

Written Testimony of Alex Herrgott, President, the Permitting Institute

Before

U. S. House of Representatives Energy and Commerce Committee

Subcommittee on Oversight and Investigations

Wednesday, May 21, 2025, at 10:00 a.m.

2123 Rayburn House Office Building.

The hearing is entitled “**Examining Ways to Enhance Our Domestic Critical Mineral Supply Chains.**”

Chairman Palmer, Ranking Member Clarke, and distinguished members of the Committee,

Thank you for the opportunity to testify today. First, let me acknowledge and sincerely thank the members of this Committee—on both sides of the aisle—not only for your leadership during this Congress but also for the persistent efforts over many years that have elevated critical minerals to national prominence. Although jurisdiction over critical minerals extends across multiple committees in both chambers, the Energy and Commerce Committee’s focused attention on an integrated critical mineral supply chain is both timely and essential.

My name is Alex Herrgott, President of The Permitting Institute (TPI), a nonpartisan, pro-development trade association established in 2021. TPI advocates passionately and persistently for pragmatic permitting reforms crucial to accelerating infrastructure investments fundamental to America’s economic security and national resilience. Our diverse members include developers, investors, and manufacturers engaged in critical minerals extraction, refining, and processing, alongside renewable and conventional energy, electricity transmission, pipelines, ports, waterways, transportation, and advanced manufacturing.

As infrastructure stakeholders navigate an increasingly complicated and polarized policy landscape, TPI remains at the forefront, relentlessly advocating for real-time, actionable, and data-driven policy reforms. Our mission is clear and urgent: every month of permitting delay inflates project costs, erodes investor confidence, and invites further foreign dominance over sectors that should be cornerstones of American self-reliance.

The inconvenient truth is stark: nearly a decade of congressional legislative efforts have failed to meaningfully address these permitting inefficiencies. Coordination and procedural improvements alone cannot significantly cut down the average 7 to 10 years it takes from project conception through final permitting approval in sectors such as energy generation, transmission, and critical minerals. Recent analyses indicate that permitting delays increase project costs by 20–30%, resulting in billions of dollars of lost capital every year. Opponents of comprehensive permitting reform often ignore the reality that every earth-disturbing project activates complex and overlapping reviews under numerous federal, state, and local environmental laws. According to recent TPI research, these redundant requirements have led nearly 80% of major infrastructure

projects into significant delays, contributing to roughly \$100 billion worth of energy, transportation, and mineral projects being abandoned over the past decade.

This debate is not about disregarding trade-offs. It is about confronting them transparently, balancing priorities effectively, and executing the law faithfully yet efficiently. It is an urgent call to dismantle the bureaucratic inertia that has turned our permitting processes into decade-long obstacle courses. Our goal must be clear: build smarter, not slower. Faster permitting does not mean weaker environmental, cultural, or historic protections—such assertions are misleading distractions that have paralyzed permitting progress, much to the benefit of competitors like China. Rather, expediting permitting is about eliminating avoidable redundancies that punish innovation and reward inaction, directly undermining our national competitiveness.

I. The Cost of Delay: A National Competitiveness Crisis

Our permitting system has become a national cautionary tale. These reforms confront the delays and legal risks that have stalled over \$1 trillion in U.S. infrastructure investment—from energy and minerals to transportation and manufacturing. Our members routinely face 7- to 10-year permitting delays that drive up costs by 20–30%, lead to project abandonment, and have already cost over \$100 billion over the last decade. In contrast, countries like Germany, Denmark, the Netherlands, and Australia—widely regarded as the "greenest" countries in the world—use one-stop permitting and strict deadlines even for complex projects like oil and gas pipelines and offshore drilling: 3–4 months in Denmark, six months in the Netherlands, and just 40 days in Australia. That we need budget reconciliation to enact such practical measures underscores just how urgent overcoming Congress's reform paralysis has become.

Meanwhile, China continues to outpace the United States—especially in energy and critical minerals. Over the last decade, China has invested more than \$1 trillion globally through its Belt and Road Initiative and spends hundreds of billions more each year domestically. With another \$2–3 trillion expected this decade, Chinese infrastructure projects—especially in energy generation, transmission, and mineral extraction and processing—are approved and built in one-third the time and without the de facto 20–30% permitting premium we impose on U.S. developers. The reality is, the window to compete head-to-head with China on infrastructure speed has closed.

China controls over 90% of the world's rare earth refining capacity, 77% of global cobalt processing, nearly 70% of lithium processing, and approximately 85% of the graphite supply chain. China also dominates global battery cell manufacturing, nickel refining, and copper smelting operations. In stark contrast, the U.S. lacks even a single fully integrated domestic processing facility for many essential minerals, despite substantial reserves, skilled developers, and private-sector interest.

America must urgently and fundamentally overhaul its permitting infrastructure to maintain economic relevance and safeguard strategic interests. Despite bipartisan recognition, entrenched stakeholders perpetuate the status quo, leaving policymakers grasping at superficial fixes.

Had permitting not become a rhetorical weapon used to stall the natural gas revolution, coal export expansion, thousands of miles of essential oil and gas pipelines, and LNG exports over the last two decades—and had we instead confronted the critical minerals challenge then, as urgently as we must today—I firmly believe we would not face today's deeply entrenched and

indefensible policy divisions that wrongly frame permitting reform as inherently adversarial to environmental protection. It is imperative we move beyond this false narrative immediately and act decisively.

II. Executive Leadership: A Window of Opportunity

President Trump's March 2025 Executive Order on Immediate Measures to Increase American Mineral Production was a critical inflection point. By invoking the Defense Production Act and designating strategic mineral zones on federal land, this order directs agencies to prioritize processing, accelerate reviews, and coordinate decisions under unified deadlines. It established a plan working through the National Energy Dominance Council (NEDC), the White House-led interagency task force to synchronize infrastructure planning and mineral development, processing, and refinement.

The Executive Order mandates tracking all critical mineral projects through the Federal Permitting Dashboard, offering real-time visibility into permitting timelines. This transparency is essential, but codification alone is insufficient—we need a predictable, repeatable framework insulated from shifting executive priorities. America requires a durable, transparent governance model that fosters investor confidence, international trust, and positions the U.S. as a reliable full-cycle mineral partner from concept to cathode. Such a framework must be codified now.

III. Case Studies: Opportunities Missed and Lessons Learned

1. Stibnite Gold Project (Idaho)

Backed by Perpetua Resources, this project promises one of America's only domestic sources of antimony, essential for defense and technology. Despite its strategic significance and bipartisan support, regulatory uncertainty and litigation have severely delayed its advancement.

2. Twin Metals (Minnesota)

One of America's largest copper-nickel deposits, Twin Metals faced abrupt cancellation despite previous approvals and strong local backing, sending troubling signals to developers nationwide.

3. Resolution Copper (Arizona)

A joint venture between Rio Tinto and BHP, Resolution Copper remains stalled over a decade due to internal disputes and litigation, despite broad bipartisan support and critical economic value.

4. Graphite One (Alaska and Ohio)

Holding America's only Tier 1 graphite deposit, Graphite One secured substantial federal support but remains hindered by permitting hurdles. If promptly addressed, it could achieve production within just 12–18 months instead of the current 2–6-year timeframe.

5. South32 Hermosa (Arizona)

The only U.S. source of battery-grade manganese and zinc, Hermosa faces significant permitting delays and resource challenges. Nonetheless, with swift permitting resolution and minimized litigation, it could enter production within 8–12 months—if not sooner, later this fall.

6. NewRange Copper Nickel (Minnesota)

Despite sustainable redevelopment plans and significant reserves, NewRange NorthMet faces

regulatory turmoil. Resolving permitting uncertainties promptly could enable production within 12–18 months rather than multiple years.

7. Mountain Pass (California)

The U.S.'s only operating rare earth mine, Mountain Pass, remains dependent on Chinese midstream processing. Despite significant investment, the U.S. has yet to establish its own separation facility, leaving strategic vulnerabilities unresolved.

IV. Processing and Refining: The Real Bottleneck

Energy as a Foundational Input

The lifecycle of critical minerals—from extraction through refining—is not only capital-intensive but energy-intensive. Industrial-scale extraction requires robust excavation and transport infrastructure. Refining these minerals demands significant energy for high-heat processes and continuous chemical reactions.

Transmission infrastructure is therefore not just adjacent to this conversation—it is central. Without an expanded, modernized grid, these plants cannot reach full capacity. Policies supporting high-voltage transmission, substation upgrades, and grid interconnection must align with mineral permitting reforms. We cannot refine at scale unless we power at scale.

Clean but Reliable Generation Will Be Key

Clean energy sources like wind, solar, geothermal, and emerging storage technologies are already playing critical roles. Yet, for at least the next decade, clean-burning natural gas remains vital for ensuring reliable and steady industrial energy supplies, particularly in regions underserved by renewable infrastructure. Natural gas can displace dirtier generation methods, such as diesel, widely used by Chinese refining operations.

Chinese refining—especially in Africa and Southeast Asia—is among the world's most carbon-intensive and environmentally destructive. America can do it cleaner and better—but only if we align mineral policy with energy policy. Every refinery requires reliable, sustainable power commensurate with the environmentally responsible minerals we aim to produce.

The permitting burden for these facilities remains immense. They must comply with complex environmental and regulatory statutes—varying significantly depending on whether facilities involve extraction, processing, refining, or combinations thereof. Key statutes include NEPA, Clean Air Act, Clean Water Act, Endangered Species Act, and numerous additional federal, state, and local regulations.

Key Federal Laws Applicable to Both Extraction and Processing:

- **National Environmental Policy Act (NEPA, 1970, President Nixon)**
Mandates environmental reviews (EIS/EA) for federal actions.
- **Endangered Species Act (ESA, 1973, President Nixon)**
Protects listed species and habitats; applies broadly to land disturbances.
- **Clean Water Act (CWA, 1972, President Nixon)**
Section 404 regulates dredge/fill into waters; Section 402 governs discharge permits.

- **Clean Air Act (CAA, 1970, amended 1990, Presidents Nixon & Bush)**
Regulates emissions, including pre-construction permitting for new sources.
- **National Historic Preservation Act (NHPA, 1966, President Johnson)**
Section 106 review required for federally involved projects potentially impacting historic resources.
- **Resource Conservation and Recovery Act (RCRA, 1976, President Ford)**
Governs treatment, storage, and disposal of hazardous waste.
- **Federal Land Policy and Management Act (FLPMA, 1976, President Ford)**
Governs public land use, mining access, and rights-of-way.
- **Safe Drinking Water Act (SDWA, 1974, President Ford)**
Regulates underground injection and ensures water source protections.
- **Migratory Bird Treaty Act (MBTA, 1918, amended 1936 and later, President Wilson)**
Protects migratory bird habitats during land disturbance.
- **Bald and Golden Eagle Protection Act (BGEPA, 1940, President Roosevelt)**
Requires permits and mitigation measures for eagle impacts.
- **Clean Air Act Conformity Rule (Section 176(c), 1990 amendment, President Bush)**
Ensures federal actions conform to local air quality plans.

Additional Laws Specific to Processing and Refining:

- **Toxic Substances Control Act (TSCA, 1976, President Ford)**
Regulates the use and disposal of chemical substances.
- **Emergency Planning and Community Right-to-Know Act (EPCRA, 1986, President Reagan)**
Mandates reporting of toxic chemical storage and releases to local communities.
- **Occupational Safety and Health Act (OSHA, 1970, President Nixon)**
Imposes safety and health standards for industrial and refining facilities.
- **Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 1947, amended 1972, President Nixon)**
Governs use and handling if processing involves chemical agents subject to FIFRA.

Many facilities are also subject to state-level equivalents of NEPA (e.g., CEQA in California), water quality standards, air quality boards, and tribal consultation requirements.

Complexity of Mineral Processing Permitting

What makes mineral processing unique is not just its complexity, but the scale and sequence of permitting steps—often requiring parallel reviews from multiple agencies, each with different authorities, mandates, and review timelines. This creates cumulative delays and multiplies litigation risk.

To unlock investment and reduce geopolitical dependence, we must acknowledge that permitting for extraction and refining cannot be treated as interchangeable. The latter requires tailored regulatory guidance, streamlined coordination, and the statutory ability for the lead agency to manage timelines across federal jurisdictions.

The Real Chokepoint: Processing and Refining

The single biggest misunderstanding in the critical minerals debate is that mining is the hard part. It isn't. The real chokepoint is processing and refining. Unprocessed minerals, no matter how abundant, do not translate into economic value or strategic security until they are converted into high-purity, application-ready forms through processing and refining. But the U.S. has fewer than five operational refining plants for battery minerals:

- **Graphite:** 100% imported, mostly from China. Only one new U.S. processing facility exists, in Alabama, with limited capacity.
- **Lithium:** Albemarle's Nevada plant is our only current operation, producing technical-grade lithium carbonate.
- **Nickel:** No commercial-scale refining in the U.S.
- **Manganese:** Zero domestic battery-grade processing capability.
- **Cobalt:** While the U.S. consumes substantial quantities of cobalt sulfate, refining is dominated by China, with virtually no active commercial-scale U.S. production.
- **Antimony:** No primary refining in the U.S. despite clear military applications; the Stibnite project in Idaho has been in review for over a decade.
- **Titanium:** The U.S. imports over 90% of its titanium sponge, with only one domestic producer (ATI) active, despite its strategic role in aerospace and defense.
- **Rare Earth Elements:** Mountain Pass ships concentrate abroad due to lack of domestic separation capacity. Heavy rare earths like dysprosium, terbium, and yttrium remain vulnerable to Chinese processing dominance. Ucore's planned Alaska separation facility and Energy Fuels' White Mesa pilot represent early-stage efforts, but full-spectrum domestic capacity is years away.
- **Zinc:** The U.S. operates a handful of smelters, but battery-grade zinc refining remains concentrated overseas, especially in South Korea and China.
- **Gallium:** No current U.S. production or refining; 100% import-reliant, largely from China, critical for semiconductors and defense electronics.
- **Fluorspar:** Imports exceed 90% for acid-grade applications critical for aluminum, semiconductor etching, and lithium-ion batteries. Domestic refining negligible.
- **Vanadium:** Modest potential recovery from tailings and coal byproducts but no commercial-scale refining, critical for energy storage, aerospace alloys, and defense applications.
- **Cesium:** Controlled almost entirely by Chinese firms, critical for atomic clocks and radiation detection. No U.S. refining exists.

The solution lies in integrated reform: tailored permitting frameworks specifically for mineral processing and refining, not just extraction. Only then can the United States unlock strategic autonomy and economic resilience.

V. Recommendations: A Roadmap Forward

Why Codification Matters

President Trump’s March 2025 Executive Order—**Executive Order 14285: Immediate Measures to Increase American Mineral Production**—was a decisive move to reprioritize critical mineral supply chains using the Defense Production Act and unified permitting timelines. Codifying this order in law is essential to ensure future administrations cannot reverse course, providing the certainty necessary for investor confidence, site selection, and permitting transparency. These are concrete tools already deployed by our allies. The EU’s Critical Raw Materials Act, Australia’s battery supply chain coordination model, and Canada’s permitting council reforms all recognize the same reality: success requires velocity and coordination.

While the Executive Order rightly focuses on federal lands, much of the U.S.’s critical mineral potential lies on private or adjacent non-federal lands. To meet industrial targets, Congress must broaden our permitting system to accommodate integrated supply chains crossing federal, tribal, state, and private lands.

Policy Recommendations

1. **Codify the March 2025 Executive Order:** Permanently prioritize mineral processing under DPA, unified NEPA timelines, and public project tracking.
2. **Expand and Enforce FAST-41:** Include all processing and recycling projects, reduce eligibility thresholds, and mandate monthly status updates on the Permitting Dashboard. Fully empower the National Energy Dominance Council (NEDC) and the Permitting Council to deploy coordinated strike teams addressing agency staffing and review delays. Tribes and states should receive the same tools and support.
3. **Milestone-Based Financing:** Establish federal milestone-based payment models for critical minerals, with structured progress payments tied to permitting, construction, and production milestones.
4. **Permit-by-Rule and Preapproval Tracks:** For brownfield sites or co-located facilities with prior EIS/EA approvals, establish permit-by-rule mechanisms and eliminate duplicative NEPA reviews.
5. **Transparency and Accountability:** Mandate federal agencies to publicly report permitting timelines, response rates, and outcomes through a quarterly updated OMB-led accountability scorecard.

VI. TPI’s Role and Commitment

The Permitting Institute was created not to passively critique but to actively engage with project developers, agencies, legislators, and communities. Through our "Truth in Permitting" initiative, we collect ground-level intelligence from hundreds of developers across infrastructure sectors, acting as a national clearinghouse for permitting best practices and problem-solving.

We advocate for a permitting system rewarding accountability, enabling smart infrastructure, and delivering timely results without sacrificing environmental integrity. Our rigorous policy architecture has directly informed FAST-41 expansions, One Federal Decision refinements, and legislative permitting reforms.

Transparency is the cornerstone of public trust. We support a fully modernized Federal Permitting Dashboard capturing comprehensive NEPA timelines, required federal authorizations, interagency disputes, and public comment schedules. This transparency translates directly into investment certainty and project readiness.

Beyond Washington, TPI actively partners with state, tribal, and regional authorities to create localized permitting councils that mirror federal efficiency tools. Pilot efforts, such as those in Arizona, have successfully integrated state-level dashboards and one-stop-shop project manager teams, a model we're replicating nationwide through advising governors and economic development agencies.

Since 2021, TPI's direct engagement has helped save infrastructure projects hundreds of millions of dollars by identifying inefficiencies, accelerating timelines, and avoiding legal and procedural setbacks. Our extensive permitting analytics and project-tracking models enhance predictable and effective reviews.

TPI is committed not just to understanding the permitting landscape but actively fixing it—writing smarter rules, empowering agencies, engaging transparently with stakeholders, and combating inertia. We are not here merely to observe; we are here to deliver solutions.

VII. The Midstream Imperative: Reclaiming America's Processing and Refining Edge

A. Overview of the Processing Gap

Processing and refining involve the chemical and physical transformation of mined ores into high-purity materials essential for industrial, defense, and technology applications. Each mineral requires a distinct and specialized refining pathway:

- **Graphite:** Must be purified, shaped, and coated to produce battery-grade anode material.
- **Lithium:** Converted into lithium hydroxide or carbonate, often through brine concentration and chemical processing.
- **Nickel:** Smelted and refined into Class 1 nickel sulfate for battery applications.
- **Manganese:** Requires conversion into high-purity sulfate for cathode manufacturing—a capability the U.S. currently lacks entirely.
- **Cobalt:** Must be leached, precipitated, and refined into sulfate or metal forms for EV batteries and aerospace superalloys; global refining dominance resides in China, often via opaque partnerships in the Democratic Republic of Congo (DRC).
- **Rare Earth Elements (REEs):** Necessitate complex separation into individual oxides (Nd, Dy, Pr), involving solvent extraction and calcination—processes that are both technically demanding and environmentally sensitive.

- **Zinc:** Roasted and leached into purified zinc sulfate or cathodes used in galvanizing, alloys, and defense electronics.
- **Copper:** Undergoes intensive smelting, electrorefining, and casting—an energy-intensive midstream process that has seen limited domestic expansion since the 1980s.
- **Titanium:** Requires chlorination, reduction, and vacuum distillation into titanium sponge and alloys critical to aerospace, defense, and additive manufacturing.

B. Capital Requirements and Project Economics

Establishing a domestic mineral processing facility typically requires investments ranging from \$300 million to over \$2 billion, dependent on mineral type, scale, and processing technology.

Examples include:

- **Kellyton Graphite Plant (Alabama):** Cost approximately \$245 million for an annual capacity of 7,500 metric tons of battery-grade anode material.
- **Thacker Pass Lithium Refinery (Nevada, planned):** Projected to exceed \$2.3 billion, covering both mining and refining infrastructure.
- **Piedmont Lithium Facility (North Carolina, planned):** Estimated at \$600 million capital expenditure for a 30,000-ton annual output of lithium hydroxide.

By contrast, Chinese processing plants benefit significantly from state subsidies, lower private-sector financial risk, and streamlined regulatory approvals.

- **Materion Beryllium Facility (Ohio):** Recent upgrades exceeded \$120 million, necessary for continued defense-sector alloy production.
- **ATI Specialty Materials (Pennsylvania):** Titanium and nickel alloy operations typically require between \$300 million and \$800 million for expansions and modernization.
- **Sherritt-Gordon Nickel Refinery (Texas, planned):** Anticipates capital investment ranging from \$700 million to over \$1 billion to produce nickel sulfate for electric vehicle batteries.
- **Ucore Rare Earth Separation Facility (Alaska, planned):** Has secured commitments over \$100 million but faces extensive federal permitting processes.

C. Time to Production and Bottlenecks

Even with secured funding and expedited permitting, U.S. mineral processing projects typically require 4–7 years from conception to full-scale production:

- **Engineering, Site Preparation, and Permitting:** 1–2 years.
- **Construction and Equipment Commissioning:** 2–3 years.
- **Process Optimization and OEM Market Qualification:** An additional 1–2 years, especially critical for battery applications where rigorous performance validation significantly extends timelines beyond federal permitting schedules.

This "qualification loop" with battery manufacturers—demanding precise reliability and consistency standards—is a substantial, under-accounted factor contributing to overall delays.

D. Strategic Market Share at Risk

China currently controls significant portions of the global critical minerals market:

- **Graphite:** 100% of U.S.-imported battery-grade graphite.
- **Lithium:** Over 60% of global lithium refining.
- **Manganese:** More than 90% of battery-grade manganese refining.
- **Cobalt:** 77% of worldwide cobalt processing.

Every delayed U.S. processing facility effectively cedes permanent market advantage to Chinese producers:

- **Battery-grade manganese:** U.S. domestic refining capacity is zero, while China holds a 95% global share.
- **Nickel sulfate:** No U.S. commercial-scale production; market dominated by China and Indonesia.
- **Graphite:** Chinese producers leverage state subsidies and export controls to dominate global markets, crippling U.S. competitiveness.
- **Cobalt sulfate:** Virtually all refining occurs in China, often linked to opaque conditions in the DRC.
- **Titanium sponge:** U.S. production ceased with TIMET's Nevada facility closure in 2020, leaving aerospace and defense reliant on imports from Japan and Kazakhstan.
- **Rare Earth Elements (e.g., dysprosium, terbium):** Despite extensive exploration, heavy rare earth processing remains monopolized by China.

Why Each Mineral Is Its Own Sector: Tailored Strategies and Strategic Alignment

Unlike infrastructure elements—such as highways or power grids—critical mineral processing does not benefit from standardized solutions. Each mineral demands a highly specialized refining process, differing significantly in energy intensity, environmental impact, and technological complexity. A lithium hydroxide plant cannot convert to graphite or nickel processing; manganese sulfate cannot be produced at a copper smelter. Each end-use sector demands specific purity, form, and performance standards unique to the mineral and application.

We must approach the critical minerals challenge strategically and realistically. Reducing reliance on adversarial regimes such as China does not necessitate building two decades of industrial capacity in five years—that is neither practical nor necessary. Instead, we need smarter international coordination, regulatory clarity, tailored permitting frameworks, and long-term policy consistency.

Removing unnecessary regulatory hurdles and prioritizing achievable bipartisan reforms can shorten approval timelines, unlock pent-up capital demand, and restore global investor confidence. Technological innovation in refining is advancing faster than regulatory frameworks;

our priority should be setting clear, transparent, and predictable rules that encourage private sector ingenuity and investment.

The current global marketplace is fractured, opaque, and dominated by adversarial interests. Resetting the regulatory landscape by offering predictable outcomes will signal to investors and allies alike that the United States is the safest, most secure location for critical mineral processing. We must recognize we are not technology-limited, but policy-constrained. By empowering innovation, removing unnecessary barriers, and fostering clarity and trust, we can reclaim our industrial and strategic advantage.

Permitting reform is achievable and urgent. I've had the privilege of working closely with members of this Committee, federal agency experts, and senior Trump Administration officials. Together, we have demonstrated that pragmatic permitting reform—built on transparency, merit-based evaluations, and bipartisan cooperation—is within our grasp.

E. Policy Imperatives

To decisively reverse these concerning trends, the United States must urgently pursue the following targeted policy reforms:

1. **Expand FAST-41 Scope:** Broaden FAST-41 eligibility explicitly to include midstream refining and chemical conversion facilities critical to the battery and clean energy supply chains.
2. **Predictable Permitting Timelines:** Align regulatory review schedules explicitly with Original Equipment Manufacturer (OEM) qualification cycles, thereby reducing unnecessary timeline extensions.
3. **Critical Minerals Infrastructure Bank:** Establish a federal infrastructure bank or dedicated public-private funding partnership to bridge capital gaps, reducing investment risk in domestic mineral processing facilities.
4. **Allied Supply Chain Partnerships:** Actively partner with trusted international allies to jointly qualify battery supply chains, reducing market entry timelines and sharing strategic resources.

VIII. Conclusion

The United States will not achieve secure, resilient critical mineral supply chains through mining alone. Without robust domestic refining and processing infrastructure, we remain reliant on foreign suppliers—particularly China—that do not share our strategic or environmental values. Our current dependence represents not merely an economic vulnerability but a direct threat to national security and technological competitiveness.

We face an urgent imperative to restore American leadership across the full critical minerals lifecycle, from mining through advanced processing and refining. This requires immediate policy actions that deliver clarity, certainty, and predictability to investors and industrial stakeholders. The recommendations outlined—codifying Executive Order 14285, expanding FAST-41, establishing milestone-based financing mechanisms,

deploying federal permitting strike teams, and ensuring transparent accountability—represent pragmatic, achievable steps capable of garnering broad bipartisan support.

This is not about deregulation but about creating a smarter, fairer, and faster regulatory framework. We must ensure our rules protect the environment, respect cultural resources, and engage stakeholders transparently, without allowing inertia or political stalemates to delay critical projects indefinitely.

We must recognize that mineral processing is uniquely complex—each mineral demands a tailored approach rather than a generic solution. It requires focused regulatory guidance, specialized permitting expertise, and clear performance standards. Our approach must align permitting timelines with industrial and OEM qualification cycles, significantly reducing unnecessary delays.

TPI's role in this effort is proactive and collaborative. We stand committed to partnering with policymakers, developers, communities, and allies worldwide, providing direct engagement, rigorous analysis, and practical solutions to overcome permitting barriers and accelerate infrastructure investment.

There are no partisan minerals, only American minerals, and it is in our shared national interest to transform permitting reform from debate into reality. Let us seize this moment—not just to diagnose problems, but to solve them decisively. With strategic clarity, regulatory coherence, and bipartisan commitment, we can ensure America reclaims its rightful place as the global leader in responsible, secure, and innovative critical mineral processing.

Thank you.