

**Statement of Todd M. Malan
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PUBLIC HEARING ON PROPOSED REGULATIONS

Section 45X Advanced Manufacturing Production Tax Credit for Critical Minerals

[REG-107423-23]

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IRS Auditorium, Washington DC

Talon Metals appreciates the opportunity to testify before this public hearing regarding proposed regulations for the Section 45X Advanced Manufacturing Production Credit for Applicable Critical Minerals.

We recognize that this hearing is an extraordinary step for the Department of Treasury in the process of developing prudent regulations that reflect the intent of Congress and protect the interests of American taxpayers. Highly complex issues are involved in implementing the goals of the Inflation Reduction Act (IRA) and we appreciate that you have taken the time to hear from stakeholders that are part of achieving both the security of supply goals and the energy transition goals of the IRA.

We appreciate that the Treasury Department and the IRS are considering including in the calculation of production costs for the 45X Production Tax Credit for Applicable Critical Minerals the costs of extraction and other similar value-added activities in the production of raw materials required to produce the applicable critical minerals and used in electrode active materials.

About Talon

Talon Metals is a publicly traded mineral resource company focused on discovery and development of high-grade deposits that contain nickel, copper, cobalt and iron in the Lake Superior region of the United States. Talon has mineral exploration activities in Minnesota and Michigan, is proposing a underground nickel mine in central Minnesota in the state's permitting system and is starting the federal and state permitting process for its proposed Battery Mineral Processing Facility in Mercer County, North Dakota. Talon was selected in 2023 for \$20.6 million in funding from the Department of Defense to support its nickel exploration in the United States and the Battery Mineral Processing Facility in North Dakota was selected by the Department of Energy for \$114 million in grant funding from the Bipartisan Infrastructure Law in 2022.

Shared Support for Value Added Extraction Inclusion in the 45X Production Tax Credit for Critical Minerals

Our full comment letter has been submitted in response to the Federal Register Notice. I would also like to bring to your attention and submit for the record of this hearing the statements in support of inclusion of the direct and indirect cost of extraction of critical minerals from the geology of the United States in the calculation of production cost from the following organizations:

- International Union of Operating Engineers
- United Steelworkers Union
- Mining Minnesota
- A letter to Secretary Yellen from nine Members of the United States Senate

President Biden's Vision for Responsible Mining -- Producing Applicable Critical Minerals in the United States at High Standards:

As a company focused on discovering, delineating and ultimately mining high grade ores from the geology of the United States, Talon is uniquely positioned to provide information to the Department of Treasury and IRS on the value-added activities that are entailed in the start of the supply chain for eligible critical minerals.

Talon has recognized President Biden's vision of a new paradigm for responsible mining of domestic critical minerals that protects the environment, involves working people, respects tribal sovereign government and reshores manufacturing and production to the United States. Our team has taken a different approach to mining, extracting and processing critical minerals in the United States to meet these high standards. For example:

- In 2021, we agreed to a neutrality agreement and workforce training partnership with the United Steelworkers union.
- We have signed commitments to construct our operations in the United States under Project Labor Agreements with Building Trades unions in North Dakota and Minnesota.
- We have conducted information sharing with proximate tribal sovereign governments and seek to share economic benefits with tribal people in the areas where we operate.
- We conduct quarterly community meetings and have an open-door policy at all of our operations to answer community questions about our plans.
- We have shaped our initial mine proposal to respond to some of the feedback that we have heard from the community and will continue to do so as we move through the permitting process in Minnesota, North Dakota and Michigan.

National Security Implications

As the Biden Administration has recognized, producing critical minerals in the U.S., while maintaining high standards for protecting the environment, participation of organized labor, respect for indigenous people and community engagement does cost more than producing these minerals in jurisdictions that do not share the standards of the United States or our values.

Talon sees these high standards of production as part of the value proposition of our products and a commercial advantage.

However, global commodity markets are currently only priced at the lowest common denominator. There is currently no pricing mechanism that differentiates between minerals produced at high standards and minerals produced at very low standards for environmental protection, indigenous participation, worker safety etc.

I mention this because in recent weeks global commodity markets for battery minerals such as nickel, cobalt and lithium have been swamped by oversupply from China or Chinese companies operating in third countries like Indonesia.

Many experts observe that this is a pattern of behavior that is squarely aimed at undermining efforts to build up secure supply chains in critical minerals (currently dominated by Chinese production).

China has repeatedly used its leading role in critical minerals production as a lever in relations with other countries. China effectuates its strategy to protect its dominant position in critical mineral production through significant market manipulation and Chinese government backed investments that are not measured by metrics of commercial return.

One of the Chinese government's marquee strategic initiatives in this area is its "One Belt, One Road Initiative" (often referred to as BRI) that has made enormous strategic investments in critical mineral production in third countries. A study from Australia's Griffith University from earlier this month highlights some of the key aspects of the BRI in the critical minerals sector.¹ A few key observations from Griffith report:

"For 2024, we see further growth of Chinese BRI engagement with a strong focus on country partnerships in renewable energy, mining and related technologies"

"Regarding BRI investments, Indonesia was the single largest recipient with about USD 7.3 billion in investments."

¹ [Griffith University Study: China Belt and Road Initiative \(BRI\) Investment Report 2023](#)

“Another important growth area of strategic importance is China’s engagement in metals and mining reaching USD 19.4 billion globally”

“RBI Engagement in the sector has grown by 158 percent compared to 2022 and reached the highest level since 2013. The minerals and metals are particularly relevant to the green transition (e.g., lithium) and batteries for electric vehicles.”

We are witnessing in real time an effort to undermine the security of supply objectives of the IRA.

Building Secure Supply Chains for Critical Minerals is a Top Objective of the IRA

It is from this perspective that we believe that Congress clearly included critical minerals in the 45X production tax credit with the clear intent to support the full U.S.-derived supply chain of critical minerals from mining and recycling to the final processing to the requisite level of purity as specified in the law.

It is also why your decisions regarding inclusion of value-added cost for mineral extraction in the United States is so important and carries implications for our ability to access within this country the raw materials required in clean energy systems and national defense platforms.

Including Value Added Mineral Extraction and Processing in Section 45X

In a recent hearing held by the Senate Energy and Natural Resources Committee, Deputy Secretary Adeyemo confirmed Treasury’s interest in including the cost of mining in the 45X “cost of production” calculation:

“We want to create incentives for not only the manufacturing, but also the mining, what we’ve done with 45X - we’ve set out rule, but also asked a series of questions as to how we can do that. Ultimately, what we’re trying to get at is making sure that people only get the 45x credit, if they actually have value add that’s been created, the thing we’re trying to protect against is that people who buy minerals potentially from abroad would then get access to the credit and that money would flow to countries to companies that are outside the United States.”²

Consistent with Deputy Secretary Adeyemo’s comments, we believe that Congress clearly intended that the 45X credit for critical minerals to include the cost of extracting

² Transcript of comments by Deputy Secretary Adeyemo before Senate Committee on Energy and Natural Resources, [Hearing to Examine Federal Electric Vehicle Incentives Including the Federal Government's Role in Fostering Reliable and Resilient Electric Vehicle Supply Chains](#), January 11, 2024

ore from the geology of the United States (that is further refined or concentrated to become an applicable critical mineral under § 45X(c)(6).

Section 45X(d)(2) clearly states that the 45X credit only applies to eligible components the production of which is within the United States or its possessions. In the case of applicable critical minerals, the mineral *is* the component, so it stands to reason that only the cost of extraction of such mineral (in its raw form) occurring in the U.S. or its possessions should qualify for the 45X credit in calculating the cost of production of such mineral.

The discovery, delineation and physical extraction, including mining and physical processing (mineral concentrating) of natural resources prior to refining in the United States that contain various concentrations of an applicable critical mineral as specified in § 45X(c)(6) is clearly a verifiable value-added activity conducted within the United States.

Significant investment is required to conduct mineral discovery and characterization of a mineral deposit as economically mineable, let alone the cost of permitting a mine, building a mine and the physical processing of ore (concentrating of minerals) prior to refining, operating the mine and reserving funds for the closure of that mine and physical processing facility as required by U.S. and state laws. Congress clearly recognized the special nature of the beginning of the supply chain of critical minerals, and its importance as a national priority, when it chose to make the critical minerals provision of 45X the only credit that does not expire.

Specific Recommendations

Responding to IRS' and the Treasury Department's invitation for suggestions as to how to include the costs of extraction and physical processing (concentrating of minerals) to the calculation of production cost eligible for the 45X tax credit for critical minerals, we have several recommendations.

Firstly, we agree with many other commentators such as the National Mining Association and the Zero Emissions Transportation Association that it would be a gross diminution of the intent of Congress to not account for the value-added activities that occur in the United States at the beginning (mining) and middle (physical processing also referred to as concentrating of minerals prior to refining) of the supply chain for the 50 critical minerals enumerated in the law.

These specific elements of the periodic table, specified to certain levels of purity, are not the result of alchemy, they originate in primary, naturally occurring resources that provide the chemical basis for the final eligible critical mineral. In the primary production of the 50 enumerated elements, it is true in all cases that there is an original source ore, and this can be proven by chemical assessment (assays).

Exploration, discovery, delineation, proposing of a mine, permitting of a mine, permitting of a physical processing facility (concentrator of minerals), construction of a mine and physical processing facility, actual extraction and physical processing (also referred to as concentrating of minerals prior to refining) of the source material and then planning for proper mine closure in the United States all represent demonstrable “value add” in the early stages of critical mineral production in the U.S. Without that early stage, production of US sourced critical minerals for primary and secondary use (recycling) is not possible. The cost of this part of critical mineral production, prior to chemical and thermal processes involved in refining is often a material proportion (70% to 80%) of the value of a final refined product.

We believe that Treasury should allow taxpayers to fully include U.S.-based value-added activities from beginning to end (“mine to applicable critical mineral”) in calculating their cost of production of critical minerals produced from mineral source materials from the United States and its territories.

We see two ways to ensure that the entire supply chain in the United States benefits from the 45X production tax credit for critical minerals:

- In cases where there are different parties conducting extraction and processing activities in the U.S., Treasury could allow each party to claim a 45X credit based on its own costs of production. A mining company that mines the ore that is physically processed to serve as the source for the refining of the specified applicable critical mineral through the chemical and thermal processes involved in refining should be eligible for its proportional share of the 45X credit. To do so, it could obtain a certification from the ultimate processor that the extracted ore was ultimately processed into an applicable critical mineral and sold or otherwise used in accordance with the requirements of § 45X(c)(6).
- Alternatively, if concerned about administrability of this proposal, Treasury could alternatively include raw material cost in the calculation of production cost, but **only** if the taxpayer that claims the 45X critical mineral tax credit obtains a certification from the mining company that the “source material” or mineral ore was extracted from the geology of the United States or its territories. The taxpayer that processes the critical mineral to the point of final purification (that qualifies as an applicable critical mineral in accordance with § 45X(c)(6) sells or otherwise uses such mineral as required under 45X. While the mining company does not get to claim the tax credit directly, it does gain a provenance preference for its product that will improve project economics.

Additional detail:

1. The producer of an applicable critical mineral as specified under § 45X(c)(6), should be able to include in its eligible production costs, the costs of acquiring raw ore / source material for an applicable critical mineral, to the extent that such source-material related costs can be certified as having been conducted in the United States or its territories (in accordance with § 45X(d)(2) - Only Production In The United States Taken Into Account).
2. The concept of “source material” for this purpose would include any ore or rocks extracted through mining and physical processing from the geology of the United States or its territories that contain the specified critical minerals listed under section 45X(c)(6), without (since when extracted and concentrated through physical processing, they are in raw form) the associated refining through chemical and thermal activation to achieve purity requirements included in that section. This can be validated by chemical analysis (assays) that can be a required certification.
3. If the producer of an applicable critical mineral is itself extracting the “source material” in the US that becomes the applicable critical mineral through chemical and thermal processes involved in refining to the specified level of purity in the law, it should be able to include all of its own costs related to such extraction from mining through to refining.
4. If the producer of the applicable critical mineral is instead acquiring the critical mineral source material for further processing (chemical and thermal processes involved in refining), then the producer’s acquisition costs for such material – certified by the seller of such material as attributable to U.S. extraction activity – should be included in its costs for purposes of the calculation of production cost in the 45X critical minerals production tax credit. The Treasury has indicated that the cost of energy, from an arm’s length third party (utility), is allowed in the calculation of production cost under § 1.263A. Adding in the arm’s length cost of the source raw materials that have been extracted in the United States should be treated no differently. Raw materials cost is normally included in the production cost calculation in § 1.263A. It is only the draft 45X draft guidelines that remove raw materials cost by exception.
5. Costs associated with any activity that does not occur within the U.S., e.g. associated with mining, recycling, refining or other processing outside of the U.S., should not be included to remain faithful to § 45X(d)(2). To determine what amount of critical mineral acquisition cost can be included for purposes of the 45X credit, the producer should obtain from the supplier of source critical mineral

material a certification indicating the percentage of the source material that originated from the geology of the United States or its territories and that its chemical characteristics are the origin or source of the final applicable critical mineral as specified in § 45X(c)(6).

6. 'Extraction' for this purpose should be defined as it is in *Proposed Reg §1.30D-3(c)(8)*:

- *(8) **Extraction** means the activities performed to extract or harvest minerals or natural resources from the ground or a body of water, including, but not limited to, by operating equipment to extract or harvest minerals or natural resources from mines and wells, or to extract minerals or natural resources from the waste or residue of prior extraction. Extraction concludes when activities are performed to convert raw mined or harvested products or raw well effluent to substances that can be readily transported or stored for direct use in critical mineral processing. Extraction includes the physical processes involved in refining. Extraction does not include the chemical and thermal processes involved in refining.*

Conclusion

In summary, we believe that a taxpayer producing an applicable critical mineral as specified in the law to claim the 45X tax credit for critical minerals should obtain:

- Certification that the raw materials (mined ore that is physically processed prior to refining) have a chemical characteristic (assay) that indicates that it is the source of the final eligible critical mineral.
- Certification that the raw materials were extracted from the geology of the United States and its territories.
- Certification that such supplier has not itself claimed 45X with regard to any of the same costs.
- Certification that such supplier has not provided certification related to any of the same costs to any other entity.

We believe this “Buy American” proposal for adding raw materials extraction cost to the calculation of production cost using definitions under § 1.263A – applied to raw materials extracted in the U.S. -- is easily administrable, addresses the concern that Deputy Secretary Adeyemo articulated regarding the need to ensure that “foreign minerals” cannot benefit from the 45X tax credit, and is consistent with the intent of Congress in enacting 45X as applied to critical minerals: to cover the full U.S. sourced supply chain required to produce eligible applicable critical minerals.

Thank you.