

Garrett Lindemann

As a long-time resident of Big Horn, and Sheridan, as well as a life science consultant to RAMACO Carbon LLC, for many years, I support the Brook Mine application, and the CARBON ADVANCED MATERIALS (iCAM) centers plans.

The RAMACO Carbon vision of coal being a carbon ore is novel. Providing a game changing view, a new perspective, on determining the value of coal, and the products that can be derived as well as manufactured using the constituents of coal. Carbon is a main component of coal and of the human body as well as living plants and animals. This is not by accident, since coal was formed from the flora, and fauna of swamps, bogs, and estuaries subjected to time, pressure, and heat.

About 170 years ago, in the 1850's – since before Wyoming was a territory -- and through to the 1940's a large amount of research was performed on coal and coal products. Derived from this research were fuels, oils, fine chemicals, plastics, fertilizers, and many personal as well as household items. All of this was started by the generation of the first synthetic dye in 1865 (aniline purple) and the first synthetic pharmaceutical (aspirin) in 1897 as the result of research into chemicals derived from coal. From these very humble beginnings companies such as Roche, Pfizer, Abbott and Thermo Fisher have their roots as does the roots of life science and biotechnology. At that time, the coal research was at the bleeding edge providing two researchers with Nobel Prizes. The work now being undertaken at RAMACO Carbon and in conjunction with our partners, nationally and internationally, is at the forefront of science and innovation. Eventually, this current work will be converted to more high skill and high value positions with companies that have the ethos "carbon is too valuable to burn" and "no molecule left behind".

In closing, and in my opinion, opportunities to have companies underpinned by these ethos that are born locally, and grow locally, embracing the surrounding areas' culture and environment is at least a once in a generation event, and more likely, once in a century. Therefore, I recommend the approval of the Brook Mine application.