# Dossier: Phoenix Tailings, Inc.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $75,000.00

**Award Date:** 2023-05-04

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Phoenix Tailings, Inc. is a venture-backed company focused on sustainable mining and critical materials recovery. Their primary business is transforming mining waste (tailings) into valuable metals, rare earth elements (REEs), and other industrial materials, thereby eliminating the environmental liabilities associated with traditional mining practices. The company aims to solve the dual problems of increasing global demand for critical materials and the significant environmental impact of conventional mining, including pollution, habitat destruction, and greenhouse gas emissions. Phoenix Tailings' unique value proposition lies in its proprietary electrochemical processing technology that allows for the economically viable and environmentally responsible extraction of valuable materials from tailings, creating a circular economy model within the mining industry.

**Technology Focus:**

* Developed a proprietary hydrometallurgical and electrochemical refining platform capable of separating and purifying critical metals and REEs from mining tailings. The process uses significantly less energy and generates fewer harmful byproducts compared to traditional methods.
* Claims to be able to recover over 90% of valuable metals from tailings, including REEs, cobalt, nickel, and lithium, and produce high-purity metals suitable for battery manufacturing, electronics, and defense applications.

**Recent Developments & Traction:**

* September 2023:\*\* Secured a $16 million Series A funding round led by Prime Movers Lab. Additional investors included prominent figures in the mining and battery industries.
* June 2022:\*\* Announced a partnership with Rio Tinto to evaluate the potential of deploying Phoenix Tailings' technology at Rio Tinto's Kennecott copper mine in Utah.
* July 2021:\*\* Awarded a grant from the US Department of Energy (DOE) to support the development of a pilot plant for the recovery of rare earth elements from coal waste.

**Leadership & Team:**

* Nicholas Myers (CEO):\*\* Prior experience in materials science and engineering, with a background in developing advanced materials for energy storage and conversion.
* Tommy Leep (Chief Product Officer):\*\* Possesses extensive experience with electrochemical processes and chemical engineering.

**Competitive Landscape:**

* Energy Fuels Inc.:\*\* Energy Fuels is involved in uranium and rare earth element production and is actively processing uranium tailings. Phoenix Tailings differentiates itself through its broader focus on multiple metal recovery (beyond uranium and rare earths) and its electrochemical process which they claim has lower environmental impact.
* MP Materials:\*\* While MP Materials focuses on mining and processing rare earth concentrates from Mountain Pass, Phoenix Tailings targets the untapped resource of tailings, offering a potentially more sustainable and cost-effective source of materials.

**Sources:**

* [https://www.phoenixtailings.com/](https://www.phoenixtailings.com/)
* [https://primemoverslab.com/news/phoenix-tailings-closes-16m-series-a-to-scale-mining-waste-reclamation/](https://primemoverslab.com/news/phoenix-tailings-closes-16m-series-a-to-scale-mining-waste-reclamation/)
* [https://www.riotinto.com/news/releases/2022/rio-tinto-and-phoenix-tailings-to-test-mining-waste-transformation-technology](https://www.riotinto.com/news/releases/2022/rio-tinto-and-phoenix-tailings-to-test-mining-waste-transformation-technology)
* [https://www.energy.gov/sites/prod/files/2021/07/f88/Project%20Selections%20for%20Rare%20Earth%20Element%20Extraction%20from%20Coal%20Waste.pdf](https://www.energy.gov/sites/prod/files/2021/07/f88/Project%20Selections%20for%20Rare%20Earth%20Element%20Extraction%20from%20Coal%20Waste.pdf)