

Appendix v. Public Summary Document

Name of Applicant: School of Energy Resources (SER) at the University of Wyoming (UWyo)

EMF Funds Requested: \$500,000 **Total Project:** \$2,574,095

Institutional Principal Investigator: Davin Bagdonas, Senior Research Scientist, University of Wyoming School of Energy Resources

Project Title: Assessment, Characterization, and Planning for Carbon Ore and Critical Minerals/Materials Resources Utilization in the Rocky Mountain Region

Overall Project Objective: The proposed project seeks to assess unconventional and secondary sources of critical minerals and materials (CMM) and carbon ore resources within the U.S. Department of Energies' (DOE) Carbon Ore, Rare Earth Elements and Critical Minerals (CORE-CM) Region 6 (US Rocky Mountain Region; see <https://netl.doe.gov/resource-sustainability/critical-minerals-and-materials/core-cm> for additional information), to significantly contribute to a national effort in developing and securing domestic supply chains of critical minerals. This proposed effort employs associated technology innovation, workforce development, and community engagement and impact analyses to further develop regional critical minerals supply chain development first realized in CORE-CM phase I efforts across the Rocky Mountain Region, including the University of Wyoming School of Energy Resources (UW-SER) who led efforts in both the Greater Green River/Wind River and Powder River Basins. This coalition team also includes previously funded CORE-CM Phase I project leaders from New Mexico Institute of Mining and Technology, and University of Utah. A regional-scale assessment, sampling, and characterization of CMM resource types will contribute datasets to achieve the DOE aim of developing a Region 6-specific prospectus. A Community Benefits Plan aims to provide access to project opportunities for people of all backgrounds, forge equitable engagement with disadvantaged communities, and foster a teaming partner culture of inclusion. Outcomes include information to help industries and communities to realize the full commercialization opportunities and economic value from a secure, reliable, and sustainable domestic supply of CMM and coal related materials.

Project Consortium: University of Wyoming, New Mexico Institute of Mining and Technology, University of Utah, Colorado School of Mines, Montana Technology University, Western Wyoming Community College, Utah State University Eastern, Western Colorado University, Lamar University, Idaho National Laboratory, Los Alamos National Laboratory, Sandia National Laboratory, Associated Governments of Northwest Colorado, Colorado Geological Survey, Idaho Geological Survey, Utah Geological Survey, Utah Advanced Materials and Manufacturing Initiative, Kemmerer Operation Group, JWP Consulting, Sonash, LLC, and Wolverine Fuels, LLC.

Project Methods: Broad tasks to meet these objectives will be completed in the following categories: Task 1.0 - Project Management and Planning; Task 2.0 – Regional Resource Assessment and Initial Planning; Task 3.0 – Regional Assessment of CORE-CM Resources, Sampling, and Characterization; Task 4.0 – Regional Overview for Infrastructure, Industries, and Business, Including Site Strategies; Task 5.0 – Stakeholder Outreach and Education; Task 6.0 – Technology Innovation Center (TIC) Plans; Task 7.0 – CORE-CM Closed Working Groups (Participation in); Task 8.0 – Critical Materials Collaborative (Participation in). The team will provide strategic planning across the project to prove feasibility and reduce risk in future project phases.

Project Outcomes: The project will develop strategic and novel development plans for the abundant CORE-CM feedstocks located in Western Wyoming and the greater Rocky Mountain Region including waste-streams from coal, coal byproducts, trona, helium, uranium, phosphate, oil and gas industries. Expanding and incorporating a growing coalition of stakeholders, along with planning directly in communities will provide a solutions under all eight objective tasks listed above, following proven low-risk methods from an experienced team. Additionally, this project will provide CORE-CM education opportunities and information to the public and incorporate public input to gain social license for full implementation in later phases.