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# United States Senate

WASHINGTON, DC 20510-4804

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COMMITTEES  
APPROPRIATIONS  
ARMED SERVICES  
ENERGY AND NATURAL RESOURCES  
VETERANS' AFFAIRS

The Honorable Lloyd Austin  
Secretary of Defense  
U.S. Department of Defense  
1000 Defense Pentagon  
Washington, D.C. 20301-1000

Dear Secretary Austin,

I write to you today in support of a program I authorized and funded in the Fiscal year 22 National Defense Authorization Act and Consolidated Appropriations Act with the goal of identifying a domestic commercial supply of Rare Earth Elements (REE) and Critical Minerals (CE) from the Acid Mine Drainage (AMD) produced by coal mining. This burgeoning technology also has the added benefit of remediating our lakes, rivers, and streams from the blight of AMD pollution.

Specifically, I am writing in support of a response to a Department of Defense Industrial Base Analysis and Sustainment program Request for Solutions, entitled: "Rare Earth Element (REE) Initiatives Prototype Projects 9 Nov 2022-IBAS." The response I write in support of was submitted jointly by the West Virginia University Research Corporation, Virginia Tech, and Montana Technological University, entitled: "Demonstration and economic evaluation of Rare Earth Element/Critical Materials (REE/CM) concentrate production at coal and hard rock AMD treatment sites."

If selected, the project team will evaluate and scale-up its AMD concentration technology at three primary resource recovery sites:

1. A mid-sized 500-1,000 gpm AMD treatment unit in WV
2. A small 150 gpm coal-based AMD treatment unit in WV
3. A large, 7,000 gpm AMD treatment plant at Montana Resources' copper mine in Butte MT

Nearly all of the infrastructure needed to install the recovery technology is in place and operational at each site. Initial work under this project will make the necessary retrofits to bring each site into REE/CM production. Afterward, the sites will be continuously operated, generating REE/CM preconcentrate to support a planned U.S. Central REE/CM Refinery.

I urge your thoughtful consideration of this critical proposal that will make strides in developing a domestic supply of REE/CM. I look forward to hearing from you soon about the status of this Request for Solutions.

With warmest regards,



Joe Manchin III  
United States Senate