is crucial that extracting and processing critical minerals be done responsibly with an emphasis on avoiding, minimizing, and mitigating impacts to fish, wildlife, and drinking water supplies.

However, even with advancements in recycling and reprocessing to help meet demand, domestic mining is and will continue to be an important part of the solution for our energy transition and to supply other minerals needed by the Nation. As such, we encourage the Committee to consider in the future additional, bipartisan legislation in this space, such as the *Unearth Innovation Act* (S.598), legislation that will help spur innovation to responsibly produce critical minerals with less environmental impact.

The Unearth Innovation Act would authorize $100 million over ten years for the Department of Energy to develop a new Mining and Mineral Innovation Program. This initiative would prioritize and aid the deployment of best practices and technologies that reduce the impacts of mineral recovery, improve environmental performance at new and existing mines, and facilitate remediation of abandoned and inactive mine sites. These strategic investments in research and development will help to responsibly secure critical mineral supplies, reduce the environmental and social impacts from domestic mining operations, and reduce the need for new mining through innovative technologies such as reprocessing historic mine waste, recycling, improved mineral recovery, and extending the lifespan of critical minerals already in circulation through the reuse, repurposing, and repairability of products.

Federal land management agencies must have the proper authorities to manage and embrace risk

A critical minerals mining "rush" will create new environmental and social challenges, and the subcommittee is right to take a hard look at the Mining Law of 1872 as well as the implications of the Rosemont judicial decision. We are encouraged that S.544 and S.859 are being considered together at this hearing and we urge Congress to continue to approach these issues in an integrated manner.

An integrated and balanced path forward means both reasonable updates to the 1872 Mining Law and reasonably addressing legal uncertainties to the mining industry that stem from the Rosemont decision.

Importantly, public land management agencies need better tools and resources to manage mining. Much progress has been made in the field of mining to minimize impacts from operations, including greater consideration of fish and wildlife habitat. But there needs to be some measure of discretion given to agencies to decide whether to allow mining in critical habitats or community drinking water supplies or sacred sites, for example.

In recent years we have seen broad bipartisan agreement that some places such as Bristol Bay or the gateway to Yellowstone National Park are not appropriate for mining. But it should not take an act of Congress or for the EPA to intervene in dramatic fashion to stop ill-advised mining proposals such as those.

As they do with every other multiple use on public lands, public land managers should have the discretion to determine lands that are suitable for mining. Ensuring equal consideration for all public land multiple uses – including conservation – will allow for sound, science-based decisions.

S.859 Act would do this by allowing for mineral withdrawals utilizing criteria enumerated in the Federal Land Policy and Management Act for the development and revision of land use plans, including weighing long-term benefits to the public against short-term benefits; coordination with state and local governments; observing the principles of multiple use and sustained yield; and assuring consideration of state, local, and Tribal plans.

In addition to advancing these provisions, we also encourage Congress to consider opportunities at the local land use planning level (i.e., Forest Plans and Resource Management Plans) for local Forest Service and BLM deciding officials to make suitability decisions for lands open to claim staking. This would be similar to how the Forest Service and BLM make lands available for oil and gas leasing and other resource uses. These decisions are in effect for the duration of the plan (intended to be 10-15 years) but may be adjusted sooner through a land use plan amendment. For lands that a forest plan or resource management plan has identified as open for claim staking, self-initiation for mining claims and security of tenure for exploration and mining would continue as it does today and has for over 150 years.

I am well aware of the significant investment made by mining companies to discover, explore, and bring to permit prospective mining operations. Discretion for land managers should be applied early in the process so that mining companies and their investors do not waste time and capital.

Responsible domestic mining on federal lands requires staffing our federal land management agencies with interdisciplinary professionals in the fields of engineering, geology, hydrology, fish and wildlife biology, botany, and cultural resources, just to name a few disciplines, along with the support staff and programs. Without these resource professional and public servants, permitting for mining – along with all the other services our public lands provide society – will slow dramatically. If we are serious about increasing responsible, domestic mineral production, we must be serious about ensuring our federal land

management agencies have the personnel, talent, resources and expertise to wisely steward this vast wealth of the Nation – our public lands.

Rosemont court decision and a path forward

Lastly, I want to address the so-called Rosemont court decision and the *Mining Regulatory Clarity Act* (S.544). We recognize that the Rosemont decision has created a great deal of uncertainty for mining on public lands, and this issue is something that Congress is correct to address.

We appreciate the bill sponsor's efforts to find a reasonable and workable solution to resolve this uncertainty. S. 544 is a more narrow, targeted proposal that avoids a number of concerns with the prior version of this legislation that Trout Unlimited raised in our testimony during the Public Lands, Forests, and Mining Subcommittee hearing held on December 12, 2023.

As we did in that hearing, we continue to emphasize that legislation to resolve uncertainty stemming from the *Rosemont* decision must be paired with meaningful reforms to the 1872 Mining Law, including both dedicated funding for abandoned mine cleanups and some measure of discretion given to agencies to decide whether to allow mining – or not – in critical habitats, community drinking water supplies, or sacred sites, for example.

Responsible domestic mining can help meet critical mineral supply chain challenges. Improved certainty for the mining industry and reforming outdated mining laws can be a win-win compromise that allows for responsible mining in the future while cleaning up the mistakes of the past. Accordingly, we encourage amendments that will ensure the legislation is narrowly targeted to address the relevant issues and specific challenges resulting from the *Rosemont* decision. The following recommendations are offered to ensure that this legislative proposal is implemented as intended and does not create new uncertainty for either the mining industry or other public land users and stakeholders.

- The use and occupancy of a mill site should be contingent upon the development of a valuable mineral deposit on a lode claim (i.e., a valid claim). While it is assumed that a claim holder has passed the so-called "prudent man" test, if they are proposing to invest resources in developing a mine, we encourage the committee to be explicit that the use and occupancy of mill site is contingent upon the development of an economically viable mine.
- The uncertainty created by the Rosemont decision is primarily applicable to hardrock mining, not placer. As such, a *Rosemont* fix should only apply to lode claims, not both lode and placer. We recommend excluding placer claims.
- We appreciate that S.544 includes a savings clause to clarify that the provisions do not apply to areas withdrawn from mining laws, such as National Parks and wilderness areas. While we support the inclusion of this savings clause to ensure that lands not open to mining are not subject to mining, we encourage the committee to clarify that the Department of the Interior also retains explicit authority to conduct validity exams on public lands that are open to mining, as well as regulate mining-related activities pursuant to all applicable Federal laws.
- The term 'mill site' is defined as, "a location of public land that is reasonably necessary for waste rock or tailings disposal or other operations reasonably incident to mineral development." The *Rosemont* decision only addressed the permanent occupancy of public land for the purposes of disposing of waste rock. We urge the committee to please delete "other operations," as that would include mining-related, impermanent uses that the Rosemont decision does not affect, such as the construction of roads, transmission lines, structures, etc.

- The proposal would allow a proprietor to "locate and include within the plan of operations as many mill site claims…as are reasonably necessary for its operations." The term "reasonably necessary" is imprecise and could allow for an unlimited number of mill sites. We encourage the committee to consider refining this provision to specify that a proprietor may locate, "only as many mill site claims under this subsection as are reasonably necessary for its operations and that create the minimum amount of degradation to public lands and waters," or language of similar effect.

As noted previously, we support mill site fees being directed to the Abandoned Hardrock Mine Remediation Program. However, even if all the approximately 515,000 mining claims and sites on public land were to become mill sites, this would generate $103 million per year. It is estimated that cleaning up abandoned mines could cost more than $50 billion – at this rate of funding, it would take five centuries to fully address this crisis!

We note, too, that despite bipartisan support from members of this Committee for increased Congressional appropriation to the Section 40704 Abandoned Hardrock Mine Remediation Program, appropriators have not heeded the call. Annual appropriations have averaged only $5 million per year split between state, Tribal and federal agencies. We must systematically rethink how we fund abandoned mine cleanups.

Clearly much more needs to be done and we encourage the committee to fully consider the following proposals to be paired with increased regulatory certainty:

- Deposit all excess locatable, placer and mill sites claim maintenance fees (more than the amount necessary for mining law administration) into the Section 40704 fund. This proposal has been widely supported by stakeholders, including both the mining industry and the environmental community.
- In addition to the above recommendation, increase claim maintenance fees beyond the current $200/claim fee.
- Create a new, yearly, per-claim fee dedicated wholly to the Section 40704 Abandoned Hardrock Mine Remediation Program. Similar proposals have been included in previous legislation (e.g., H.R. 3201, sponsored by Rep. Lamborn (R-CO) in the 111th Congress) and this funding would go into effect immediately, helping fill the funding gap while royalties from new mining operations take time to come online.
- Enact a reasonable and fair royalty on the extraction of hardrock minerals from public lands. Some in the mining industry are on record with an openness to considering royalties that are practical and not punitive. This is an area of common interest, and we strongly encourage the Committee to work with stakeholders to find a path forward.

Conclusion

We have fought and bickered and disagreed over mining on public lands for over 100 years. Certainly, there is a common-sense compromise within our reach that would provide sufficient, dedicated funding for abandoned mine cleanups, allow that certain landscapes are inappropriate for mining, and at that same time address the legal and regulatory certainty needed by the hardrock mining industry.

You have my commitment and the commitment of Trout Unlimited to continue working in good faith to strike a balance we can all support.

Thank you for the opportunity to testify today. Trout Unlimited appreciates the leadership of Chairman Lee, Ranking Member Heinrich, and other Committee members to explore these complex issues and seek collaborative solutions that benefit our environment, communities and society.

The CHAIRMAN. Thanks so much for your opening testimony. We will now proceed to questions. We will be alternating between Republicans and Democrats in five-minute rounds.

Mr. Somers, I would like to start with you.

Last month, I introduced a bill called the Critical Mineral Consistency Act, and I did this in order to try to align the Department of the Interior's critical minerals list with the Department of Energy's critical materials list. Can you explain for us, Mr. Somers, why both critical minerals and critical materials are essential to the United States, particularly with regard to our economic, energy, and national security?

Mr. SOMERS. Absolutely. Thank you, Mr. Chair. I applaud you for introducing this particular piece of legislation because the disparities between the lists that the Federal Government has maintained, especially between the DOI list and the DOE list, have been perplexing to the mining industry for a number of years now, and in many cases, again, when you are talking about critical minerals specifically, a lot of these critical minerals, as I mentioned in my testimony, are co-located with base metals and precious metals and other things that may not appear on either of these lists. But in particular, in the case of Utah, again, our most productive copper mine is also our most productive critical mineral mine. And so, making sure that you have equal consideration from the Federal Government for both the critical minerals and minerals like copper is really essential.

The other issue that comes to the fore here is that, you know, regardless of what national defense technology or energy transmission technology you are talking about, I mean, they are going to rely both on things like copper, and on some of the more boutique minerals, you know, that are on the critical minerals list. And so, you know, while you have a large number of rare earths, for example, that will go into an F-35, which we have a lot of in Utah, you also need a lot of copper to make an F-35. You also need vanadium for the alloys that go into those airframes. And so, again, having some consistency from the federal perspective when it comes to any potential fast-track permitting or grants and research and other things is essential in order for us——

The CHAIRMAN. Why does it matter for us to try to produce those in the United States rather than importing them?

Mr. SOMERS. Right, absolutely. I mean, again, as you have seen from the recent actions of China, I mean, if you have something like antimony, for example, that is banned, that prevents us from manufacturing munitions in the United States because those are critical to go into, again, munitions, the national defense systems, and other things. And so, it does become a national security risk if we are relying on foreign producers and especially adversarial foreign producers for those minerals.

The CHAIRMAN. Makes sense.

Mr. Haddock, in your testimony, you noted that Nevada, where Barrick operates, is a state with a lot of federal land, and Utah faces, of course, a similar challenge with 67 percent of our land being owned by the Federal Government. When it comes to mineral development, what additional hurdles do companies face when try-

ing to develop these things when they are operating on federal land as compared to either state land or private land?

Mr. HADDOCK. The additional hurdle is permitting—that is, the timeline for permitting. The permitting timelines on state or private land would be much quicker, and then, of course, the litigation risk on the tail-end, where almost every project is litigated. It makes it very difficult to spend a lot of money, like for some projects you would spend half a billion dollars before you get to the point of permitting it. That's a lot of money to sit there for a long time.

The CHAIRMAN. But when you are going in to operate on either state land or private land, there is still permitting required. There is still a potential litigation risk. Tell me how that risk and the corresponding delays compare between the two.

Mr. HADDOCK. There is kind of a broader range of litigation risk because of, number one, NEPA. The federal agencies that administer the public lands do an absolutely great job of bringing together mountains of data, analyzing all the range of issues that that they have to consider under the various laws. But what tends to happen in those cases is that the courts tend to flyspeck the EISs and nitpick until they find one issue that they don't think has been adequately addressed and then you are back to supplemental EIS.

The CHAIRMAN. Okay, so does that suggest that the additional time consumed in the federal process doesn't necessarily produce a cleaner, safer outcome— it's more flyspecking and time consuming, but not necessarily with a corresponding benefit to environmental quality? And if this is the case, how does this impact—how does that situation, compounded by recent court decisions, how does that impact investment in project development?

Mr. HADDOCK. Well, it makes it harder to invest, but you are absolutely right. NEPA was enacted before many of the detailed federal environmental laws that have performance standards. And what commonly happens is, whether you are working on state land or private land or federal land, you have to comply with all those laws. What typically happens to an EIS process is, additional mitigation measures are imposed, additional performance standards are imposed, and then they are litigated over. So that's kind of the additional burden from that.

The CHAIRMAN. Thank you. My time is expired.

Senator Heinrich.

Senator HEINRICH. Thank you, Chairman.

Mr. Wood, according to the GAO, there are at least 140,000 abandoned hardrock mine features just on federal land—and GAO actually points out itself that that information, where those sites are, is so lacking that the true number may actually be closer to half a million features on public land alone. That leads into the dynamic that you described of something like 40 percent of headwater streams being impaired—places that should run clear and be home to trout—running orange and acidic, which certainly impacts both irrigation and municipal water supplies. Walk us through what the primary impediments are to being able to clean up those sites and how much of it is purely a resource constraint.

Mr. WOOD. Well, thanks to your good work, sir, on the Good Samaritan Remediation of Abandoned Hardrock Mines Act, one of the primary problems—liability issues—is at least being addressed in a pilot program over the next seven years. But the single largest and most fundamental challenge that we face on cleaning up abandoned mines is that there is no dedicated funding source for it. So TU has managed to do about 50 abandoned mine cleanups around the country. And the way we are able to do that, in spite of the liability, is we get federal agencies to agree to hold the liability for us, and it's only on public land that we can do that.

But we have to cobble—we have to beg, borrow, and steal to get that money. It's membership dollars. The mining industry, frankly, has been generous in supporting a lot of abandoned mine cleanups—foundations, private citizens. Unlike with coal, unlike with oil, unlike with gas, there is no dedicated funding source that we can rely on.

Senator HEINRICH. Mr. Haddock, is it reasonable to expect mining companies to make some contribution toward that effort?

Mr. HADDOCK. Senator, let me answer that one this way: we have said over the years that we would support a reasonable net royalty. Now, there are, as you have heard me say before, there are issues about that, including that we should look at total government take. And when you look at total government take, in the form of taxes and royalties to state and local governments, that the amount that you pay to operate in Nevada is really commensurate with what we would pay to operate in Australia or Canada. That said, we support a reasonable net royalty. Net royalty is preferable because in the hardrock mineral context, the ore bodies are extremely complex and different, and net represents—net actually recognizes the difference between ore bodies. You don't have to go about determining what kind of royalty rate for which ore body.

The other thing I would note is the way—we have to remember the state and local taxes, because the way the mining law was set up to begin with was, it really left taxation and royalties to state governments. It is interesting because when they pulled oil and gas out of the mining law in 1920, they made the royalty a federal royalty, but then the Federal Government collects it and then distributes it back to the states. And so, with that, I would say that we support it. We would support actually a reasonable net royalty that is earmarked first for abandoned mine land reclamation.

Senator HEINRICH. Good. That's very helpful. So it sounds like the main issues here are creating some sort of regulatory certainty and permitting certainty so that the capital does not have to be ridiculously patient. There is the issue of actually being able to have some sort of revenue source that is reasonable to be able to clean up the existing mine lands problem, and then the issue that Mr. Wood brought up, of some level of discretion within the public land management agencies so that you don't get into the sort of intractable arguments that oftentimes lead to litigation.

Do you foresee, Mr. Haddock, a potential sort of global solution here where you could have a lot more certainty at the front end, and then come up with a reasonable number that does take into account those variations and then be able to have a more predictable way to clean up all of the legacy issues?

Mr. HADDOCK. I think all of those things can happen without wholesale revision of the mining law. Those are discrete issues that I think can be addressed discretely. My view on certainty up front is, that's what the BLM's land resource planning process is about, and I think that's where the certainty needs to come. That's where the resources that need to be protected need to be identified because once you start exploring, you need to be able to continue.

Senator HEINRICH. So you basically need a map of like where this is going to be embraced and it's permissive, and where the places where maybe there is enough of a conflict that it's not appropriate.

Mr. HADDOCK. And that process exists and is in place today in the BLM districts.

Senator HEINRICH. Thank you.

The CHAIRMAN. Senator Daines.

Senator DAINES. Chairman, thank you.

I want to talk about the Bull Mountains coal mine. This is a mine near Roundup, Montana. It plays a crucial role in Montana's energy economy. The mine employs 250 people. Now, these are high-paying jobs with good benefits. It generates over $90 million a year in state, local, and federal taxes and revenues. It is the lifeblood of Musselshell County. Unfortunately, these jobs are now at risk and the life of the mine and the community it serves are in limbo. It's because of the checkerboard federal ownership in Montana, as well as this longwall mining process, that this mine is running out of permitted coal and might be forced to close. And this is why I introduced Senate bill 362. It's a targeted, short-term fix that allows the mining of very specific federal minerals to ensure that we have enough time to find a longer-term solution for the mine. This bill simply allows the mine to continue mining the same materials it has for decades under the same permit it has had for years.

Last Congress, this Committee passed this identical bill with a bipartisan vote. I want to thank my colleagues on this Committee for working with me to make that happen, and I hope we can again pass this short-term fix so these workers in Montana can continue to provide for their families. Mining jobs saw a major hit in Montana over the last couple of years. The Bull Mountains Mine recently had to lay off dozens of hardworking Montanans because they have run out of permitted coal. And recently, the Stillwater Mine, the United States only platinum and palladium mine, which is used in catalytic converters to keep our air clean, it recently laid off 700 Montanans. We can't afford the loss of any more jobs for these Montana miners. That's why we must pass this bill and get it on the President's desk.

Mr. Somers, as the President of the Utah Mining Association, you understand how vital the mining industry is to building jobs, local communities, national security, and tax revenues. In Montana, coal-fired plants provide the largest share of Montana's electricity generation, accounting for 45 percent of Montana's in-state generation. The coal industry not only supplies Americans with a low-cost, reliable, and secure source of energy—it's called baseload power—but it also generates millions of dollars of federal, state,

and local revenue per year, and creates hundreds of very good-paying jobs in Montana.

Mr. Somers, can you speak to the importance of supporting our coal jobs and ensuring that coal mines, like the Bull Mountains Mine in Montana, continue to provide revenue for our states as well as our counties?

Mr. SOMERS. Absolutely, thank you, Senator.

Utah is very similar to Montana with regard to its coal industry. We also deal with checkerboard ownership. We deal with, you know, underground mines, and the planning that has to go into that. And like Montana, the vast majority of our electricity is provided by coal-fired generation. I mentioned in my testimony that, you know, mining jobs, on average in Utah, pay about 46 percent more than the Utah average wage, but when you go into our coal-producing counties, the number can go over 100 percent. So in many of our coal-producing counties, especially in central Utah, mining companies—coal mining companies—are by far the largest private employer, and provide very essential revenue, and not just for the direct mining jobs, but for all of the service jobs that go into those particular industries. And Utah in particular, like Montana, has made a very concerted effort to ensure that our coal mines stay healthy, and also that our coal-fired generation plants are preserved and we are able to provide that essential baseload power so that we can continue to have the type of economic growth that we have become used to in Utah over the last number of years.

Senator DAINES. You know, it's fascinating when you have conversations with technology leaders today. You are chatting with—whether it's Google or AWS or Microsoft and others—before you start talking about the technology, perhaps AI, the first conversation right now is the shortage of baseload power. It is the constraint for innovation here for our country long-term, and grateful that we have baseload power in these coal-fired plants.

Chairman Lee, I want to close by saying thanks for holding this hearing. I can't stress enough the importance of passing this bill, Senate bill 362. It has been passed before in this Committee, ensuring that the Roundup and the Musselshell community isn't left behind because of federal inaction. The Federal Government has been slow-rolling this. This is a short-term fix to allow the process to finally become completed for a long-term solution. This will allow enough time for the Trump Administration to finalize a new permit, for Congress to pass legislation like my Crow Revenue Act, to bring long-term economic certainty for the workers, Musselshell County, as well as the Crow Reservation and the Crow Nation.

Mr. Chairman, thank you.

The CHAIRMAN. Thank you, Senator Daines.

We will turn next to Senator King.

Senator KING. Thank you, Mr. Chairman.

This discussion reminds me of a little-known biblical provision where God came to Moses and said, "I have good news and bad news." Moses said, "What's the good news?" God said, "I am going to allow you to part the waters of the Red Sea. My people will escape. The waters will then come back and engulf Pharaoh's army." Moses said, "God, that's wonderful. What's the bad news?" God said, "You prepare the environmental impact statement."

[Laughter.]

Senator KING. Sorry, I couldn't resist.

[Laughter.]

Senator KING. Mr. Haddock, why does the permitting take so long? And I used to work on permitting of energy projects. We thought four or five years was a long time. Why does it take 29 years? What are the bottlenecks?

Mr. HADDOCK. The permitting itself doesn't take 29 years, but the average EIS is about four years for a mining project now. There is a massive amount of baseline data and work that has to go in—back, you know, in an iterative process with the agency, and there are just detailed studies, and then at the tail-end there are massive numbers of comments that then have to be responded to that require additional work. It is just a very long process that is, at this point, managed by very dedicated, very capable federal employees that are stretched very thin.

Senator KING. We hope that those federal employees will still be here after the next several months, but that's another subject.

What about—how do we look on cooperation with our international neighbors? For example, Canada, Australia, allies—do we need to have more cooperative relationships in that situation, Mr. Somers? Talk about mining as an international factor.

Mr. SOMERS. Sure. And I think that we do have to distinguish between countries that are allies and countries that have similar environmental and labor standards like Canada and Australia, as you mentioned. You know, a good example of cooperation that we see in Utah is the production of tellurium. So tellurium is mined at the Bingham Canyon Mine—the Rio Tinto Kennecott Mine, and then it's actually sent to Montreal for processing and then sent back to Utah and to Arizona for manufacturing into——

Senator KING. I don't want to calculate the tariff of that going back.

Mr. SOMERS. Sure. But I do think that, again, finding ways to utilize allied supply chains, and also utilizing existing facilities is very important because in many cases you are going to be able to get to actual production much quicker if you are utilizing existing facilities than if you are trying to build them from greenfield operations.

Senator KING. Absolutely. So one word that hasn't been mentioned much this morning is processing. My understanding, for example, is that a great deal of lithium comes from Australia, but something like 85 percent of the processing is done in China. Should we also be talking about processing when we are talking about mining? Aren't they interrelated in a way, because, ultimately, we need that product, the result of the processing?

Mr. SOMERS. Absolutely. If you are producing extracted minerals here in the U.S. but you are having to send them to China or another unfriendly nation for processing, then you haven't really solved the problem at all. So processing needs to be part of this conversation at every level.

Senator KING. So that should be part of what we are discussing here in terms of bottlenecks and that process. And I think you touched on this, but my notes were, who pays for abandoned mine

cleanup? And it sounds like it's sort of catch-as-catch-can, Mr. Wood. There is no steady source of available funds.

Mr. WOOD. That's right, and I would be remiss not to mention again that the mining industry has been very supportive of helping to clean up abandoned mines so long as they don't have to hold the liability. But that's the big problem, we don't have a dedicated funding source to get ahead of these abandoned mines that dot the landscape.

Senator KING. One sort of parenthetical question. Mr. Somers, you mentioned a mine that was producing a lot of important minerals, and there were other minerals there that could be produced at that mine. If you are going after lithium, and you have discovered tellurium, do you have to go through another permitting process, or can that mine expand its production of additional materials without additional delay?

Mr. SOMERS. To be honest, that depends on that operation, and it depends on the regulatory environment within the state where that operation is taking place, but in most cases, it is easier to go and to produce new minerals from an existing permitted facility, because in many cases it's a matter of finding ways, you know, through secondary recovery processes to pull other minerals out of a waste stream in many cases. And so, again, it depends on the type of operation, but generally you are better off, and can get to actual production quicker if you are using existing permitted facilities.

Senator KING. Thank you. I am out of time.

Mr. Haddock, I want to continue our discussion of net versus gross royalties, and if you would give us some written material on why mining should be treated different than oil and gas or coal in terms of the way the royalty is calculated. So we are out of time here, but I look forward to having some—maybe a page or two on that subject.

Thank you.

Mr. HADDOCK. I can point you to materials we submitted to the Committee before, and I will do that.

Senator KING. Thank you.

The CHAIRMAN. Senator Cortez Masto.

Senator CORTEZ MASTO. Thank you. Thank you to the panelists. Rich and Chris, great to see you again. Mr. Somers, thank you for joining us as well. I am going to do this on behalf of my mining companies in Nevada, but I know they would invite any Senator on this panel to come and see hardrock mining in the State of Nevada. I think it is important to see it and understand what is going on to recognize the challenges that they are facing and why they are talking about net royalties. So I appreciate that.

Thank you also for the hard work that I know you have done on the Mining Clarity Act, and the work that we have done together to really focus on some of the challenges that we heard at the last Committee. Now, this is based on those challenges. We amended it. It passed out of Committee in a bipartisan way last Congress, but I want to put to bed some of the stuff that we are still hearing out there with respect to this act. So Mr. Haddock, if you would, when we came together to address some of the concerns that we heard last time, there were concerns that the Mining Clarity Act would

allow mining in national parks, monuments, and other withdrawn areas. Can you address that? Can you talk a little bit about whether that's true or not?

Mr. HADDOCK. The savings clause in the act makes clear, and we worked extensively with Trout Unlimited and others on that, that it does not affect any of the laws that govern mining in the parks, and it does not change anything that's been withdrawn. If it has been withdrawn, it's gone. And I think it's crystal clear in the act.

Senator CORTEZ MASTO. Mr. Wood, you would agree?

Mr. WOOD. I would.

Senator CORTEZ MASTO. Thank you.

And then, Mr. Haddock, can you also confirm that the savings clause and the restructuring of the language, which includes adding the provision to deposit the mill site annual maintenance fees into an abandoned mine reclamation cleanup fund exists? And that was part of this discussion as we try to address some of the concerns. We recognize there is not a dedicated funding source, but this was an attempt to try to start that process. Is that right?

Mr. HADDOCK. It was, and it was a really convenient way to do it because this is a new kind of mining claim, and it was great to just tie it to abandoned mine reclamation.

Senator CORTEZ MASTO. Yes, and if you would address the new kind of mining claim, because this new language limits where these new mill site claims can be located. And there is an accusation that somehow this is also a land giveaway or that new claims would blanket all of our public lands. Would you address that?

Mr. HADDOCK. Yes, new claims wouldn't blanket all of our public lands. As I have said, it's only a very, very small percentage of Nevada's lands that is even inside a plan of operations compared to the 22 percent that has already been withdrawn and the nine percent that's proposed to be withdrawn. We are talking about a tiny percentage of one percent of the state that is in plans of operations. And only part of that is the ancillary facilities. And so, in order to locate one of these new subsection (c) mill sites, you have to have a plan of operations. You have to have a real mine. You just can't go out and put them anywhere on federal land. You have to have been working there. You have to have been drilling. You have prepared a plan of operations. You are going into an EIS. You have spent tens of millions of dollars at a minimum.

Senator CORTEZ MASTO. For that plan of operation.

And then, Mr. Haddock, finally, this bill does not overturn or reverse the Rosemont decision. The bill leaves Rosemont in place. It just creates a new path that miners can choose to take. Can you discuss under what circumstances a mining company may choose to take this new path?

Mr. HADDOCK. Well, from my perspective, it's an easy choice because it's clear, and I don't have to fight in permitting over whether or not a given lode claim is valid in the sense that it has an economically minable mineral deposit on it before I put my crusher on top of that. I don't have to argue about whether or not that claim is still valid when I mine through it in the underground and I still have a crusher sitting on top of it. It eliminates those issues.

Senator CORTEZ MASTO. Right, but a mining company can choose if they want to go under the Rosemont decision as a way to exist,

they can move through that path or they can move through this path setting forth an operational plan with a mill site and contributing to abandoned mine cleanup. Is that right?

Mr. HADDOCK. They can.

Senator CORTEZ MASTO. Okay, so there is still a choice for——

Mr. HADDOCK. There is still a choice.

Senator CORTEZ MASTO. Okay, I appreciate that.

And then, finally, let me just say thank you to all of you. You have heard the hurdles. There is no doubt the permitting process is the hurdle. We absolutely need to, in the West, make sure that our federal agencies that are crucial to us continuing this mining in Nevada—it is the BLM and DOI—that they are adequately funded and staffed. But we also have to make sure, and I am going to put a fine point on this, that those people in those positions can't use their positions to delay permitting by putting it off just because they don't like the permitting or the mining that is going on. That is not their choice to do. And so, we have to address both ends of it when we are looking at moving forward to address the permitting process of this as well.

So thank you again to the Chairman and Ranking Member for this hearing.

The CHAIRMAN. Let's see—Senator Gallego is next.

Senator GALLEGO. Thank you, Chairman Lee and Ranking Member Heinrich, and thank you to our witnesses for your attendance today.

I have been outspoken about the need to shore up our critical mineral supply chains for years, especially for our national security, and just our energy future, and Arizona certainly can be a leader in this space. Over 70 percent of the nation's copper comes from Arizona, along with gold, silver, zinc, and many others. As we produce—these minerals and metals and advanced technology contribute to our economy and build infrastructure. We can do this in a way that protects our natural resources too. So I am glad to see multiple bipartisan bills on critical minerals in this hearing, and I look forward to continuing to work on these issues.

So my first question is for Mr. Wood. You mentioned in your testimony that, historically, mining has threatened drinking water supply and quality. In states like mine, water is a very scarce resource that must be conserved and clean. What other actions can the Federal Government take to protect and remediate our water in the context of mining and critical mineral supply chains?

Mr. WOOD. Thank you, sir, for your question.

An important step was taken last year with the passage of the Good Samaritan legislation, which will allow for 12 pilot projects over the next seven years, and then we have every intent of coming back and trying to authorize that legislation to remove the liability hurdles that organizations like mine or mining companies would face by trying to clean up those abandoned mines.

The second, again, I mentioned this earlier, but the second point is paramount today—it's funding. There is just no funding for it. There is no dedicated funding source. So even if you didn't have concerns about liability, you still have to go out and cobble together hundreds of thousands—occasionally millions—of dollars to do these cleanup projects.

Senator GALLEGO. My next question is for Mr. Haddock.

Please expand on how the Critical Minerals Consistency Act would decrease uncertainty about research and tax credits, especially those passed by Congress in the last few years.

Mr. HADDOCK. Senator, I'm sorry, that last part about how the consistency would affect research?

Senator GALLEGO. Would decrease uncertainty about research and tax credits, especially those passed by Congress in the last few years.

Mr. HADDOCK. Well, I think the Act simply decreases the uncertainty in mine permitting, and I don't think it really affects the research and that end of things.

Senator GALLEGO. Okay.

Mr. Wood, back to my question from earlier. You said that some of these cleanups can be hundreds of thousands to millions of dollars. Is there any national estimate of how much cleanup on an annual basis budget we need to actually be effectively cleaning up some of these sites?

Mr. WOOD. On an annual basis?

Senator GALLEGO. Yes.

Mr. WOOD. It would be nice if we had a billion dollars a year, but I am just pulling that out of the air.

[Laughter.]

Senator GALLEGO. It would be nice if a lot of us had a billion dollars.

Mr. WOOD. Yes, you know, a lot of these projects, to be clear, they are minor construction sites, and my engineers get mad at me whenever I say this, but in many cases you are dealing with tailings, you dig a ditch, you line with an impermeable barrier, you bulldoze the tailings in there, put in another impermeable barrier, maybe you dig a French drain around it, and then you walk away. So a lot of these are not—these are not Superfund sites that we are talking about. These are often low-tech construction projects. They get more expensive. The reason I used the millions word was, if you have to do something like build a wastewater treatment plant, that, obviously, would be more expensive than just doing a small construction project.

Senator GALLEGO. Okay, thank you. I yield back.

Senator HEINRICH. So with respect to Senator Gallego's question, the EPA estimates that the total liability for these sites is about $54 billion. So if we had a billion dollars a year, it would still take 54 years to get these sites cleaned up.

The CHAIRMAN. Senator Hickenlooper.

Senator HICKENLOOPER. Thank you, Mr. Chair, and thanks for having—both you and the Ranking Member—having this hearing, and Mr. Haddock, good to see you, and Mr. Somers and Mr. Wood, nice to see you again.

Obviously, I got a master's in geology back in 1979. Spent a fair amount of time looking at the difference between geology and resources and what the difference is between a lode that could be a mine and a lode that couldn't be a mine. I think if you go back and look on a broader scale, we are facing challenges now that are going to require a much higher level of precision when we make those decisions. And Mr. Haddock, obviously you have been clear,

you and Mr. Somers both, in terms of we have that capability now to a large extent.

We have introduced three bills on critical minerals that were part of a number of other bills, and they are mostly smaller bills, but they are demanding to—we are trying to drive innovation, strengthen coordination, make sure we have the appropriate alliances. But I thought that this does seem like a moment of alignment where we could actually address—have a more comprehensive bill that looked at that alignment of self interest in terms of really, I think, many people, and my first question will be toward you, Mr. Wood, whether you agree with this, that many people in the environmental community recognize that we are going to need a lot more critical minerals if we are going to deal with the challenges of climate change—more electric vehicles, wind, solar, you know, all of these things demand, not just, you know, rare earth minerals, but nickel and copper, I mean, things like this.

And so, Mr. Wood, just to start that, do you think it's possible that we could—can you imagine some sort of a consensus from the environmental side of things that we could help establish what would be the criteria, the framework, by which mining could take place and processing could take place, and by so setting standards, we would then export them once we have worked our way through that? And I am not saying this happens easily. Is that something you can imagine?

Mr. WOOD. I can absolutely imagine that. I don't think we are that far apart. I mean, coming up with a reasonable—I am not an expert in royalties, but coming up with a reasonable royalty, I think, is achievable, it sounds like. Building some discretion, whether it's the land use plan or upon enactment of a bill to make clear that some areas are suitable for development, some are not, that sounds achievable. And I would be remiss if I didn't say that rare earth minerals, and minerals, generally, are absolutely vital for the future of this country. And so, I would rather we mine them here and give the industry the certainty it needs while providing the protections that conservation demands.

Senator HICKENLOOPER. Great, and I agree. I think this is obviously a unique time, where we have what is too often rare in government, which is the alignment of self interest, and that's whether you are working in non-profits, or in businesses, or in government, the alignment of self interest is the secret to progress.

Mr. Haddock, we introduced the Critical Materials Future Act to really expand domestic processing of critical minerals and directly reduce our reliance on China. It has been already said several times that China does so much of the processing for so many of these minerals. Can you elaborate a little bit on the need for investments both in domestic mining and also domestic processing?

Mr. HADDOCK. Well, it's obviously important to have processing onshore if you can have it. The materials that we would mine and concentrate for processing are still bulk materials, and they are expensive to ship.

Senator HICKENLOOPER. Right.

Mr. HADDOCK. So if you have, all things being equal, if you have domestic processing, that promotes a domestic industry. The other thing I would add is, just to kind of put it in context, over the last

two decades, China has invested $57 billion in critical mineral supply chain, onshore and offshore. They have recognized the need for that and they have been very aggressive. And so that's why so much mineral processing is in China.

Senator HICKENLOOPER. I agree. Thank you.

Mr. Somers, just really quickly, expanding domestic mining and processing is going to require a skilled workforce. We have only 600 students in the United States right now that are enrolled in mining-related programs. Many of them are at the Colorado School of Mines, I am proud to say. China has 1.4 million students in mining. How are we going to address this?

Mr. SOMERS. Yes, thank you, Senator. I think that that's a huge problem, and not just for the technical degrees—the mining engineering, chemical engineering, and other degrees—but also for, you know, skilled trades and other things.

Senator HICKENLOOPER. Right.

Mr. SOMERS. You know, I think that the Mining Schools Act that was considered in the last Congress is a good first step in that to provide some opportunities for our currently certified mining schools to go out and recruit more students and have more resources available to them. But, you know, solving that workforce problem is critical if we are going to be able to reshore these supply chains.

Senator HICKENLOOPER. Right. Thank you, all. And I yield back only because I have to. I could spend the afternoon talking to you. I yield back.

The CHAIRMAN. Thanks, Senator Hickenlooper.

We will now start the second round.

Mr. Haddock, I would like to start with you. A few minutes ago, you mentioned you would be okay with a new net royalty, but that's not, of course, what is being proposed in S. 859. How do you think a gross royalty, as proposed in S. 859, would affect the industry and would affect essential mining investment and development?

Mr. HADDOCK. Well, it would be devastating, as the testimonies we submitted on the predecessor to this bill showed that that kind of royalty would take 67 percent of the value of the operation. It would take it up from about 30, where we spend today for total government take, to two-thirds of the operation, and that just would make the United States impossible to do business in.

The CHAIRMAN. So you add that on top of the other burdens and it would make it an impossibility.

Now, Mr. Somers, if there were a net royalty, there might be some businesses, some companies, I suspect, that could absorb that and deal with it, but what would that do to the state of competition in the industry, particularly as it relates to smaller companies, those that are less established? How would they fare in that environment when they had a net royalty added on top of the pre-existing burdens that we have been discussing today?

Mr. SOMERS. I think it would be very damaging, and especially, again, when the resources, obviously, don't move, but the capital can move. And so, companies are going to invest where they are going to get the best return. And I think especially in the mining industry, where we rely very much on small exploration companies and on junior mining companies to develop many of these mineral

deposits, in many cases, they will be sold off to larger companies. I think that, you know, having anything that hampers investment, especially in those smaller companies, and that front-end of the mining, those front-end mining operations, would be very damaging in the long term.

The CHAIRMAN. So we have to look at this, I suppose, as one of many market signals. If we were to do that, like I say, even though some larger companies could absorb it, a lot of the newer exploration, or at least a significant amount of the new development, the new exploration, is undertaken by startups, by smaller companies. We have to respond to all kinds of market signals—market signals that have to take into account whether there is federal land involved, whether to what extent there is federal permitting involved, and whether to what extent there is a federal litigation risk associated with that permitting. You add more things on top of that, including a royalty, a new royalty, whether that's gross or even net, doesn't that, in many circumstances, chill investment in the United States and effectively drive it elsewhere?

Mr. SOMERS. Absolutely, and I think it also goes in opposition to what many of the states are trying to do to bring investment to their state. So in Utah, for example, over the past few years we have passed two different tax credits that incentivize mineral exploration and also high-cost infrastructure associated with mining operations and other extractive operations. And so, if you have the states moving in a direction where they are trying to incentivize production and exploration in order to attract that investment, but on the federal side, you are moving in the other direction, then you are really canceling those efforts out.

The CHAIRMAN. Right.

Mr. Somers, how would you compare interacting with federal authorities on permitting and other matters to state regulators? For example, the Utah Division of Oil, Gas, and Mining, sometimes referred to as DOGM. What are those two experiences like?

Mr. SOMERS. I think, in many cases, you know, as I mentioned in my testimony, it's very important that we protect primacy for states so that we can manage as many of these federal laws and regulations as possible. But in general, I mean, the state agencies tend to be more responsive because, frankly, we can call their bosses. I mean, we can call, you know, the head of the Department of Natural Resources, where DOGM is. We can, you know, call the Governor, legislators, and get responses there. Whereas, you know, trying to fix problems on a federal level becomes much more difficult, you know, and not to say that we don't have opportunities to influence those agencies through working with our federal delegation and other things, but you know, as a general principle, I think, you know, the government closest to the people functions the best, and we find that in regulatory agencies as well.

The CHAIRMAN. Do you find—is there any kind of inferior environmental outcome or greater risk of environmental harm as a result of a decision where jurisdiction is vested in a state agency, for example, the Utah Division of Oil, Gas, and Mining, as compared to federal authorities?

Mr. SOMERS. We have not witnessed that in Utah.

The CHAIRMAN. So the biggest significant difference, if I am understanding you correctly, is the amount of time, the amount of delay, and the uncertainty—shorter, greater certainty with the states without a diminished environmental outcome?

Mr. SOMERS. Correct.

The CHAIRMAN. Thank you.

Senator Heinrich.

Senator HEINRICH. Actually, Senator Murkowski hasn't had a chance to even have her first round, so I would defer to her.

The CHAIRMAN. My peripheral vision was off.

Senator MURKOWSKI. I know, I am so far down the dais here, but that's okay. I show up, and that's so much of what matters.

The CHAIRMAN. My wife would call that male refrigerator blindness, and it claims many victims.

[Laughter.]

Senator MURKOWSKI. I am going to have to remember that one.

I want to thank you for having this hearing. As one that's been focused on the issue of critical minerals and the vulnerability that we have in this country when it comes to being able to access our own, and the increasing reliance on countries like China, this is a key issue, and I am glad that the Committee is taking it up so early.

Mr. Somers, I wanted to start with you. There was an interesting article in the Wall Street Journal just a bit ago entitled, "Why the U.S. Keeps Losing to China in the Battle Over Critical Minerals." You may have seen it. But it tells the story of Syrah. This is an Australian company that—I have cited this story a fair amount in the Biden Administration because what we saw was hundreds of millions of U.S. taxpayer dollars that went to support that, even though they were planning on sourcing the graphite from a very unstable part of Mozambique. It's one of those sources of frustration. You watch this whole project. Syrah goes into force majeure last year, and so, everything that the U.S. taxpayer has put out there is at risk, at jeopardy, and you have continued unrest in Mozambique. To me, this was a situation where you had just no common sense when it came to the federal investment decisions.

And then, I will submit to you that we have some opportunities in our own country to be smart about our investments, lower risk investments here at home. My colleagues have heard about the potential for Graphite One, the largest natural graphite deposit in North America. We pushed, we pleaded, we did everything that we could to raise the profile on this. We did get support from the Defense Production Act. That was helpful. But when it came to Department of Energy, it was really pretty tough to get any attention here. So I am looking at this, and at least with the previous Administration, seeing this unwillingness for the Federal Government to invest in projects here at home.

And so, my question to you is whether or not you think it would be wise, advisable, to have some kind of a requirement for any federal investments in mineral processing to be tied to the extent practical to domestically sourced minerals, because we know we are not doing the processing. We want to bring processing here. But also, it doesn't make sense if we are getting the raw materials from other countries. Speak to this if you would, please.

Mr. SOMERS. Absolutely, I think that would be a very wise requirement. And again, in my testimony, I mentioned that just in Utah we have 40 of the 50 critical minerals on the DOI list, you know, and you add the graphite that you mentioned in your home state, and mineral occurrences in other U.S. states, there is really very little reason that we need to go outside of the U.S. to source these minerals. And again, if we have both the extraction and the processing happening here domestically, then that really does shore up our supply chain and ensure that we don't have those economic and national security risks.

I would also say that in many cases, not only are there natural deposits, but in the case of graphite, for example——

Senator MURKOWSKI. Synthetic.

Mr. SOMERS [continuing]. There are opportunities, you know, there are projects right now, currently, in Pennsylvania and West Virginia that are getting graphite from coal, you know, with off-gassing of hydrogen, which can be used for electricity generation. And so, there are many opportunities for us to be innovative as well and not rely on unstable countries in order to extract the raw resources.

Senator MURKOWSKI. Well, thank you for that.

Let me ask a question of you, Mr. Haddock. In your written testimony you briefly mentioned the Bureau of Mines. This was abolished back in the '90s. You didn't specifically call for its resurrection, but given the importance of what we are talking about here today, it's something that I have certainly thought about. We have a Department of Energy. Maybe we want a Bureau of Mines to look at our mineral security and our competitiveness. So what do you think about the idea? What would a modern Bureau of Mines look like? What functions would they be responsible for?

Mr. HADDOCK. Thank you, Senator. That's a great question.

In my mind, as I was looking at these critical minerals bills, and everybody was talking about all the coordination between all these various agencies, and this agency could do this and that, it just felt like there is a need for centralization here. And also, one of the things that I have talked about before and I have advocated is that there needs to be a knowledge base of, you know, as private explorers are out working, we need to find a way to be able to share the information that's critical to knowing where these byproduct minerals are, and in small concentrations. And so, I don't know exactly what it would look like, but I certainly know, in a business world, you would create a focus on that with a small group of people with the right expertise and focus on those very narrow questions.

Senator MURKOWSKI. Good, well, thank you for that. That might be something that the Committee would want to explore, Mr. Chairman. You know, where we are trying to eliminate a lot of bureaucracy nowadays, but when you are focusing in an area as significant as this for our entire economy, it seems to me that we might want to give a little more definition. And so, certainly something that I would love to work with you all on.

Thank you, and I appreciate all of you being here today, and Senator Heinrich, thank you for the courtesy of the refrigerator look over here.

[Laughter.]

The CHAIRMAN. Thanks so much, excellent suggestion.

Senator Heinrich.

Senator HEINRICH. I am going to defer to Senator Hickenlooper. I know he has a second round.

Senator HICKENLOOPER. Great. Let me get back to my question there. I got distracted for just that moment. It's always the case.

You guys have been talking a lot about supply chain, and I think that's at the essence of all of these things. Again, I want to go back to Mr. Somers.

The National Critical Minerals Council Act, to ensure that we are, you know, coordinating minerals policy at the highest level of government. Can you elaborate on why it's essential to elevate critical minerals to the highest levels of the White House, obviously, but also to the agency, and how a national council or a minerals advisor could enhance that?

Mr. SOMERS. Absolutely, and I would like to echo what Mr. Haddock said. I think that, you know, more centralization in the Federal Government would be very beneficial in whatever form that takes, a Bureau of Mines or a National Critical Minerals Council or Minerals Czar. I am not sure exactly, you know, what that should look like specifically, but I think that ensuring that the Federal Government is working together, and you have the Department of Energy, the Department of the Interior, the Department of Defense, and the Trade Representative, and others, I mean, all the different parts of government that need to be involved in these discussions so that, you know, we are, again, maximizing our opportunities to be self-sufficient with our critical minerals supply chain and also dealing with trade issues and other issues that can affect investment here in the U.S. is absolutely essential.

Senator HICKENLOOPER. I appreciate that more than you can imagine. I think collaboration and coordination is going to be in high demand.

Mr. Wood, and this is just, again, someone who also loves trout, and like many of your members, I enjoy taking the trout out of the water, but also putting them back.

Mr. WOOD. Yes, that's good. That's good.

Senator HICKENLOOPER. I think we have some of the largest trout, I think, in the country, if you don't recognize that yet.

Mr. WOOD. Yes, you do.

Senator HICKENLOOPER. What actions can Congress take to reduce the impacts of some of these new mining projects? What have we not talked about yet where we could get better value?

Mr. WOOD. You know, I think we have talked about several topics already that would reduce impact. I will say that modern mining is a lot different than historic mining practices. These are well-regulated industries. Most of them are well-capitalized. I do think that the two biggest problems with the mining law, I don't think are that unfixable. One is, as I mentioned earlier, creating a dedicated funding source or royalty, and the second issue would be making clear that there is discretion for denying a mine permit early in the process.

Senator HICKENLOOPER. Right. I agree. Perfect. Thank you, I appreciate that. Obviously, that's a discussion that could go on for some hours.

Mr. WOOD. Yes.

Senator HICKENLOOPER. Mr. Haddock, we talked about a better path forward for mining in this country by simpler permitting processes, you know, faster responses, but making sure that we have the highest environmental standards. And I guess I could say, actually to all witnesses, we have already covered a number of the permitting bottlenecks that mining companies face on projects. But as we resume on this Committee bipartisan discussions and solutions, what would you think—each can suggest one—what should be our highest priority?

Mr. HADDOCK. I will start. Pass the Mineral Regulatory Clarity Act.

Senator HICKENLOOPER. Okay, that's fair.

Mr. Somers.

Mr. SOMERS. Again, I think that there has been a lot of discussion about permitting reform, and that is absolutely critical, and also litigation reform.

Senator HICKENLOOPER. There you go.

Mr. WOOD. And I would say, again, funding to clean up abandoned mines and allowing some more discretion in the process for areas where you shouldn't mine.

Senator HICKENLOOPER. All right, absolutely. Well, the Ranking Member described, what was it, the $54 billion backlog, and yet, the billion dollars a year that you mentioned really, it's almost just taking care of what is happening, you know, day to day with existing mining, as small as it is. But anyway, somehow that has got to come together as well, as we get ultimate solutions.

Anyway, thank you all, I appreciate your work, and look forward to working with you going forward.

I yield back.

The CHAIRMAN. Okay, I really appreciate all three of our witnesses for coming here today. You have offered some very valuable testimony that we have all benefited from. As you can tell, these are issues on which there is a lot of bipartisan consensus—not always on the discrete policy proposals at hand, but in many areas there is. At a minimum, there is a lot of bipartisan consensus over the importance of these issues, and that leads often to legislative consensus, or very nearly such.

We have some brief housekeeping before we wrap up.

I ask unanimous consent to enter into the record some letters of support for S. 714, the Critical Mineral Consistency Act, and S. 544, from the following organizations: the National Mining Association, the American Exploration and Mining Association, and Citizens for Responsible Energy Solutions also submitted one.

And without objection, so ordered.

[Letters for the record follow:]

Rich Nolan
President & CEO

March 12, 2025

The Honorable Mike Lee
Chairman
Committee on Energy & Natural Resources
U.S. Senate
Washington, D.C. 20510

The Honorable Martin Heinrich
Ranking Member
Committee on Energy & Natural Resources
U.S. Senate
Washington, D.C. 20510

Dear Chairman Lee and Ranking Member Heinrich:

On behalf of the National Mining Association, I write in support of the Critical Mineral Consistency Act of 2024 (S. 714) being considered before the committee today. This bipartisan and bicameral legislation creates alignment for minerals and materials prioritized by the Department of the Interior (DOI) and the Department of Energy (DOE).

This commonsense legislation reflects the overwhelming importance of domestic mineral supply chains to manufacturing, energy, infrastructure and national security priorities. It also signals the bipartisan support for a cohesive domestic mineral strategy that does not pick winners and losers. Under the Energy Act of 2020, items appearing on the DOI's critical minerals list are automatically included on the DOE's critical materials list. However, items on the DOE list are not reciprocated to the DOI list.

The Critical Mineral Consistency Act, which overwhelmingly passed out of the House of Representatives with bipartisan support in the last congress, is an important step forward to provide the regulatory clarity that mineral and material producers need as they meet the increased demand projected for nearly every sector of our economy. This bill allows made-in-America to increasingly mean mined-in-America.

As you work to improve domestic mineral supply chain security, I strongly urge your support for the bipartisan Critical Mineral Consistency Act.

Sincerely,

Rich Nolan

101 Constitution Ave. NW / Suite 500 East / Washington, D.C. 20001 / Phone: 202. 463. 2600

Rich Nolan
President & CEO

March 12, 2025

The Honorable Mike Lee
Chairman
Committee on Energy & Natural Resources
U.S. Senate
Washington, D.C. 20510

The Honorable Martin Heinrich
Ranking Member
Committee on Energy & Natural Resources
U.S. Senate
Washington, D.C. 20510

Dear Chairman Lee and Ranking Member Heinrich:

On behalf of the National Mining Association, I write in support of the Mining Regulatory Clarity Act (S. 544) that is being considered before the committee today. This bipartisan and bicameral legislation provides the certainty needed for continued domestic production of minerals from federal lands necessary for U.S. national security and the economic competitiveness.

The legislation reflects the strong bipartisan work of Senators Catherine Cortez Masto (D-Nev.) and Jim Risch (R-Idaho) as well as Senators Jacky Rosen (D-Nev.), Mike Crapo (R-Idaho) and Lisa Murkowski (R-Alaska). Included as an underlying provision in the bipartisan Energy Permitting Reform Act of 2024, which passed out of the Senate Energy and Natural Resources Committee by a vote of 15 to 4, this legislation works to address an issue resulting from the ill-considered 2022 *Center for Biological Diversity et al.* v. *U.S. Fish and Wildlife Service et al.* court decision.

The court decision reversed more than 150 years of established precedent under the Mining Law, making it extremely difficult to operate mines efficiently and responsibly in the U.S. The Mining Regulatory Clarity Act is not targeted at any single mining site, but instead will restore the longstanding certainty needed for the U.S. mine operations, underpinning our ability to meet the extraordinary mineral demands required for U.S. manufacturing, energy, infrastructure and national security needs.

Importantly, nothing in the legislation permits, allows or expands any type of mining activity on protected or conserved lands, including previously withdrawn lands or lands in our national parks. Nor does it allow or incentivize the blocking of access or use of lands for other multiple-use activities. Many mining companies invest hundreds of millions of dollars and years into potential mine sites before receiving even a dollar of return on their investments; they need assurance that, when mining begins, they will be able to responsibly use the land their operations require as established by law.

101 Constitution Ave. NW / Suite 500 East / Washington, D.C. 20001 / Phone: 202. 463. 2600

As you work to improve mineral supply chain security while maintaining our world-leading safety and environmental standards, I strongly urge your support for the bipartisan Mining Regulatory Clarity Act to enable responsible domestic mineral development on federal lands.

Sincerely,

Rich Nolan

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March 12, 2025

The Honorable Mike Lee
Chairman
Committee on Energy and Natural Resources
304 Dirksen Senate Office Building
Washington, D.C. 20510

The Honorable Martin Heinrich
Ranking Member
Committee on Energy and Natural Resources
304 Dirksen Senate Office Building
Washington, D.C. 20510

Re: AEMA Statement for the Record for the March 12, 2025 Senate Energy and Natural Resources Committee Hearing

Dear Chairman Lee and Ranking Member Heinrich:

The American Exploration & Mining Association (AEMA) appreciates the opportunity to provide the following statement for the record for the March 12, 2025 hearing to receive testimony on S. 544, the Mining Regulatory Clarity Act, and S. 859, the Mining Waste, Fraud, and Abuse Prevention Act, and other legislation. For the foregoing reasons, AEMA supports S. 544 and opposes S. 859. We also support S. 596, to establish a pilot program to support domestic critical mineral processing, S. 714, to amend the Energy Act of 2020 to include critical materials in the definition of critical mineral, and we support in concept S. 789, to require reports on critical mineral and rare earth element resources around the world and a strategy for the development of advanced mining, refining, separation, and processing technologies.

Who We Are

AEMA is a 130-year-old, 1,700-member national trade association representing the minerals industry with members residing in 46 U.S. states, 7 Canadian provinces or territories and ten other countries. AEMA is the recognized national voice for exploration, the junior mining sector, and maintaining access to public lands, and represents the entire mining life cycle, from exploration to reclamation and closure. More than 80% of our members are small businesses or work for small businesses.

We Need a Reliable Domestic Mineral Supply Chain

The pandemic and geopolitical events have exposed the United States' supply chain vulnerabilities, highlighting the importance of an abundant and affordable supply of domestic minerals for America's future.

The fact is, global mineral demand is skyrocketing. Unfortunately, a lack of access to economically viable mineral deposits and a lengthy, inefficient federal permitting system has resulted in the U.S.

being increasingly dependent on foreign sources of strategic and critical minerals. It's time that we, as a Nation, recognize this vulnerability and the vital importance of minerals to our national security, our economy, and our everyday lives. We have heard a lot over the years about the importance of energy independence, but it is equally as important, if not more so, that we are minerals independent.

In September 2016, the Government Accountability Office ("GAO") published a report entitled "Strengthened Federal Approach Needed to Help Identify and Mitigate Supply Risks for Critical Raw Materials." This reported evaluated "certain metals, minerals, and other "critical" raw materials [that] play an important role in the production of advanced technologies across a range of industrial sectors and defense applications." The GAO report found several limitations in the scope of federal critical mineral programs that are inconsistent with the directives in the National Materials and Minerals Policy, Research and Development Act of 1980. (30 U.S.C. §§ 1602 – 1605), hereinafter referred to as the 1980 Act.
In the 1980 Act, Congress found:

> "the United States lacks a coherent national materials policy and a coordinated program to assure the availability of materials critical for national economic well-being, national defense, and industrial production, including interstate commerce and foreign trade." (30 U.S.C. § 1601(7).

In response to this finding, Congress declared:

> "...it is the continuing policy of the United States to promote an adequate and stable supply of materials necessary to maintain national security, economic well-being and industrial production with appropriate attention to a long-term balance between resource production, energy use, a healthy environment, natural resource conservation, and social needs." (30 U.S.C. § 1602)

Relying on adversaries and allies for the minerals needed for U.S. manufacturing has created our currently unsustainable dependence on foreign countries for minerals. The most recent USGS *Mineral Commodity Summaries* published in 2025 indicates that the U.S. is now more than fifty percent import-dependent for 46 different metals and minerals, and 100 percent import-dependent for 15 of those. Stated differently, the U.S. now imports the majority of 46 different minerals, nearly half of the naturally-occurring elements on the Periodic Table, most of which can be mined in the U.S.

Made in America must include "mined in America" and sourcing minerals from U.S. mines that use state-of-the-art environmental protection measures, put a premium on worker health and safety, and have financial assurances that guarantee reclamation when mining is complete.

Background on Hardrock Mining

American miners continue to play an indispensable role in building and defending our Nation. From foundations to roofs, power plants to wind farms, roads and bridges to communications

grids and data storage centers, America's infrastructure begins and ends with minerals and mining. Now is the time to get serious about building a reliable mineral supply chain. The U.S. mining industry stands ready to help build that supply chain right here in America.

AEMA members take great pride in producing the metals and other important minerals America needs for national and economic security, as well as the materials people use in their everyday lives. We are proud of our members' contributions across the communities and regions where they operate, many of which are rural areas facing significant economic and social development challenges. Notably, the U.S. mining industry is the safest, most environmentally responsible mining industry in the world. Our members have repeatedly demonstrated that mining and protecting the environment are compatible, as mineral producers make possible the development of society's basic needs and consistently minimize modern society's impacts on the environment.

The challenge of finding and developing mineral resources in the United States, or anywhere in the world, is very difficult because mineral deposits are geologically rare and hard to discover. Exploration and mining projects must undergo multiple lengthy stages of development. First, there is the initial identification of deposits that hold potentially developable mineral reserves. To this point, the United States has only explored and mapped the mineral potential on approximately 12 percent of the country's lands. The USGS estimates that it would take more than 10 years just to find and map all domestic resources, using modern technologies, with at least another 7-10 years to get those resources to market. Consequently, mining companies often do most of this work themselves and cover all the investments needed to advance a potential mineral deposit towards an operating mine.

It is also important to recognize that many federal lands across the western United States already have been closed to exploration and mining. Further restrictions would inevitably prevent mining in areas where there is insufficient information to determine whether critical and strategic minerals exist and need to be developed. There is no clear reasoning for such harmful restrictions, and they limit the flexibility of extracting our Nation's critical and strategic minerals where they are located and can be found.

AEMA's members operate their respective exploration and mining activities in a responsible manner through a wide range of social and environmental conditions across the United States. Their operations are subject to extensive evaluations at the project level where there is ample opportunity to ensure resource protection through federal and state permitting actions. To meet our imminent metal and mineral needs, the Congress and the administration should be focusing on how to expand areas that should be open to potential mining and exploration activities, instead of looking for ways to restrict regions from exploration.

After a potential deposit is identified through exploration, which often takes years of exploration-level permitting to ascertain, mining companies must determine a path to confirm the nature and scale of any developable resources. They must identify the amount of additional exploration necessary to properly define the mineral deposit, gain approvals to conduct further studies, and then explore and report on the exploration results. Defining the deposit generally requires multiple years of drilling to establish the extent and quality of any valuable mineralization. This

process can take up to several decades for large and complex orebodies. Exploration drilling and associated activities require significant investment, especially since they are often undertaken in geographically remote and challenging areas where access and infrastructure are limited. It is worth noting that only about 1 in every 1,000 prospective mineral deposits has the potential to become a producing mine.[1] It's also noteworthy that a single deposit is rarely confined to one tenure type—that is, it may consist of federal tenure, private tenure or even State lands where any successful operation could, for example, provide a revenue stream to the school children of that State.

In the event a mineable resource is defined, the work continues for mining companies to determine whether there is an economical and feasible mine development scenario. This generally involves preparation of a Feasibility Study, sometimes preceded by a Pre-Feasibility Study, and requires several additional years to produce information sufficient to support a mine investment decision. Multiple years of baseline data collection and analysis are often undertaken to provide information for the feasibility work as well as for future permitting. While mining companies may start their pre-permitting work early, including at the exploration stage through Feasibility Study preparation, they often do not submit formal applications until a developable project is identified through the Feasibility Study.

Thus, while it is easy to focus on a single part of the mineral development process, it is important to recognize all of the crucial stages involved with development of an operating mine. When projects require on average 29 years, according to S&P Global, to take a potential mineral resource to the point of mine construction, any government action that could lengthen this process or create disincentives, or create risk to the security of tenure, should be carefully weighed in terms of its ramifications. Moreover, even when a project has matured through the permitting process, litigation and other actions that jeopardize or delay further development or ancillary operations at mine sites can have severe consequences. Based on current trends, the next domestic mining project to help fill this Nation's critical needs could be decades away from providing any substantial benefit.

The General Mining Law Works Well

The Mining Law, as amended, invites U.S. citizens to make substantial investments of time, knowledge, and money to explore for minerals on federal lands with the hope of discovering a mineral deposit that can be developed into a mine. This process, known as "self-initiation," greatly benefits our Nation because it effectively leverages private investments that transform undeveloped federal land into mining operations that create jobs, pay taxes, and provide the minerals the country needs – at no risk or expense whatsoever to U.S. taxpayers.

It has always been Congress' intent that the law must support and encourage mining on public lands. Although Congress has amended the Mining Law and developed other laws pertaining to public lands management since 1872, the purpose of the Mining Law has not changed. Congress

[1] https://burgex.com/improving-mineral-exploration/#:~:text=The%20success%20rates%20are%20low,producing%20mine%20(at%20best).

has repeatedly preserved the foundational rights under Section 22 of the Mining Law that authorize citizens to enter, use, and occupy public lands to explore for minerals and to develop mines.

The "self-initiation" process is essential. It allows U.S. citizens to enter federal lands open to operation of the Mining Law, and to locate mining claims on lands that may have favorable geologic conditions for finding a mineral deposit. Once the claim is located, the claim owner can use the surface of a mining claim for mineral exploration and development purposes, and all uses reasonably incident to mining, so long as the claim owner complies with the surface management regulations and other environmental protection requirements.

Self-initiation is especially critical to the prospecting and early-stage mineral exploration phases of the mining lifecycle when geologists continually test and refine their mineral target concepts and exploration techniques. Because exploration is an iterative process that uses new information to vector towards mineralized zones, the ability to expand a claim block based on new information is critically important. The 1 in 1,000 odds of making a discovery are akin to looking for the proverbial needle in the haystack and drive the need to preserve self-initiation to facilitate locating additional claims on lands with potentially favorable geology in response to the on-the-ground realities of exploring for rare mineral deposits that are very difficult to find.

The Mining Law is Not Antiquated

Since its enactment in 1872, Congress has made many important changes to the Mining Law including:

The Minerals Leasing Act – In 1920, Congress removed coal, petroleum, natural gas, phosphates, sodium, sulfur, and potassium from the law and established leasing programs for these resources in part because they have different geologic characteristics than locatable minerals;

The Federal Land Policy and Management Act (FLPMA) – In 1976, Congress created an environmental protection mandate prohibiting unnecessary or undue degradation of lands subject to mineral activities, established a claims recordation requirement that documents where claims are located and who owns mining claims, and created special environmental protection measures for claims in wilderness study areas and in the California Desert Conservation Area;

1993 to Present – Starting in 1993, Congress has used the appropriations process to establish an annual fee, the Claims Maintenance Fee, for use of federal lands for mineral exploration and development purposes, and to continue a moratorium on patenting. Claimants currently pay $165 per claim, and the fee is adjusted every five years to reflect the Consumer Price Index. These fees have raised significant revenue. According to BLM's most recently available statistics, in FY 2019, BLM received over $71 million in CMF and location fees. Less than $40 million of that was retained for administration of the Mining Law program; the remainder going to the general Treasury. Since enactment of these fees in 1993, the federal government has collected approximately $1.3 billion.[2] By making timely payment of this fee, claimants secure the right to

[2] https://www.blm.gov/sites/blm.gov/files/PublicLandStatistics2019.pdf

use and occupy federal lands, subject to compliance with the 43 CFR 3809 and 36 CFR 228A surface management regulations and all other applicable state and federal environmental protection regulations.

A statutory mandate exists to encourage and facilitate the private development of the minerals our society needs. When Congress enacted the Mining and Minerals Policy Act of 1970, it declared that "it is the continuing policy of the Federal Government in the national interest to foster and encourage private enterprise in (1) the development of economically sound and stable domestic mining, minerals, metal and mineral reclamation industries, (2) the orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help assure satisfaction of industrial, security and environmental needs." (30 U.S.C. § 21a). The mineral directives in this Act apply to BLM-administered public lands and National Forest System lands. These are compatible objectives that operate to encourage deployment of privately funded, domestic mineral production while protecting the environment.

Congress made other important changes to the Mining Law when it enacted FLPMA in 1976. Among other things, FLPMA mandated a claim filing and recordation system to give BLM a mechanism to rid the federal lands of stale mining claims and created an environmental protection mandate prohibiting unnecessary or undue degradation (UUD) of public lands subject to mineral activities. When mining critics assert the Mining Law needs to be changed because it does not include environmental protection requirements, they are ignoring how FLPMA significantly changed the Mining Law by inserting the UUD environmental performance standard, which specifically applies to mineral exploration and mining projects.

In 1980, BLM finalized the 43 CFR 3809 surface management regulations for locatable minerals to implement the FLPMA UUD mandate. The stated purpose of these regulations is to "[p]revent unnecessary or undue degradation of public lands by operations authorized by the mining laws [and to] establish procedures and standards to ensure that operators and mining claimants meet this responsibility... and reclaim disturbed areas." (43 CFR § 3809.1) The UUD provisions in the 43 CFR 3809 regulations contain explicit directives that mineral activities must comply with all applicable state and federal regulations to protect the environment and cultural resources and satisfy a long list of environmental performance standards. Prior to commencing mineral activities on public lands, project proponents must provide BLM with financial assurance (reclamation bonds) to guarantee that lands affected by exploration and mining will be properly reclaimed.

The laws governing National Forest System lands are similarly protective. In 1976, Congress enacted the National Forest Management Act, which mandates a land use planning process that ensures mineral resource development is given proper consideration consistent with the mandate in the Mining and Minerals Policy Act of 1970 while minimizing resource conflicts and balancing environmental concerns.

The Forest Service's 36 CFR 228 Subpart A surface management regulations for locatable minerals include environmental protection measures that require operators of mineral exploration

and mining projects to minimize adverse impacts on National Forest surface resources where feasible (36 CFR § 228.8). Like the BLM, the Forest Service's surface management regulations provide comprehensive and effective environmental protection at mineral projects on National Forest System lands including requirements for financial assurance before activities can commence.

The Claims Maintenance Fee (CMF), which has been continued in annual appropriations measures since 1992, gives BLM a powerful land management tool that accomplishes several important objectives. First, it provides real-time information about where claims are located, who owns the claims, and whether the claims remain in good standing. Claims for which the fee is not paid by the August 31 fee payment deadline are categorically voided. Secondly, the substitution of a fee for the on-the-ground assessment work requirement has virtually eliminated unnecessary ground-disturbances associated with performing the annual assessment work that was previously required to maintain a claim in good standing. The fee has thus significantly reduced the environmental impact of mineral exploration activity. Third, the fee raises sufficient revenue to fund the Department of the Interior's Mining Law program, with leftover revenue that currently goes to the general Treasury. AEMA supports use of CMF revenue in excess of that required to fund the Mining Law program to fund abandoned mine land remediation.

The 1920 Mineral Leasing Act, FLPMA, and the annual Claims Maintenance Fee are examples of how Congress has continually updated the Mining Law since its enactment in response to evolving land management requirements, and clearly demonstrate that the law is not antiquated.
To the contrary, the Law as amended serves the country well. If the Law is amended in the future, the changes should be surgical and tailored to respond to specific land management objectives, recognizing the need, and the statutory mandate, to satisfy the Nation's demand for minerals.

Comprehensive Environmental Protections Are Working

Federal land management agencies' current environmental protection requirements for locatable minerals provide effective and comprehensive environmental protection that safeguard all aspects of the environment including water resources, wildlife, special status species, air quality, cultural resources, soils, vegetation, and visual resources.

Surface management regulations govern how mineral activities must be conducted on public lands to minimize environmental impacts. Both the U.S. Bureau of Land Management and the U.S. Forest Service have specific regulations for locatable mineral activities that have been in effect for decades. These regulations, in conjunction with state environmental laws and regulations, establish environmental performance standards and reclamation bonding requirements to protect the environment and guarantee mineral projects will be reclaimed when exploration and mining have been completed.

The American people are not on the hook for and have not paid any money to clean a mine site permitted on federal lands since 1990. Today's comprehensive suite of federal and state environmental laws and regulations, combined with robust financial assurance requirements, ensure that new abandoned mines are not being created.

The BLM and Forest Service must prepare NEPA environmental reviews prior to authorizing mineral projects that already analyze impacts, identify ways to eliminate, minimize, and mitigate impacts, and verify that proposed projects will comply with all applicable state and federal regulations.

The BLM, Forest Service, EPA, and state regulatory agencies have the authority to say no to mining if there are doubts that the project can meet specific environmental protection regulatory requirements. During the permitting process, regulators can require project proponents to go back to the drawing board to redesign a project to address concerns about environmental impacts.

Numerous other federal environmental statutes also govern mining, including but not limited to the Endangered Species Act, the Clean Air Act, the Clean Water Act, the National Historic Preservation Act, Archaeological Resources Protection Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response Compensation and Liability Act. The current system achieves the appropriate balance between mine development and environmental protection. There is no exalted status for mining. Rather, a rigorous demonstration is required to show that all aspects of the environment at a proposed mine will be protected.

The Mining Waste, Fraud, and Abuse Prevention Act Will Impede Domestic Mineral Production

A. Hardrock Royalty Proposal

For many years, the mining industry has presented testimony in hearings before Congress explaining why a gross royalty structure, like that used in the federal oil and gas royalty program, is unworkable for hardrock minerals and would lead to significantly less mining on federal lands. This testimony demonstrates that using coal, oil, and gas royalty programs as a template for a hardrock royalty would be impractical due to the different geologic characteristics of oil, gas, and coal as compared to hardrock minerals. Moreover, oil, gas, and coal are more abundant than hardrock mineral deposits, making these energy minerals easier to find, develop, and produce. By comparison, discovering and developing a hardrock mineral deposit takes much longer and requires a much larger investment.

Additionally, the raw minerals produced at most hardrock mines are not salable, as they must undergo costly processing steps to create a product that can be sold. Although federal royalties for oil, gas, and coal are often referred to as gross royalties, these are actually more comparable to a net royalty in that they are based on the value of the *marketable* products extracted from the well or a mine. If a workable federal hardrock royalty is desired, that royalty should only be effective at the point in time when value-added steps have created a marketable product from the mine. Then the costs incurred by the mine operator to produce the marketable product would need to be deducted in the royalty calculation.

If a realistic royalty scheme is to be implemented, royalty payments to the United States must be based on the value of the federal government's ownership interest in the raw minerals, as they

are found in the ground, thereby allowing the mine operator to deduct costs associated with the value-added mineral processing steps necessary to produce a salable mineral product. Although the federal government, through the Mining Law, has made land available for mineral exploration, it currently contributes nothing to the immense costs and efforts required to find, produce, and process valuable hardrock minerals. Without relying on federal subsidies, mining companies invest their own funds in a way that already benefits federal taxpayers at the end of these processes. Despite the costs and daunting odds against discovering a valuable mineral deposit and development of a mine, the Mining Law stimulates private-sector investment in a way that transforms undeveloped federal land into mining operations and results in jobs, taxes, and critical minerals the country needs.

A gross royalty such as that proposed in S. 859 is also inappropriate because it has a very different effect on mining investment than a net royalty, especially during price cycles. Royalties assessed on gross proceeds discourage investment by raising economic risks and increasing the initial outlay required to commence operations. As a result, projects subject to gross royalties generally require higher pretax and after-tax rates of return to accommodate this increased risk. By comparison, net royalties have a smaller effect on the variability of after-tax rates of return and are less of a deterrent to ongoing investment.

When commodity prices decrease, the rate of return required to justify mining investment increases more dramatically under a gross royalty than under a net royalty. Because most mine operating costs are fixed, a gross royalty takes a bigger piece out of the mine's reduced income during periods of low commodity prices. A gross royalty is especially problematic during times of low commodity prices because it causes a greater reduction in cash flow during periods when profits are already suffering. During low commodity price cycles, low-grade ores often become uneconomic to mine and process and become waste which is not processed or not mined at all. This shortens the life of the mine and reduces the total amount of minerals (including critical minerals) produced from the mine. In this way, gross royalties would contribute to premature mine closures with the effect of lost jobs; reduced local, state, and federal tax revenues; decreased royalty payments; and business losses for the mine's vendors and suppliers.

By comparison, a net proceeds or net income royalty would not force mines to operate at a loss because the royalty owed is automatically reduced during periods of low prices, and it increases again when prices start to rise. A net royalty would allow mining operations to continue during periods of low commodity prices and also enable maximum recovery of low-grade ore during periods with higher prices. Because mineral demand is cyclical and commodity prices fluctuate, a net royalty provides a better incentive to explore for minerals on federal lands in spite of variable mineral demand and commodity price cycles.

If the federal government were to impose a royalty burden on existing mining claims (or rights already vested under the Mining Law), such an imposition would trigger Fifth Amendment takings concerns. The seizure or reduction of any privately held property interest constitutes an actual (per se) taking and requires compensation under the U.S. Constitution. This concept applies to partial actual takings, which take a portion of the overall property rights, and it applies to any reduction of the claim holder's net revenue interests (the basic purpose behind imposition

of any royalty burden). In fact, the Fifth Amendment's restriction against actual partial takings has been applied to mining claims on multiple occasions, not only in federal actions, but cases where the government's power of eminent domain has been exercised to condemn easements or right of ways through mining claims. To avoid constitutional takings issues, and the attendant risks of litigation and potential damages, any royalty scheme implemented by the federal government would have to be limited to future mining claims and avoid imposing royalty burdens on the existing property rights of current mining claim owners.

B. AML Funding Options Need Not Rely on Royalties or New Fees

With respect to AML reclamation funding, amending the Mining Law to impose new fees or royalties is not the only way to create an AML reclamation fund. Recognizing the importance of developing a funding source to reclaim hardrock AML sooner rather than later, AEMA points to the annual claim maintenance fees and service fees (together, "Claim Holding Fees") already paid by mining claim holders as a potentially significant source of funding. Annually, BLM collections exceed the cost for BLM to administer the Mining Law. For example, BLM's 2020 Public Lands Statistics Report shows BLM collected $69,420,974 in Mining Law fees in Fiscal Year 2020 and Congress appropriated $40,196,000 for Mining Law Administration program operations, including the cost to administer the mining claim fee program, with the excess of $29,224,974 deposited to the general fund.[3] Similarly, in Fiscal Year 2021, BLM collected hardrock mining fees of $100,820,256 and was authorized to retain $39,696,000 for Mining Law Administration program operations, including the cost to administer the mining claim fee program, with the excess of $61,124,256 deposited to the general fund.[4] Congress has provided no directive to use these excess Claim Holding Fees for public land management but could easily direct them towards AML efforts.

Section 40704 of the Infrastructure Investment and Jobs Act ("IIJA") established a new abandoned hardrock mine reclamation fund to jumpstart abandoned mine cleanups. Additionally, there are at least eight states that generate revenue to work on abandoned hardrock mines. Revenue sources include mine license taxes and royalties on oil and gas, hardrock mines, and other mineral extraction, and other sources such as the state general fund.[5] If these funds were pooled with the federal Claim Holding Fees and spent efficiently, much could be accomplished. For example, the federal agency-Colorado model of collaboration on a watershed approach could be deployed uniformly nationwide to maximize efficient use of resources.[6]

AEMA has a number of other suggestions to generate AML reclamation funding. For example, a *voluntary* mitigation system could be established to enable new mine applicants or existing operators to fund reclamation of AMLs in the regions where they operate. Any voluntary reclamation activities could further be considered as "sustainability credits" or social license credits to "offset" and be included in the overall evaluation of environmental and social impacts

[3] https://www.blm.gov/sites/blm.gov/files/docs/2021-08/PublicLandStatistics2020.pdf, Table 3-32, page 158.
[4] https://www.blm.gov/sites/default/files/docs/2022-07/Public_Land_Statistics_2021_508.pdf, Table 3-32, page 160.
[5] GAO Report: "Abandoned Hardrock Mines, Information on Number of Mines, Expenditures, and Factors That Limit Efforts to Address Hazards," at 29-30.
[6] *See Id.* at 36-37.

of new mining development projects. For such an approach to work, the federal and/or state agencies would need to maintain a list or "pool" of AML sites or eligible projects to which the funding or reclamation work could be directed in order to prioritize where the AML reclamation work would be performed.

Most legacy sites have environmental impacts because environmental laws did not yet exist at the time of historic mining operations and waste management practices were at best rudimentary at most old mine sites. Environmental impacts also resulted from the limited mineral processing technologies that were historically available that left behind residual metals that were unrecoverable at the time that are now leaching out of old mine wastes and contaminating ground water and surface water at some AML sites. Robust environmental laws are now in place throughout the United States and mineral processing technologies have advanced over the years. The result is that what was a "waste" historically may now have recoverable mineral value with today's technologies. Studies done at Idaho National Labs, Los Alamos National Labs, with the Critical Minerals Institute, among others have documented that there are rare earth element ("REE") deposits and other critical minerals at a number of AML sites. Accordingly, the remining and reprocessing of mine tailings and waste could serve both to reclaim some or all of an AML site and result in the responsible production of valuable minerals. "Waste" deposits at certain AML sites could hold sufficient mineral reserves that little or no additional funding would be required if remining and reprocessing options, along with liability relief for legacy issues, were available.

Conclusion

Demand for minerals in our advanced society is increasing every day. Minerals are critical to developing the innovative technologies that will propel our economy, enable America to compete globally and improve our quality of life. They are the building blocks for the manufacturing, construction, and automotive industries, and are essential to growth in fields such as advanced energy and healthcare. Current efforts to transition to a "green energy" economy are not possible without a robust domestic mining industry to provide the required minerals and metals.

Our mineral import reliance must be addressed. Americans and the environment lose when we offshore our mineral requirements. It makes no sense to create mining jobs elsewhere and import minerals from countries, often adversaries like China and Russia, with inferior environmental protection and worker health and safety standards. President Biden's decarbonization aspirations demand that we minimize the carbon footprint of our minerals by getting them from domestic mines rather than creating the substantial carbon emissions to ship minerals from around the globe.

Mining makes every aspect of our lives possible. Most people never think about the pivotal role mining plays in their lifestyle and standard of living, but mined products are key to the advanced, technological, comfortable, and more healthful existence we enjoy. Like food and water, energy and minerals are essential. We are fortunate that America is blessed with a rich mineral endowment, and it is more important than ever to responsibly utilize our own mineral resources. In fact, it is a national imperative.

It is therefore imperative that lands with important mineral deposits remain accessible to responsible mineral exploration and development and that federal and state permitting processes can be completed in a timely manner.

The Mining Law, as amended, has served this Nation well by providing the necessary framework and security of tenure, or certainty, required to attract mineral investment and take the risk to find that true needle-in-a-haystack, one-in-a-thousand economically viable mineral deposit.

By keeping our existing mines operating and getting new mines in operation, the economic impact ripples out far and wide: to employees, mine suppliers, local economies, and the downstream domestic industries we supply with our products. Not to mention the tax revenues we generate for local, state, and federal governments as a result of this economic activity. Few industries pack such an economic punch.

AEMA therefore urges your support for S. 544, S. 596, S. 714, and S. 789, and oppose S. 859. We look forward to continuing to work with you to ensure America has a secure and affordable supply of the minerals and metals needed for our modern society.

Sincerely,

Mark Compton
Executive Director

CITIZENS FOR RESPONSIBLE ENERGY SOLUTIONS

March 6, 2025

The Honorable Mike Lee
Chairman
U.S. Senate
Committee on Energy & Natural Resources
Washington, D.C. 20510

The Honorable Martin Heinrich
Ranking Member
U.S. Senate
Committee on Energy & Natural Resources
Washington, D.C. 20510

Dear Chairman Lee and Ranking Member Heinrich:

On behalf of Citizens for Responsible Energy Solutions (CRES), I write in support of S. 714, the *Critical Mineral Consistency Act*. CRES is a nonprofit organization dedicated to supporting conservative solutions to address our nation's energy, economic and environmental security while ensuring America retains its global competitive edge.

This *Critical Minerals Consistency Act* eliminates disparities between the Critical Materials List, created by the Department of Energy (DOE), and the Critical Minerals List created by the U.S. Geological Survey within the Department of the Interior (DOI). Additionally, the bill underscores our nation's commitment to reducing our reliance on foreign entities from competitors like China for critical minerals that are essential to the deployment of new technologies especially in the energy sector. This commonsense legislation passed the House of Representatives last Congress with a strong bipartisan majority.

CRES encourages favorable consideration and swift passage of the *Critical Mineral Consistency Act*.

Sincerely,

Heather Reams

Heather Reams
CRES President

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Dear Chairman Lee and Ranking Member Heinrich:

On behalf of Citizens for Responsible Energy Solutions (CRES), I write in support of the *Mining Regulatory Clarity Act*. CRES is a nonprofit organization dedicated to supporting conservative solutions to address our nation's energy, economic and environmental security while ensuring America retains its global competitive edge.

The *Mining Regulatory Clarity Act* is a commonsense bill that will ensure the permitting process for mining on federal land is streamlined. If we are to reduce our reliance on adversarial countries like China and Russia for critical minerals, we must be capable of mining domestically. This legislation provides necessary certainty to our nation's mining industry and will reduce red tape that is hindering our ability to responsibly unleash our natural resources.

CRES encourages favorable consideration and swift passage of *The Mining Regulatory Clarity Act* through the Senate.

Sincerely,

Heather Reams

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CRES President

The CHAIRMAN. The record for this hearing will remain open for two weeks.

We thank the witnesses, and we stand adjourned.

[Whereupon, at 11:25 a.m., the hearing was adjourned.]

APPENDIX MATERIAL SUBMITTED

Responses of Rich Haddock,
Senior Advisor
Barrick Gold Corporation

Questions for the Record
Of the March 12, 2025 Hearing of the
Senate Energy and Natural Resources Committee

To Receive Testimony on Pending Legislation

Submitted March 28, 2025

Questions for the Record from Senator John Hoeven

Question 1: Mining projects are subject to permitting and siting requirements at the federal, state, and local level, amounting to as many as 30 permits required for a single project.

What redundancies or inefficiencies should be addressed to streamline the permitting process?

Response: For mining projects on federal lands, there are substantial redundancies associated with the NEPA process that, if addressed, could reduce permitting time and agency effort with no loss of environmental protection.

President Nixon signed the National Environmental Policy Act ("NEPA") into law in 1970. NEPA was followed by major substantive environmental legislation, including the Clean Air Act in 1970, Clean Water Act in 1972, Endangered Species Act in 1973, Safe Water Drinking Act in 1974, the Resource Conservation and Recovery Act addressing hazardous waste in 1976, and the Comprehensive Environmental Response, Compensation, and Liability Act in 1980. In the early days of NEPA, agencies were concerned primarily with the impacts of their decisions on air and water quality. But now, more than fifty years later, we have robust federal laws and regulations, including federal programs delegated to states, that address air and water quality. Every mining project is subject to multiple federal and state requirements to protect air and water, including limits on emissions, imposition of technology standards, ambient air quality standards, surface water quality standards, and groundwater quality standards.

Yet, driven by court decisions, land management agencies are forced to duplicate the work of environmental regulators under these federal environmental laws.

For example, in 2005, Barrick submitted a proposal for the Cortez Hills Expansion Project, a plan of operations for expanded mining in the Cortez Mining District in Nevada. The plan of operations was submitted to BLM for review and approval. BLM prepared an environmental impact statement ("EIS"). The Draft EIS was published in October 2007, the final EIS was published a year later and the Record of Decision was signed on November 12, 2008. Tribal and environmental groups challenged the decision and sought a preliminary injunction. The Federal District Court for Nevada denied the motion for preliminary injunction. Plaintiffs appealed that decision to the Ninth Circuit Court of Appeals.

At issue was the fact that some ore from the Cortez Hills Expansion Project was to be hauled to an existing off-site processing facility 70 miles away over public highways. The off-site processing facility, a roaster owned by another Barrick entity, was constructed and operated under air quality permits from the Nevada Division of Environmental Protection ("NDEP"). BLM had no control over the off-site processing facility and Barrick had not sought and did not need any approval from the BLM to either haul the ore over public roads or process it at the off-site location.

Plaintiffs argued that BLM violated NEPA by failing to analyze the air quality impacts of the off-site processing. *South Fork Band Council v. U.S. Dept. of Interior*, 588 F.3d 718, 725 (9th Cir. 2009). BLM (and Barrick as an intervenor) argued that the EIS need not evaluate the air quality impacts of the off-site processing facility because it operated under and in compliance with state permits issued under the Clean Air Act. *Id.* at 726. The Court dismissed that argument with one sentence: "A non-NEPA document—let alone one prepared and adopted by a state government—cannot satisfy a federal agency's obligations under NEPA." *Id.*

Respectfully, the court missed the point. Because the off-site processing facility was already operating under an air quality permit issued by the state (under federal Clean Air Act authority delegated by EPA under an approved State Implementation Plan), it was appropriate for BLM to assume that air quality impacts were appropriately regulated and need not be reanalyzed by BLM in reviewing the mining plan of operations. *See also,* 15 U.S.C. 793(c)(1) (exempting EPA actions under the Clean Air Act from NEPA). Clearly, the air quality impacts from the processing facility were not a "truly significant" issue or a "real" issue within the meaning of the CEQ regulations. Compliance with air quality standards and the permit issued by the State of Nevada was required and assured under any scenario. The off-site processing facility was not a factor in the decision before the BLM, and not in BLM's jurisdiction, yet the EIS was remanded for analysis of those impacts. The remand resulted in a needless re-analysis of air quality impacts already accomplished during the permitting of the facility, with no difference in outcomes. It just added expense and delay.

The Ninth Circuit Court of Appeals made a similar decision on a mining case in *Great Basin Resource Watch v. Bureau of Land Management*, 844 F.3d 1095 (9th Cir. 2016). In that case plaintiffs challenged BLM's approval of a mining plan and the associated EIS for the Mount Hope molybdenum mine, located in a remote and rural part of Nevada. The agency had conducted an extensive air quality analysis, including modeling of emissions and concentrations.

In conducting the modeling, BLM consulted with the Nevada Bureau of Air Quality which has regulatory jurisdiction over air quality permits in Nevada. BLM asked for the Bureau's advice on background air quality values to be used in the modeling. The Bureau responded with an email that provided values for some constituents and said that the background values for "all other pollutants are assumed to be 0." *Id.* at 1103. Obviously, no agency is better positioned to opine on background air quality at a remote Nevada site than Nevada's Bureau of Air Quality. They know all of the air pollution sources, they know all of the modeling, and they know all of the monitoring. It is their expertise. BLM followed the state agency's advice and conducted the modeling which showed that projected air quality concentrations for all pollutants would fall within applicable air quality standards. The State of Nevada also issued an air quality permit for the mine, evidencing its determination that standards were met.

The Court of Appeals found the agency's explanation inadequate and remanded the EIS for further air quality analysis. *Id.* The mine argued that the air quality analysis in the EIS was adequate "because it relie[d] in part on the fact that the [Bureau of Air Quality] issued a Clean Air Act permit for the Project." *Id.* The Court said the argument "evinces a misunderstanding of the nature of NEPA and its relationship to 'substantive' environmental laws such as the Clean Air Act. Quoting the *South Fork Band* decision described above, the court said that "a non-NEPA document . . . cannot satisfy a federal agency's obligations under NEPA." *Id.*

The *South Fork Band* and *Great Basin Resource Watch* cases are classic examples of courts ignoring the expertise of the agencies involved and finding fault – any fault – as an excuse to remand and delay a project. This practice is commonly called "fly specking" and every court that does it disclaims any such intention. As a result of these, and other similar decisions, agencies continue to conduct duplicative and extensive analyses[1] where no significant environmental impacts are possible because the mines in question must obtain and operate in compliance with air permits. This issue extends beyond air and water quality analysis as courts require agencies to conduct their NEPA analysis without regard to substantive environmental laws and permits. Agencies typically duplicate the work of state permitting agencies in water quality and water allocation as well.

Congress could eliminate this unnecessary duplication and redundancy by requiring agencies conducting NEPA analysis to defer to state or federal permit decisions under substantive federal environmental laws. Specifically, the statutory definition of "significant impacts" could be revised to eliminate any impacts where that potential impact was regulated by another federal agency, a state or a local government under a federal environmental law with a delegated program or under a state environmental law or regulation. Issues that are not relevant to an agency's decision should also be classified as "not significant." Applying that definition in the mining context would mean that BLM as the land manager would recognize that air quality impacts are regulated by the state of Nevada but would not be required to analyze impacts to that resource because they are not a significant factor in BLM's review of a mine plan.[2]

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[1] The air quality chapter in the Cortez Hills Expansion Final EIS was 30 pages. None of that analysis was relevant to the agency's decision on the mining plan of operations.

[2] BLM's regulations require mine operators to comply with applicable environmental regulations, including federal and state air quality standards. 43 C.F.R. 3809.420(b)(4). A mine operator who cannot obtain a necessary air quality permit cannot operate.

Eliminating these redundancies would modernize NEPA, shorten permitting review times, remove grounds for courts to reject EIS's, and save agency resources without any change in the environmental impacts of any mining project.

Question 2: How could a states-first regulatory approach provide developers with certainty and empower more investment in new projects?

Response: BLM and Forest Service regulations governing mining on federal lands require mining operators to obtain and comply with federal and state environmental laws and regulations. Mines cannot operate without all required state permits. Agencies typically defer to substantive air and water quality permitting from states—except that NEPA still requires that land managers evaluate those impacts. See response to Question 1.

Nevada is about 85% percent public land. As a result, there is usually a significant role for the BLM to play both in its statutory role as a regulator and in its proprietary role as a landowner when it comes to mine permitting. Interestingly though, one of the most productive mineral belts in the state lies within the area of the Southern Pacific Railroad land grant. The ownership pattern inside that grant is a checkerboard of alternating private land and public domain in one-square mile sections. The history of mine permitting in the checkerboard is instructive because facilities on private lands have historically been permitted in about 1/3 of the time necessary to permit facilities on the federal land sections, or less, and the primary (and sometimes sole) reason is the NEPA analysis the BLM is required to undertake. As outlined above, a facility on private land must meet the same environmental performance standards, whether under state, federal or delegated federal laws. See response to Question 1. I believe the suggestions made in response to Question number 1 would go far toward streamlining permitting and recognizing the State's roles.

On more traditional land management issues, such as mine reclamation and closure, it is important for federal land managers to coordinate regulation to avoid duplication and conflict. Nevada, which has more mining than any other state, provides a useful example, where the state and federal agencies do a good job. In Nevada, BLM and the Forest Service have entered into a Memorandum of Understanding with the Nevada Division of Environmental Protection ("NDEP") which defines agency roles and requires the sharing of information. When a mine operator submits a plan of operation to BLM, that same document is submitted to NDEP as a reclamation permit application. NDEP is invited to be a cooperating agency in preparing the federal NEPA document. Whether NDEP chooses to be a cooperating agency or not, it stays active in the NEPA process. All permitting information is shared between agencies and they attempt to coordinate permitting schedules. Because no NEPA review is required for state permits, federal agencies typically proceed first with their NEPA process and NDEP permits are issued after the agencies have identified a preferred alternative in the NEPA document. Often, those permits are then issued before the BLM's record of decision or are held until about the same time.

Most importantly, federal and state agencies use the same tool to calculate the amount of financial assurance required for reclamation and closure plans. Working with federal agencies

and industry, NDEP developed an online tool, the Standard Reclamation Cost Estimator ("SCRE"), which operators use to calculate financial assurance guaranteeing reclamation and closure of the mine.[3]

After review and approval of reclamation and closure plans by the agencies, the operator can use SCRE to calculate an amount equal to the cost of implementing those plans by the BLM or NDEP if the operator is unable to complete reclamation and closure. That amount of financial assurance must be posted jointly with the BLM and NDEP and it is accessible to the agencies if the operator fails to act. Recent estimates indicate that BLM and NDEP hold approximately $5 billion in financial assurance to guarantee reclamation and closure of Nevada mines.

The online tool is regularly updated to reflect the most recent data on input costs and is constantly monitored by BLM and NDEP. If an operator uses the tool correctly, BLM and NDEP will accept the financial assurance estimate without further detailed review. It took several years to develop the online tool and obtain acceptance from agencies, mine operators and the public. Use of SCRE in Nevada has cut months from the permitting process.

Other states have begun to use the Nevada tool to estimate financial assurance costs for mines outside of Nevada. It is certainly adaptable to other environments.

Another example can be found in Alaska, where the state has created a Large Mine Permitting Team to coordinate state review of mining projects. The team expedites federal NEPA reviews by providing consolidated and coordinated responses to NEPA documents.

Question 3: Mining projects can also be subject to lengthy judicial review, even after meeting all permitting and regulatory requirements.

How do prolonged judicial challenges impact the financial viability of new mining projects?

Response: Truthfully, it is more accurate to say that mining projects – especially large ones – are almost always subject to lengthy judicial review, making the litigation timeline in the U.S. one of the most significant risk factors companies take into account when they decide whether to invest capital. The capital expenditure required to explore, develop, and permit a mine can run to hundreds of millions of dollars before the first mineral is produced.

As a result, as I testified in the March 12 hearing, miners invest capital in the U.S. only for the most obvious and highly prospective projects. Projects with more marginal or uncertain economics are less likely to attract capital. As it happens, many such riskier projects in the U.S. would target critical minerals like rare earths, nickel, graphite, vanadium, and tungsten. Without more certainty for capital investments, those kinds of projects are less likely to go forward. This explains various current policy proposals for the U.S. government to intervene and "de-risk" certain domestic critical minerals projects. I note that President Trump's March 20 executive

[3] The online tool can be viewed at https://ndep.nv.gov/land/mining/reclamation/reclamation-cost-estimator

order directs agencies of the federal government, especially the Defense and Energy Departments and the International Development Finance Corporation, to develop de-risking strategies and tools to promote domestic mineral production. Senator Hickenlooper's bill, S. 596, which was a subject of the March 12 hearing, also would tackle this problem.

Judicial challenges to mine projects can vary significantly, but by far the most common litigation tool to slow or even stop projects on Federal land is an attack on the environmental impact statement ("EIS"). See Response to Question 1. Compliance with the National Environmental Policy Act ("NEPA") during permitting is the single most time-consuming aspect of the process. Taken together, NEPA compliance during permitting and judicial review of that compliance are the dominant reasons permitting a mine on Federal lands takes so long. The Mount Hope example below (and also discussed in our response to Question 1 above) illustrates how NEPA compliance and judicial review prolong the process of getting U.S. mines into operation.

The operative statutory requirement of NEPA is succinct: agencies must prepare an EIS for "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332. The statute provides some additional guidance, requiring the EIS to examine "reasonably foreseeable" environmental impacts (including unavoidable adverse impacts), a range of alternatives to the proposed action, the relationship between short-term actions and long-term productivity of the environment, and irreversible and irretrievable commitments of federal resources. *Id.* But other than these general guidelines, NEPA contains few other statutory criteria against which compliance can be measured, and contains no standard of review or statute of limitations.

These factors contribute to delay in several ways. First, in the absence of a specific statute of limitations, the six-year statute of limitations in the Administrative Procedure Act ("APA") applies. It should be noted here that opponents seeking to stop a mine project usually do not wait that long to file a judicial challenge, because their strategy is usually to seek a preliminary injunction blocking the project during judicial review. That consideration causes opponents to file their lawsuit as soon as possible after agency approval. However, the six-year statute of limitations allows continuing attacks on the agencies' permitting decisions, even after the mine is operating.[4]

Second, because NEPA has no standard of review of its own, the "arbitrary and capricious" standard of the APA applies. The agency action (in this case the production of the EIS) should be upheld unless the agency failed to consider relevant factors and data, or made a clear error of judgment. In theory, the APA standard affords agencies some deference in their decision-making, requiring only that agencies articulate a "rational basis" for their actions. However, because NEPA compliance is so complex, requiring the creation and aggregation of so much data and analysis, judges have not been constrained by the "arbitrary and capricious" standard in reviewing EIS's. In a document that can be hundreds of pages long, with hundreds or thousands of pages of data, appendices, and other supporting material, it is often possible to find

[4] The U.S. Supreme Court's 2024 decision in *Corner Post, Inc. v. Board of Governors of the Federal Reserve System* could exacerbate this litigation risk. The Court held that the APA statute of limitations begins to run not from the date of the agency action, but from the date the plaintiff is injured by the action. 603 U.S. 799.

something, as demonstrated by the *South Fork Band* and *Great Basin Resource Watch* cases, that constitutes error or omissions. In my experience, all EIS's are good faith efforts by diligent and capable government officials to document reasonably foreseeable environmental impacts. Despite that, courts continue to fly-speck and to enjoin proposed mines from operating.

Finally, because NEPA lacks detailed statutory criteria, many NEPA legal requirements are found in NEPA *jurisprudence*, not in the statute itself. NEPA case law is voluminous, and provides numerous opportunities to contest the adequacy of EIS analyses. My response to Question 1 above provides two examples of how the 9th Circuit has interpreted NEPA in a way that requires agencies to duplicate permitting and environmental analytical work already performed by state or other federal regulators. And frankly, the courts continue to add NEPA "requirements" in the cases-after-cases brought by mining opponents, which is a main reason for opponents to keep filing these suits. The fly-specking engaged in by courts and the multiplying NEPA requirements flowing from these court decisions cause the agencies to go to ever-increasing lengths to "bullet-proof" their NEPA documents, resulting in longer and more complex NEPA documents with duplicative materials, and more delay in the permitting process.

The Mount Hope molybdenum mine project in Nevada is a worst-case study in permitting delays that can be exacerbated by endless litigation, most of it NEPA-driven. One episode of that litigation is described in our response to Question 1. This project has been seeking BLM approval for almost two decades. In the interim, the Secretary of the Interior has identified molybdenum as a critical mineral, important to the economic and national security of the U.S. The deposit is considered to be one of the largest and highest-grade molybdenum deposits in the world, which explains why the mine developer has been willing to persist in its permitting efforts despite almost unimaginable delays.

The proposed plan of operations for the Mount Hope Mine was originally submitted to BLM in June 2006. The notice of intent to prepare an EIS was published in the *Federal Register* in March 2007. The Draft EIS was made available for public comment in December 2011, almost ***five years*** after the notice of intent was published. The final EIS was published in October 2012. The Record of Decision approving the project was issued one month later. All in all, it took the BLM six years to prepare and finalize the EIS and approve the project.

BLM's decision approving the Mount Hope Mine was challenged by Great Basin Resource Watch and the Western Shoshone Defense Project. The Federal District Court for the District of Nevada upheld BLM's decision in July 2014, two years after the BLM had approved the project. *Great Basin Resource Watch v. U.S. Department of the Interior*, 2014 U.S. Dist. LEXIS 100363 (D. Nev. 2014).

Plaintiffs appealed the 2014 decision to the Ninth Circuit Court of Appeals raising several environmental claims. In December 2016, the 9th Circuit affirmed most of BLM's decision, but remanded the project back to the agency for additional environmental analysis on two air quality issues, and asked BLM to clarify the legal status of certain springs. *Great Basin Resource Watch v. Bureau of Land Management*, 844 F.3d 1095 (9th Cir. 2016). BLM completed the work ordered by the Ninth Circuit court and published a Draft Supplemental EIS ("SEIS") for public review in February 2019, and a final SEIS in July 2019. The Record of Decision approving the project was reinstated the following month. The judicial review, which included

trial court and appeals court consideration and resulting remand for further NEPA work at the BLM, added ***seven years*** to the permitting timeline.

Not finished, the same plaintiffs challenged BLM's decision ***again***, raising NEPA and other claims and this time adding claims based on the Ninth Circuit's decision in the *Rosemont* case.[5] Ironically, almost a decade earlier, the same judge heard these plaintiffs argue that BLM erred when it did not confirm the validity of the Mount Hope mining claims before approving the plan of operations—the *Rosemont* argument. Consistent with every other decision on mining opponents' ancillary use attacks up to that time, the judge applied established precedent and rejected the argument, finding that the Mining Law did not require that BLM inquire into claim validity. However, in 2023, following briefing on the impact of the new *Rosemont* decision, the same federal judge who approved the project nine years earlier vacated the BLM's approval and sent the project back to BLM to evaluate the project's mining claims in light of the *Rosemont* decision. This round of litigation added ***three and a half years (so far)*** to the permitting timeline. In summary, 19 years after Mount Hope submitted its plan of operations, and two decisions approving the mine plan, the project remains in limbo.

Question 4: What measures should Congress consider to reduce the risk of endless litigation and provide more regulatory certainty for projects?

Response: My responses to Questions 1 and 3 above illustrate ways that NEPA has evolved from a well-intentioned and necessary requirement for the federal government to consider the environmental impacts of its actions, into the major cause of U.S. project permitting delays and an effective litigation tool for frustrating capital investments in mining in the U.S. The examples above also suggest solutions. The *procedural* requirement of NEPA to consider the environmental impacts of federal actions is important and must be preserved, but NEPA's evolution into the driver of and impediment to federal permitting decisions must be reformed.

Congress amended NEPA in 2023 to address permitting delays. Public Law 118-5 – the Fiscal Responsibility Act – imposed page limits and deadlines on preparation of EIS's and environmental assessments ("EA's"), and authorized project proponents to prepare NEPA documents, subject to the review of and approval by federal officials. Canada allows project proponents to prepare environmental review documents, speeding up the permitting process without compromising the quality or effectiveness of environmental reviews. The U.S. should be able to achieve the same results.

It remains to be seen how the page limits and deadlines created in the Fiscal Responsibility Act will affect permitting and judicial review of permitting decisions. Among other things, it is unclear how agency compliance with statutory page limits may affect the

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[5] The *Rosemont* litigation and its ensuing impacts on mine permitting were the principal subject of my testimony before the Committee on March 12, and would be resolved by Senator Cortez-Masto's S. 544, the Mining Regulatory Clarity Act, which was on the Committee's March 12 agenda. The Mount Hope permitting ordeal is persuasive evidence of the need for this legislation.

quality and completeness of EIS's, or how courts may take (or not take) the statutory limits into account in ruling on the adequacy of EIS's.

Also in the 118th Congress, Senators Manchin and Barrasso introduced permitting reform legislation which was considered and voted out of the Energy and Natural Resources Committee but did not receive floor consideration. S. 4753 – the Energy Permitting Reform Act – contained several provisions that would address the statute of limitation problems I described above in my response to Question 3, and would contribute to more timely judicial review of permitting decisions.

Section 101(b) of the legislation would create a 150-day statute of limitations for final agency "permitting" actions, including EIS's and other NEPA reviews. The legislation provides adequate time for plaintiffs to prepare and initiate challenges to federal permitting actions and removes the threat of lawsuits under the existing APA statute of limitation that can extend six years (or longer, based on the Supreme Court decision in *Corner Post*) ***after*** projects are approved. There is no reason to retain a federal law that enables project opponents to wait six years to decide whether to oppose a permitting decision. The 150-day limit would bring greater certainty and finality to federal permitting decisions, while preserving the ability to initiate and resolve legitimate objections in the court system.

Section 101 also would require federal courts to set permit challenges for expedited review, and to require action on any remand within 180 days (in most cases). Agencies similarly would be required to expedite the actions necessary to comply with the court remand.

Congress should include the Manchin/Barrasso reforms in new permitting reform legislation. Such legislation also should address the concerns illustrated in my response to Question 1 above. That could be accomplished by providing that impacts are not "significant" within the meaning of NEPA when they are subject to permits issued by federal agencies or state agencies exercising delegated authority under environmental laws. The legislation also should empower federal agencies to rely on "non-NEPA" environmental analyses prepared by federal or state authorities as long as they satisfy the requirements of NEPA.

The examples I presented above in my responses to Questions 1 and 3 dramatically illustrate that the APA arbitrary and capricious standard is not working for NEPA reviews. In too many cases, judges vacate and remand permitting decisions over relatively minor aspects of NEPA environmental reviews. The case is remanded to the agency to correct the identified deficiencies, and in the meantime, the entire project sometimes remains enjoined. This practice does not make sense and results in years of permitting delay. Barrick believes strongly that NEPA needs its own standard of review that requires courts to rule on the adequacy of EIS's and EA's *holistically*, and remedies the permitting delays caused by "fly-specking." If an otherwise well-crafted EIS contains errors or omissions that do not affect the overall conclusions of the review, projects should not be enjoined while those issues are addressed. This approach would help return NEPA to its original purpose as a *procedural* step to be taken by the government before making decisions, instead of the substantive project-stopper NEPA has become.

Finally, current law encourages NEPA lawsuits against agencies because plaintiffs may be awarded some or all of their costs and attorneys fees under the Equal Access to Justice Act. For example, in the two cases cited in my response to Question 1, BLM was forced to pay the plaintiffs' attorneys fees because the plaintiffs prevailed on the air quality issues, which were just one small part of EIS's that courts otherwise found to meet the requirements of NEPA. Congress has investigated these payments from time to time, but it has been difficult to track down hard numbers. However, it is clear that federal land managers – the BLM and the Forest Service – have been forced to pay tens of millions of dollars in attorneys fees awards in NEPA cases. The Equal Access to Justice Act creates a bounty system whereby plaintiffs' attorneys can launch dozens of criticisms against a particular document in the hope that a court will find one of those claims persuasive and reward the plaintiffs for their efforts. NEPA, and EAJA if necessary, should be amended so that attorneys fees may not be awarded to plaintiffs who challenge agency decisions approving projects on public lands.

Question for the Record from Senator Mazie K. Hirono

Question 1: The Bureau of Land management is being significantly impacted by staffing cuts that were announced last month.

Do you agree that these cuts impact the agency's ability to process permits for mining companies, like Barrick Gold Corporation? Are you concerned that the permit process will take longer as a result of these cuts?

Response: As I testified in the hearing, the BLM employees we work with are very dedicated and very capable federal employees, who are stretched very thin. They work under demanding conditions, as I explain in further detail below, so if the goal is to shorten permitting times and prioritize the growth of domestic hardrock mining on Federal lands, the BLM personnel who perform these jobs become even more indispensable than they already are.

Maintaining adequate level of trained and professional staff in BLM offices is important for many reasons. Congress has, through FLPMA and other statutes, imposed significant land management responsibilities on every BLM Field office. Resource specialists in the office, including aquatic and terrestrial biologists, archeologists, geologists, soil, range and grazing specialists, recreation specialists, and sometimes, mining engineers are the hands-on managers of these public resources.

In the context of mine permits and NEPA documents, resource specialists play key roles in the permitting process including: approving protocols for baseline data collection, review baseline studies for accuracy and completeness, identifying issues for environmental analysis, reviewing environmental analysis submitted by applicants and contractors, reviewing reclamation and closure plans, reviewing administrative drafts of NEPA documents prior to publication, reviewing comments on draft NEPA documents relevant to their specialty and assisting with responses, reviewing administrative drafts of final NEPA documents and records

of decision prior to publication and assisting, as necessary, with other legal obligations that are coordinated with the permitting and NEPA process, including consultation with Tribes, compliance with the National Historic Preservation Act, consultation with the U.S. Fish and Wildlife Service where endangered species are involved, and working with cooperating agencies such as state wildlife authority and mine regulators. The same responsibilities apply if the BLM is permitting a solar or wind facility, or leasing geothermal or oil and gas resources. Each NEPA process typically has a Project Manager who manages the duties of the resource specialists and coordinates with the NEPA contractor, the operator and coordinating agencies.

Most BLM offices in Nevada are managing multiple EIS's and other NEPA documents (environmental assessments) every day. If there is no available resource specialist to fill a key role during the NEPA process, delay is inevitable. In Nevada, we know that BLM will likely be shorthanded during the wildfire season as BLM employees are pulled off their regular responsibilities, not to fight fires on the front line, but to manage the firefighting efforts and to design and implement reseeding and reclamation efforts to restore vegetation as soon as the ground has cooled.

So based on the forgoing, my answer to your questions is yes, I am concerned that staffing cuts will have significantly negative impacts on mine permitting. If the resource specialists necessary to prepare the EIS won't be available, at best the process slows significantly, and at worst it grinds to a halt. The same can be said for cuts at sister agencies, such as U.S. Fish & Wildlife Service, who participate in the EIS process as cooperating or co-lead agencies. While some of the improvements outlined in response to Senator Hoeven's question No. 1 could help, by reducing redundancies and reducing the BLM's workload, it will still be necessary for BLM to have adequate staffing levels to process mine permits in a timely manner.

U.S. Senate Committee on Energy and Natural Resources
March 12, 2025 Hearing: *Pending Legislation*
Questions for the Record Submitted to Mr. Brian Somers

Questions for the Record from Senator John Hoeven

Question 1: Mining projects are subject to permitting and siting requirements at the federal, state, and local level, amounting to as many as 30 permits required for a single project. What redundancies or inefficiencies should be addressed to streamline the permitting process?

The mining industry operates under a comprehensive framework of federal and state laws, regulations, and policies that govern nearly every inch of a mine site. While the industry supports regulations that both foster environmental protection and promote responsible development, it also relies on fair, consistent, and predictable permitting processes to support our national priorities and remain competitive in the global economy. Other nations with large mining industries and similar labor and environmental standards to the U.S.—nations like Canada and Australia, for example—have much more rational permitting processes than the U.S.

For too long, regulatory uncertainty in the permitting process has delayed projects, chilled investment in U.S. mining operations, and inhibited the ability to mine the raw materials on which our nation's energy, infrastructure, manufacturing, and mining supply chains depend. Change is needed to make the permit process for mining projects timelier and more efficient. This includes enforcement and adherence to the provisions found in the Fiscal Responsibility Act of 2023 such as firm timelines and page limits for environmental reviews. Additionally, having the correct NEPA guardrails remains paramount even as the future of the Council of Environmental Quality's (CEQ) NEPA regulations is unclear in light of recent court decisions and President Trump's executive order directing CEQ to propose rescission of its regulations and develop guidance for agencies on NEPA implementation within 30 days. Further, litigation reform under NEPA and other environmental statutes is a much-needed step for permitting certainty in the U.S.

Question 2: How could a states-first regulatory approach provide developers with certainty and empower more investment in new projects?

Some states, like Utah, have delegated authority to enforce certain federal environmental, health, and safety laws which pertain to mining and to oversee certain permitting processes. However, most mining projects in states like Utah which have significant amounts of public land must still obtain permits from the federal agencies. Experience in Utah has shown that federal permitting timelines tend to be significantly longer and less predictable than those controlled by the state. Delegating more authority to states for permitting processes and other regulatory oversight could eliminate federal bottlenecks, provide more certainty and predictability to mine developers, and attract more investment in exploration and development of mining and mineral processing projects.

Question 3: Mining projects can also be subject to lengthy judicial review, even after meeting all permitting and regulatory requirements. How do prolonged judicial challenges impact the financial viability of new mining projects?

U.S. Senate Committee on Energy and Natural Resources
March 12, 2025 Hearing: *Pending Legislation*
Questions for the Record Submitted to Mr. Brian Somers

Lawsuits that last years, or even decades, erode project proponents' trust and reliance on the permitting process. The mining industry has experienced protracted and disruptive litigation delays, with some litigation not even being commenced until years after projects have been approved and construction activities have begun. There can and should be a better balance between access to courts to address legitimate grievances and concrete timeframes for litigation, including appeals. Litigation reform under NEPA and other environmental statutes is a much-needed step for permitting certainty in the U.S.

Question 4: What measures should Congress consider to reduce the risk of endless litigation and provide more regulatory certainty for projects?

Durable litigation reforms under NEPA and other environmental statutes is a much-needed step for permitting certainty in the U.S.

Questions for the Record from Senator Mazie K. Hirono

Question 1: The Utah Mining Association's website states that "It is essential to acknowledge the benefits of mining, but it is equally crucial to ensure responsible environmental practices within the industry." Sixty percent of hard rock mining claims in Utah are within 30 miles of a national park or other protected landscape.

What measures are your members and contractors taking to ensure that mineral exploration and other activities on these claims are not negatively impacting the water, air, and wildlife resources of the lands within the NPS system and other protected lands in the state?

Modern American mining operations are subject to extensive legal and regulatory frameworks that dictate siting, operating permits, emissions standards, water quality standards, reclamation requirements, financial assurance, and much more. Certain federal lands are precluded from mining activities altogether. The impacts of mining operations that are permitted on federal, state, tribal, or private lands are strictly regulated and cannot have deleterious effects on lands within the NPS system or other federal lands within certain protected statuses. Both mining and service members of the Utah Mining Association are committed to responsibly developing Utah's mineral resources within the bounds of all pertinent laws and regulations.

Question 2: Does the Utah Mining Association support companies adopting IRMA standards to ensure that their operations are not impacting vulnerable ecological resources?

Modern American mining operations adhere to and often exceed the standards set by what is among the world's most extensive legal and regulatory frameworks in the world. A network of exhaustive federal and state environmental, ecological, reclamation and financial assurance laws and regulations work together to ensure that operations protect public health and safety, the environment, and wildlife. In addition to the rigorous legal

U.S. Senate Committee on Energy and Natural Resources
March 12, 2025 Hearing: *Pending Legislation*
Questions for the Record Submitted to Mr. Brian Somers

requirements to which every operation must adhere, U.S. mining companies regularly and voluntarily adopt the best management practices and risk-based management systems that are appropriate for each unique site, including environmental, social and governance frameworks. The Initiative for Responsible Mining Assurance (IRMA) is one of many rigorous frameworks (others include Towards Sustainable Mining, The Copper Mark, and other metal marks) with a goal of minimizing mining risks, including environmental and safety risks. These frameworks also allow companies to demonstrate transparency in compliance with regulatory standards as well as actions undertaken that go above and beyond such requirements. The Utah Mining Association supports its member companies picking the frameworks that are the most appropriate for assessing and managing risks applicable to their business activities, local circumstances, and that are prioritized by their key stakeholders. No one set will work for all types of mines or mining companies or for the communities in which they operate.

Question 3: There are about 400 active mining claims in protected areas across the state of Utah, including lands with great significance to tribes. Does your organization or any of your members support more exploration on these protected lands?

Federal laws and rules dictate which federal lands are open for mineral exploration and mine development. Lands held in trust for federally-recognized tribes are controlled by those tribes. Tribes will exercise their sovereign powers to determine which, if any, of their trust lands are suitable for exploration and development. Given the extraordinary economic and national security risks entailed with having critical mineral supply chains controlled by adversarial countries like China and our country's need to become self-sufficient in supplying for our own mineral needs, the Utah Mining Association supports exploration and mine development on any lands where such activities are permitted by law.

U.S. Senate Committee on Energy and Natural Resources
March 12, 2025 Hearing: *Pending Legislation*
Questions for the Record Submitted to Mr. Chris Wood

Questions for the Record from Senator Mazie K. Hirono

Question 1: There are over 1,300 mining claims inside of national parks, thousands more in national monuments, and over 160,000 active mining claims directly on the doorsteps of our national parks. With respect to National Parks, during his confirmation hearing, Secretary Burgum stated that "we have to protect every single inch of our national parks."

The National Park Service is being significantly impacted by staffing and budget cuts. These cuts impact NPS's ability to provide vital input on mining proposals directly adjacent to units of the NPS system that could result in irreparable harm to natural and cultural resources. How important is it to adequately staff and fund the NPS to ensure that NPS units are protected and conflicts are minimized?

Answer: America's public lands, including our National Parks, are the envy of the world. The public servants who manage our public lands are crucial to ensure that resource extraction is balanced with other values, including protecting the natural and cultural values of the National Park System, as required by law. A decision to allow mining near a National Park is a decision that must be fully evaluated and informed by experts across multiple disciplines, including in the fields of engineering, geology, hydrology, fish and wildlife biology, botany, and cultural resources, just to name a few disciplines. Moreover, administrative and support staff are crucial to maintain and grow the $55.6 billion that National Parks contribute to the U.S. economy and 415,000 jobs that these public lands support.

March 28, 2025

The Honorable Mike Lee, Chair
Senate Energy and Natural Resources Committee
United States Senate
Washington, DC 20510

The Honorable Martin Heinrich, Ranking Member
Senate Energy and Natural Resources Committee
United States Senate
Washington, DC 20510

RE: Full Committee hearing on mining and critical minerals legislation

Dear Chairman Lee and Ranking Member Heinrich:

The undersigned hunting, fishing, outdoor recreation, and conservation organizations are writing to share our perspective regarding mining legislation pending before the Senate Energy and Natural Resources Committee. Thank you for working in a bipartisan fashion to hold a hearing on these bills and this important topic. We recognize that domestic mining is crucial to strengthen national defense, necessary across numerous economic sectors, and integral to our country's evolving energy portfolio.

Much progress has been made in the field of mining to minimize impacts from operations, including greater consideration of fish and wildlife habitat. However, numerous studies have documented negative impacts of mining on several species, including greater sage-grouse, mule deer and other big game animals, and native species of fish. The need to balance responsible mining with public land values – including quality hunting and fishing opportunities and clean water – is paramount and needed more than ever as our country and policymakers consider strategies to secure supply chains for minerals like lithium, nickel, copper and rare earth elements.

The March 12, 2025, hearing showcased that there is common interest across user groups and members of Congress on both sides of the aisle to find a policy path forward that provides the mining industry with regulatory certainty and to also improve mining laws, including enacting a reasonable royalty dedicated to cleaning up abandoned mines. As the Committee further considers legislative proposals, you have our commitment to work in good faith to help strike a compromise that can earn broad support.

With this objective in mind, we offer the following recommendations for the Committee to consider as these legislative proposals are further refined:

1) We are encouraged that the Mining Regulatory Clarity Act (S.544) incorporates revisions to address concerns previously raised with the legislation. We look forward to working collaboratively with the bill sponsor and the Committee to further refine S.544, including ensuring that the legislation narrowly addresses the specific uncertainty stemming from the 9th Circuit's *Rosemont* decision. In particular, we recommend that the legislation be limited to the permanent occupancy of public land for waste rock or tailings disposal; exclude placer mining;

and expressly retain the Department of the Interior's authority to conduct validity examinations and regulate mining-related activities pursuant to all applicable Federal laws.

2) Increase funding for cleaning up abandoned mines by enacting a royalty and/or fee on the extraction of hardrock minerals from public lands that is both fair for the mining industry and that generates significant revenue to help clean up the legacy of abandoned hard rock mines.
3) Dedicate all excess locatable, placer and mill sites claim maintenance fees (more than the amount necessary for mining law administration) for cleaning up abandoned mines.
4) Provide some level of discretion for public land management agencies to determine – upfront – lands available for mining activities. This is the same way public land management agencies determine lands suitable for oil and gas leasing and other industrial land uses.
5) Eliminate patenting (i.e., privatization of mining claims) of federal lands.
6) Improve procedures to facilitate early and often coordination with local, state and Tribal governments as well as public land users, affected communities, and other stakeholders.

The *Rosemont* decision has created a great deal of uncertainty for mining on public lands, and we recognize that perverse reforms to the 1872 Mining Law could disincentivize domestic mining, potentially offshoring operations to localities with less stringent environmental and labor standards. Additionally, we know that the wrong mine in the wrong place can have devasting impacts on fish and wildlife, with resulting losses in hunting and fishing opportunity.

These factors highlight the necessity of a compromise grounded in trust and cooperation. We stand ready to work collaboratively with lawmakers, the mining industry, and other public land stakeholders to advance comprehensive legislation that provides certainty for the mining industry, helps clean up the mistakes of the past, and prevents future impacts to clean water and healthy fish and wildlife habitat.

Sincerely,

- Backcountry Hunters & Anglers
- Theodore Rosevelt Conservation Partnership
- National Wildlife Federation
- Trout Unlimited

Committee members,

My name is Tom Baratta, and I own property just outside the permit boundary of Signal Peak Energy's Bull Mountains Mine #1. Over the years, Signal Peak has been involved with numerous illegal activities, ignored labor laws, and has been criminally convicted and fined for environmental and safety violations. They have failed to complete adequate water monitoring and have somehow "lost" other monitoring information. They have intimidated and harassed local ranch owners with litigation resulting in at least two of my ranching neighbors to sellout.

Signal Peak uses the most environmentally damaging method for extracting coal. The practice of long wall mining has dewatered at least 13 springs in the area, damaged riparian areas and caused extensive subsidence cracks in areas that have been undercut by mining. It has been impossible to work with the mine and Montana Department of Environmental Quality to mitigate or reclaim the damage mining activity has caused. We as landowners need a proper Environmental Impact Statement (EIS) conducted so that we have baseline data to help determine any damages caused by mining activity. Too often Signal Peak has evaded responsibility for damages to privately owned land and water, and this EIS can ensure we hold them responsible for repair and reclamation.

Signal Peak avoided its responsibility to perform an EIS in 2009, successfully lobbying to be able to do a much less rigorous Environmental Assessment (EA). The EA that was conducted is highly flawed based on inadequate and outdated research. Landowners in the Bull Mountains can't afford to allow Signal Peak to again avoid complying with National Environmental Policy Act rules requiring an EIS be conducted prior to permitting.

Without an EIS, we homeowners and ranchers run great risk of losing our life investments and way of life. We need a completed EIS to know when material damage is done to our land or water as a result of mining activity. In the arid landscape of central Montana, scarce water resources are critical to our livelihoods. Facilitating expansions of mining operations without gaining a thorough understanding of the potential widespread impacts is shortsighted and wreckless.

Please apply the law equally and justly in determining your position on these bills. Do not allow a criminally-convicted corporation to steal from Montanans and cause damage to hardworking ranchers and landowners.

Thank you

Tom Baratta
63 Hidden Springs Rd.
Roundup, MT 59072

NORTHERN PLAINS RESOURCE COUNCIL
CONSERVATION • FAMILY AG

Bull Mountain Land Alliance

The Honorable Mike Lee, Chair
U.S. Senate Committee on Energy & Natural Resources

March 6, 2025

Dear Senator Lee:

On behalf of Bull Mountain Land Alliance (BMLA), Northern Plains Resource Council (NPRC), and our members who live in the Bull Mountains and throughout Montana, we write to express our strong opposition to S.362 introduced by Senator Steve Daines.

S.362 seeks to benefit Signal Peak Energy, LLC, (Signal Peak) at the expense of impacted local communities, ranchers, and the environment. This bill would seriously undermine an ongoing Office of Surface Mining Reclamation and Enforcement (OSMRE) environmental impact study of the mine's local impacts. This review will reveal critical information about potential impacts to neighboring landowners, wildlife, and agricultural water resources that should be analyzed by decision makers before they grant SPE access to mine thousands of acres of publicly owned coal.

SPE employs hundreds of people in Musselshell and Yellowstone counties, and it is responsible for providing nearly a third of Musselshell County's tax base. We understand the impetus for and necessity of protecting these jobs and local revenue dollars. That said, local landowners and ranchers face threats to their water and livelihoods that have not been thoroughly analyzed or made public. Coal mining has taken place in Montana's Bull Mountains for decades without an environmental impact statement ever being conducted, and the directly impacted residents of the Bull Mountains cannot afford for SPE to be granted access to mine more coal without this review being completed.

For these reasons and others outlined below, we strongly urge the Senate Committee on Energy & Natural Resources to oppose S.362.

1. **Signal Peak, LLC Is a Bad Neighbor**

Since the Bull Mountains Mine re-started and expanded mining operations in 2009, Signal Peak's actions have shown a disregard for the law and a motivation to further its own interests at the expense of the people who live and work in the Bull Mountains. Through

the years, Signal Peak has used callous tactics to directly and indirectly force generational ranchers off their land. The Bull Mountains have been a crucial summer range for cattle because of their proximity to perched-groundwater aquifers and springs. Unfortunately, since mining began, ranchers and landowners have seen extensive subsidence, which has torn apart the landscape and impacted the hydrological system in the region resulting in ranchers reconsidering or moving their ranching operations to survive. Signal Peak has gone as far as to cancel the grazing lease of a rancher on the corporation's land and has sued people who ranch above the mine in multiple cases. Signal Peak's motivation to push ranchers off the land seems very clear: the corporation seeks to avoid assessing and addressing the harms it has caused to springs, aquifers, and wells. S.362 effectively condones a corporate actor that is known for violating the law and harming the people who live in Musselshell County and Yellowstone County. S.362 allows Signal Peak to bypass the only process that requires the federal government to review the mine's impacts and provide an opportunity to address those impacts.

Signal Peak is also currently on federal probation with the Department of Justice after criminal convictions for willfully lying to federal mine regulators about work-place injuries and for illegally dumping toxic mine waste into an area that was intended to provide replacement water to local residents harmed by the mine.[1] The company has also violated the law by not complying with the obligation to collect and analyze water sources weekly, which has led to an "irreversible loss of monitoring data."[2] They have also incurred more than 1,700 violations according to the Mine Safety and Health Administration (MSHA).[3]

Signal Peak is also known for avoiding paying taxes that would benefit the State of Montana and the local county. By avoiding millions of dollars in tax obligations through exhaustive lobbying efforts at the Montana legislature, Signal Peak has evaded its responsibility to support the local community.[4]

The bottom line is that S.362 is a raw deal for ranchers, local landowners, the environment, taxpayers, and the rule of law.

2. Signal Peak's Operations at the Bull Mountains Mine Have Not Been Subject to an Environmental Impact Statement (EIS)

If S.362 is enacted, the EIS that is being prepared for the extensive AM3 expansion of the

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[1] Judgment, *United States v. Signal Peak Energy, LLC*, No. 21-CR-79 (Jan. 31, 2022); Offer of Proof, *United States v. Signal Peak Energy, LLC*, No. 21-CR-79 (Oct. 5, 2021).
[2] DEQ, Notice of Noncompliance (Aug. 22, 2019).
[3] Mine Safety and Health Administration, Mine Data Retrieval System, https://www.msha.gov/data-and-reports/mine-data-retrieval-system.
[4] Mike Dennison, *Tax Break for Roundup-area Coal Mine Stuffed into Bill in Final Days*, Billings Gazette (Apr. 28, 2011), available at *https://billingsgazette.com/news/state-and-regional/montana/taxbreak-for roundup-area-coal-mine-stuffed-into-bill-in-final-days/article_995244c5-f6f7- 5087-9d50-da3a5e057ebb.html*; Mike Dennison, *Tax Break for Roundup-area Coal Mine Stuffed into Bill in Final Days*, Billings Gazette (Apr. 28, 2011), *available at* https://billingsgazette.com/news/state andregional/montana/musselshell-county-turns-down-coal-mine taxbreak/article_52aa5180-1215-11e0-9c79-001cc4c03286.html

Bull Mountains Mine would be evaded. For decades, the landowners and ranchers in the Bull Mountains region have been organizing and advocating for a full analysis, through an EIS, of the impacts the mine has on the environment and the local community. If Signal Peak continues expanding the mine, it should only be after a proper and thorough analysis of the environmental impacts is completed. Given Signal Peak's repeated violations of environmental and safety laws, federal protection and review should be strengthened rather than undermined.

Local communities do not know what information the EIS will ultimately yield, but the future of the mine should be determined only after considering all information possible. Local ranchers have experienced dried-up springs and wells as well as cracks opening in their pastures due to subsidence caused by undermining. For years they have sought to have a thorough EIS completed in order to better understand the impacts of expanded mining on their livelihoods.

Signal Peak heavily lobbied the Bureau of Land Management (BLM) more than a decade ago to ensure that only an environmental assessment (EA) was done on the mine's original lease, which limited the scope of analysis and left the local community with more questions than answers.[5] This prevented decision makers from taking a hard look at the environmental and community impacts that this mine has and will continue to perpetuate. Subsequent expansions and permit amendments at the Bull Mountains Mine have continuously recycled this same EA with only minor updates, and a comprehensive and more substantive evaluation of impacts has never been conducted. Since the mine opened, ranchers and landowners have seen the consequences of this lack of analysis first hand: water resources being devastated, increases in air pollution, and subsidence and surface cracks on critical ranching and grazing land. A close look at the harm that may result from longwall mining of federal coal is not just a bureaucratic hurdle – it is crucial in preserving the livelihoods of local communities.

3. Lack of Public Participation

Landowners adjacent to or above the mine were not consulted prior to the introduction of S.362. This is a grave oversight due to the direct impact that this bill will have on landowners who rely on the land and water resources to ranch and maintain their livelihoods. Senator Daines missed a critical step during the formation and introduction of this legislation by not considering the viewpoints of impacted landowners who would be directly affected by the bill.

Unfortunately, this has been a recurring issue during the 15 years of Signal Peak's operation in the Bull Mountains – ranchers and landowners have been left out of the decision-making process at almost every step due to Signal Peak's abuse of the minor permit revision process. Hundreds of minor permit revisions have been made to Signal Peak's permit without any public participation process or opportunities for public input. Permit revisions deemed "minor" do not require any public notice – even to affected or

[5] BLM Meeting Notes (Mar. 2009).

surrounding landowners – and do not involve opportunities to provide public comment or input through another mechanism. Statute requires permit revisions impacting water resources to be categorized as "major" – which *does* mandate public notice and participation. However, Signal Peak has repeatedly made revisions to its permit that impact water resources or otherwise should be deemed "major" through use of the flawed and less-transparent minor permit revision process. In one example, Signal Peak sought a minor permit revision to remove a natural spring-fed well, which was a source of water that a local rancher relied on to water more than 200 cows.[6] The Montana Department of Environmental Quality (DEQ) granted that permit revision, and left local landowners scrambling for sustainable water sources. Earlier this year, OSMRE found reason to believe that DEQ has acted unlawfully in granting these permit revisions through the "minor permit revision" process. That review is pending. There has been a repeated pattern – from Signal Peak, DEQ, and now from Senator Daines – of sidestepping public processes and leaving out impacted people from decision making.

The bottom line is that S.362 seeks to undermine a federal National Environmental Policy Act (NEPA) process that would allow for transparency, a thorough study of the environmental impacts, and allow the public to comment and have a voice in the process. Those of us who live in the Bull Mountains have seen this story play our before: our land, water, and livelihoods are seen as secondary to the economic interests of a large corporation like Signal Peak. If industries set up shop in rural communities such as those in Musselshell County, they should be obligated to protect adjacent landowners and the entire community from the adverse effects of their operation. Our elected officials should not capitulate to the economic interests of out-of-state corporations while ignoring the real-life impacts those decisions have on regular folks.

Our organizations and members appreciate your attention to our concerns with this bill, and we urge the Committee to prioritize landowners, ranchers, and the environment over the desires of a corporate bad actor by opposing this legislation. We thank you for your time and consideration.

Sincerely,

Tom Baratta, Chair
Bull Mountain Land Alliance

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6 https://dailymontanan.com/2022/09/04/charters-last-stand-ranchers-signal-peak-may-prove-that-coal-and-cows-cant-coexist/

Roundup, Montana

Edward Barta, Chair
Northern Plains Resource Council
Billings, Montana

OUTDOOR ALLIANCE

March 11, 2025

Senator Mike Lee
Chair, Senate Energy and Natural Resources Committee
363 Russell Senate Office Building
Washington, D.C. 20510

Senator Martin Heinrich
Ranking Member, Senate Energy and Natural Resources Committee
709 Hart Senate Office Building
Washington, D.C. 20510

RE: March 12th full committee hearing on mining legislation.

Chair Lee, Ranking Member Heinrich, and members of the Committee,

On behalf of the human-powered outdoor recreation community, thank you for holding March 12th's hearing on hardrock mining and critical minerals legislation. Reforming America's outdated hardrock mining laws is a priority for our community, both to address the demand for critical minerals to support clean energy and to ensure that new mining projects do not adversely affect public lands values including outdoor recreation. This letter outlines our strong support for one bill before the Committee—S. 859—which would make these critical reforms, as well as recommendations for improving another bill—S. 544—to prevent future resource conflicts related to mining waste storage.

Outdoor Alliance is a coalition of ten member-based organizations representing the human powered outdoor recreation community. The coalition includes Access Fund, American Canoe Association, American Whitewater, International Mountain Bicycling Association, Winter Wildlands Alliance, The Mountaineers, the American Alpine Club, the Mazamas, Colorado Mountain Club, and Surfrider Foundation and represents the interests of the millions of Americans who climb, paddle, mountain bike, backcountry ski and snowshoe, and enjoy coastal recreation on our nation's public lands, waters, and snowscapes.

Currently, the outdoor recreation community and the outdoor economy are profoundly affected by hardrock mining. Improperly sited mines have the potential

to irreversibly degrade outdoor recreation resources like rivers, trails, and climbing areas, as well as important cultural sites and conservation lands—often areas that our community considers irreplaceable. Recreationists are also affected by legacy mining pollution, which the EPA estimates has polluted 40% of headwaters in western U.S. watersheds.[1] At least 140,000 abandoned hardrock mine features exist across federal public lands, many of which pose physical hazards to people, as well as environmental hazards that threaten public health, wildlife, and aquatic ecosystems.[2] Without proper regulation, these mining impacts threaten the outdoor recreation experience on federal public lands and also threaten America's growing $1.2 trillion outdoor recreation economy, which employed nearly five million people in 2023.[3]

The lack of protections for recreation and other public lands values in the 1872 Mining Law—the outdated law that still governs hardrock mining on western public lands today—poses a major barrier for our community to support mining projects that might be needed for clean energy and other purposes. As Congress considers legislation to accelerate domestic production of critical minerals, it is imperative that these policies be paired with significant reforms to the 1872 law that reflect modern uses of public lands, cultural values, and local economies. At a minimum, these reforms should include adequate funding for abandoned mine remediation, royalties for hardrock mining, and clearer discretion for agencies to approve or deny mining projects based on foreseeable impacts to ecological, cultural, or recreational resources. Accelerating hardrock mining without these necessary reforms will likely increase controversy around mining projects leading to uncertainty and delay, as well as degradation of public lands, cultural sites, recreation opportunities, and local economies.

Our comments on specific bills are below.

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[1] U.S. Environmental Protection Agency, EPA-840-B-00-001, Liquid Assets 2000: America's Water Resources at a Turning Point (2000).

[2] Abandoned Hardrock Mines: Information on Number of Mines, Expenditures, and Factors that Limit Efforts to Address Hazards. United States Government Accountability Office. March 2020. Report to the Ranking Member, Subcommittee on Interior, Environment, and Related Agencies, Committee on Appropriations, U.S. Senate, https://www.gao.gov/products/gao-20-238.

[3] U.S. Bureau of Economic Analysis, BEA 24-53, Outdoor Recreation Satellite Account, U.S. and States, 2023 (2024).

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Mining Waste, Fraud, and Abuse Prevention Act of 2025 (S. 859)

Outdoor Alliance strongly supports the Mining Waste, Fraud, and Abuse Prevention Act of 2025, which proposes greatly needed reforms to the 1872 Mining Law. For more than 150 years, the law has elevated hardrock mining above other uses of federal public lands, including outdoor recreation, and has encouraged irresponsible mineral development without environmental standards or a meaningful return for the owners of public land, the American public. S. 859 provides a comprehensive, long overdue update to federal mining policy that, if passed, would provide the planning guidance, environmental safeguards, and fiscal protections needed to support a necessary responsible increase in production of critical minerals from public lands. We especially appreciate that S. 859:

- Eliminates patenting of public lands. § 101 would permanently end the practice of patenting public lands, whereby individuals and corporations can purchase public lands from the federal government at a nominal price. Although Congress has imposed temporary moratoriums on new patent applications since 1994, a permanent fix is needed for this outdated policy.
- Establishes royalties for hardrock mining. Title II would establish royalties to help ensure that Americans see more of the financial benefits of hardrock mining on public lands. Revenues would support the Hardrock Minerals Reclamation Fund established in Title IV.
- Requires permits for exploration and mining operations. Sections 302 and 303 would establish a permitting system for hardrock mine exploration and mining operations, respectively. These permit systems would help prevent degradation of public lands and mandate better planning for mining activities.
- Creates new pathways for protecting special places. Section 307 creates a process by which local land managers review important conservation areas, including Areas of Critical Environmental Concern, Wilderness-quality lands, and eligible Wild & Scenic Rivers, and make a determination as to whether lands should be withdrawn from mining. This section also allows states, Tribes, and local governments to petition the federal government to withdraw lands from mining.
- Strengthens tribal consultation. Tribes deserve consistent, early opportunities to consult with federal agencies about mining proposals before

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permitting decisions are made. § 310 would provide consistency for the consultation process related to hardrock mining.

- Address legacy mining pollution. Title IV would create a Hardrock Minerals Reclamation Fund that would carry out the abandoned hardrock mine cleanup program established by Section 40704 of the Infrastructure Investment and Jobs Act. Funds for the program would come from a portion of royalties, rents, and fees generated by other provisions of S. 859. This cleanup program is greatly needed to remediate ongoing issues like soil contamination and acid mine drainage that cause public health and safety issues for outdoor recreationists and others.

These reforms are critically needed to bring hardrock mining policy into the 21st century. Our organizations encourage you to advance this important legislation in the 119th Congress.

Mining Regulatory Clarity Act (S. 544)

The Mining Regulatory Clarify Act (MRCA) seeks to address concerns with hardrock mining waste disposal stemming from the 2022 *Rosemont* court decision.[4] We appreciate that the MRCA has been considerably improved since the version introduced in the last Congress; however, we remain concerned that the bill is more broadly written than necessary to allow for responsible mineral extraction and needs to be improved to provide certainty that it will not lead to mining companies establishing mill site claims beyond what is necessary for mining waste disposal.

The MRCA would allow mining claimants to establish 5-acre mill sites "as are reasonably necessary for its operations" and use these sites for waste disposal or other operations incident to mining. We recommend that the bill be targeted in the following ways:

- Amend the "as are reasonably necessary" language from subsection (c)(2)(A) to clarify that claimants are only allowed to claim the minimum number of mill sites necessary to dispose of mining waste.

[4] *Center for Biological Diversity v. U.S. Fish & Wildlife Service*, 33 F.4th 1202 (9th Cir. 2022).

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- Clarify that, with regards to non-withdrawn lands, the MRCA preserves 1872 Mining Law's core requirement that the right to use and occupy mining claims is contingent on the discovery of a valuable mineral deposit. As written, the bill includes a savings clause in subsection (c)(8)(D) explicitly preserving the discovery requirement for withdrawn lands, which could be read to inadvertently imply that this requirement doesn't extend to non-withdrawn lands. This ambiguity should be clarified.

- Provide clear statutory authority for agencies to approve or deny a mining plan of operations, and provide guidance for agencies to ensure that mill sites are not sited on areas with resource conflicts, including outdoor recreation sites, cultural sites, or environmentally sensitive lands.

- Delete the phrase "or other operations reasonably incident to mineral development" from the definition of mill sites. This language is not necessary to address *Rosemont*, which only addressed mining waste disposal.

- Increase funding for the Abandoned Hardrock Mine Fund. We are pleased that the bill would invest mill site claim maintenance fees in abandoned hardrock mine remediation; however, we recommend increasing claim maintenance fees beyond the current $200/year and also identifying other sources of funding for this purpose.

These changes are necessary to prevent abuses of the mill site provision and will help ensure that mining occurs in a way that is responsive to the concerns of local communities. Finally, given the pressing need for holistic reforms to mining governance, we believe the issues addressed by the MRCA are only appropriately addressed in the context of broader reforms as contemplated by the Mining Waste, Fraud, and Abuse Prevention Act.

* * *

Thank you for considering our community's input. We look forward to working with you to reform hardrock mining policy to meet the demand for critical minerals while protecting outdoor recreation opportunities, conservation values, and cultural resources on America's public lands.

OUTDOOR ALLIANCE

Best regards,

Louis Geltman
Vice President for Policy and Government Relations
Outdoor Alliance

cc: Adam Cramer, Chief Executive Officer, Outdoor Alliance
Heather Thorne, Executive Director, Access Fund
Beth Spilman, Executive Director, American Canoe Association
Clinton Begley, Executive Director, American Whitewater
Kent McNeill, CEO, International Mountain Bicycling Association
David Page, Executive Director, Winter Wildlands Alliance
Tom Vogl, Chief Executive Officer, The Mountaineers
Ben Gabriel, Executive Director, American Alpine Club
Rebekah Phillips, Executive Director, the Mazamas
Madeline Bachner Lane, Chief Executive Officer, Colorado Mountain Club
Chad Nelsen, Chief Executive Officer, Surfrider Foundation

Ladies and Gentlemen:

Ranching over a longwall mine is like sharing a tent with a camel, and you and the camel are shut in together. The camel is much larger than you, so you have to adjust your movement to his whether you like it or not. My camel was named Signal Peak Energy. Despite my owning the tent long before his arrival, he was immediately the dominant tenant in our relationship. Even though the social responsibilities for taxes, etc. were mine, control of the tent was his.

As you'll read, the result of this unpleasant relationship was repeated damage to my land, loss and damage to water sources, loss of access to my own property, damaged roads, legal harassment, and a constant feeling of unease and fear of what damage might happen next. Eventually, the impacts from this mine became a significant part of my decision to sell most of my beloved ranchlands.

This forced relationship began in 1990, when the coal prospecting predecessors to Signal Peak first wanted surface access to do various preparations for a future mine. Agreements had to be negotiated----damages for roads used, monitoring wells drilled, and access at all hours of the day and night. Some things were never mentioned until they happened, and then were not explained very well. It was clear early on that underground coal mines don't make good neighbors, at least not this one. Little did I know how bad it would get.

In 1990, The Bureau of Land Management negotiated a coal-for-land trade with the prospectors who were touting their design to open a mine. BLM did an Environmental Impact Statement (EIS) on this proposal, but when we local landowners questioned what would happen to our water if this mine came about, we were told that our concerns were premature until a mining permit was granted.

By 1992, the prospectors had secured a coal mining permit from the State of Montana which approved a very different mine plan than the one they are currently pursuing. The State of Montana did a mine EIS for the permit at the time, which was insufficient. Work done by the State of the Montana in the environmental area was generally not very good quality, as Montana's history of superfund sites and environmental disasters indicates. After the permit was secured, the original permittee began a search high and low to get a bidder for the permit. It was not a popular product, but they finally found a guy in Tennessee, John M. Baugues, to take it over.

The mine limped along, mining where the previous small miner had mined, but in the meantime, the mine personnel were running about on our ranch.

In 1998, the State of Montana revoked John M. Baugues' Mountain Inc. mine permit for a "pattern of violations." The water monitoring ceased, and the casing for the monitoring wells was removed and left to lie on the prairie.

While we had peace until 2003, the money guys on the other side were busy hunting up suckers to resurrect the revoked mining permit. When the 2003 Montana Legislature came up, they were in Helena with a bill to resurrect the mine permit based on environmental work more than a decade old. The idea was that resurrecting the permit, rather than applying for a new one would be so much cheaper, and it was. The Bill was sent to the Agriculture Committee, because

the Energy Committee was too busy that session. The Ag Committee had no idea what was going on. The only parties there to testify were myself and the would-be miners. The legislature resurrected the permit subject to approval by the federal Office of Surface Mining (OSM).

OSM coughed out an approval eventually. This set the unfortunate precedent that a permanent revocation is never permanent.

Back came all the monitors, monitoring wells, and road uses. The first immediate impact was degradation of our roads, given they were poorly designed for the mine's uses. Given the challenges that already face rural roads, this was both a significant inconvenience and, at times, a risk to local safety.

Signal Peak mined by press release from 2003 until August 2008. They finally got First Energy of Ohio and the Boich Family of Ohio to put up the money to buy a longwall machine and build a 33 mile railroad to ship the coal to Broadview, Montana.

The mine president would stop by to visit every now and then. He asked my husband, Don, what he could do for us. Don very sweetly said they could just go away. The mine president looked very surprised and a little hurt. Sadly they didn't just go away.

Signal Peak began mining after getting their machine in and the railroad constructed. They mined Panel 1, and began Panel 2, arriving on our land with a bang on November 30, 2010. I had just arrived home from getting my shoulder replaced. Thirty minutes later the mine president called, much disturbed.

At the beginning of Panel 2, the first on our land, the earth had cracked open two hundred feet down to the coal and the miners. He was in desperate fear of an explosion from spontaneous combustion. He could barely utter the words "SponCom" in his panic. (SponCom is a computer program that assesses the potential for spontaneous combustion in coal.) He needed to put a road across a roadless area to the base of Dunn Mountain immediately and begin hauling nitrogen in to pump into the mine to keep it from exploding. The unspoken implication was that if I didn't give permission and anything awful happened, it would be my fault. The result was a massive distraction on our ranch for months.

A formerly roadless area became an industrial zone with 24/7 nitrogen in huge tanker trucks, with bright lights and a complete man camp and diesel storage area beginning December 1, 2010 and remaining until the middle of February of 2011. The road and the man camp have never been reclaimed, and the scar on the face of Dunn Mountain, from which they clawed the topsoil and vegetation, has been "reclaimed" but with little success.

The way the mine was set up, each longwall panel began on my land as the machine began to work its way back to the mains. The damage was most severe over the set up rooms. Frequently the land cover was low, but even when the cover was thicker, the damage seemed to be severe with large cracks on each one.

The mine repaired the biggest cracks, but the effects on my ranch water did not appear until Panel 4. The first spring, Turtle Pond, kept its water, but has never looked prosperous since undermining. The next spring up the drainage on Panel 4 was Bull Spring. It lost water immediately. I waited to complain until 2016, hoping it would appear "opportunistically." It did

not.

In 2016, Signal Peak reworked Bull Spring. Our original piping was broken when it was undermined. The current owners of my property do not think it has been fixed. Our rigid piping was replaced with flexible black plastic. I think the gate roads in that area may not be collapsing very fast, or the new pipe could be locking with trapped air in high places.

Panel 5 took out our main road up to the high pastures, and our access was blocked for several months. For a family ranching operation, loss of access to grazing lands can compromise one's livelihood.

At about this time Signal Peak filed a slap suit against me and my neighbor to the north, along with a subpoena duces tecum, (i. e. bring all one's papers on a certain subject). It was unclear if they wanted me to go back 30 years or what. On top of all the other stressors due to mining impacts, that lawsuit wrecked my peace of mind the entire spring season. A sheriff came out to serve papers on me, and one of my dogs kept him pinned in his car for a while. I can't say that I was sorry. The mine's lawyers would set a date for a hearing on the subpoena, and then cancel it the day before the hearing. They did that twice.

The mine lost the legal battle in district court in Yellowstone County. The mine appealed to the Montana Supreme Court and lost there as well.

I had tried to be reasonably accommodating, but I couldn't swallow everything they tried to promote. There was a new mine president, and he wanted total acquiescence. One of the worst things about that subpoena was that I had to go through my husband's day books and the ones that I had started keeping when his health began to decline to meet the demands of the lawsuit. The documents I turned over included some from the week of my husband's death in October 2014, the year our first waters were undermined. That was very painful to relive, especially for a lawsuit that felt designed more for harassment than clarity.

During my husband's health decline and after his death, I was supervising an employee on a daily basis and trying to keep the ranch work afloat. I did that for four more years. Between the problems from the mine and the general workload of the ranch, I was trying to figure out what to do.

In late summer of 2018, I suffered a personal hip injury, and that was the last straw. Had I not been dealing with the mine issues, I might have been able to hand on, but the stress and worry of that made continuing untenable.

I spent the year of 2019 dealing to sell the ranch. Even with a willing buyer, making a deal on something like that is more like turning a battle cruiser than a rowboat. The deal was completed December 18, 2019; it would have been my husband's 86th birthday.

I saw the best days of ranching in the Bulls. We had water and grass. The natural water of the springs protected us from the vagaries of depending on dams entirely, or the mechanical efficacy of wells. The year after I sold, the mountain spring drainage was completely dried up by Panel 8. I cannot express to you how infinitely sad that is for that wet drainage to be gone.

Now there are two storage tanks that have to have human intervention for anything to get a

drink. There is no guarantee that calves can reach the water when they come in to drink. The tank that my father put in slid downhill 3 feet when it was undermined, and the water is no longer level, so there is now less of it in the tank. Montana Department of Environmental Quality only requires the mine to haul water for livestock when they are in the pasture. Nothing else is supposed to drink the water that the mine hauls, and there is no other water.

A subsided ranch is no place for an old lady. When one stops a pickup on a subsided panel, one has to be very careful not to catch the front of one's foot on a rough bump or step over a crack and have the back edge next to the crack give way and tip one over backward. In other words, it is not safe to go out alone. It seems like every time one stops the pickup, there is a crack or a place to trip. People have driven their pickups into larger cracks that cannot be seen if the grass is tall.

My place in the Bull Mountains was the place of my heart, and it breaks my heart to see what Signal Peak's longwall has done to the land there. Coal has broken up our small community of ranchers and broken the land as well. Water is life, but coal has taken *our life*.

Ellen Pfister
Shepherd, Montana