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Comments: Heavener Coal Project comments

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I oppose the permitting of underground mining of coal in the Ouachita National Forest for the reasons below.

Climate Change

Dating back to 2009, the forest service has requested that climate change be included in the permitting of Forest Projects (Strategic Framework for Responding to Climate Change). For instance, "[hellip] make informed decisions and provide planning direction responsive to changing climate, using climate change science and projections of change in temperature and precipitation patterns [hellip] that is scientifically defensible."

Since 2009 it has become absolutely clear scientifically in the US and the entire world that emission of CO2 is a primary driver of global warming. This proposal is one of the worst in terms of aggravating the CO2 problem.

Over 20 years, the Heavener Project proposes to mine some 70 million tons of coal1, half from the public land in the Ouachita National Forest, and then transport it, in some cases more than 10,000 miles, to countries such as China, India, and Brazil, where it will be used in blast furnaces for the production of steel.2 Although there may be efforts to reduce the emission of CO2, SO2 and other pollutants in this process, the USFS, ADEQ, and the federal government have essentially no control over standards in other countries.

The financial, CO2, and energy consequences are daunting and not solvable at this time. For instance, when a ton of coal is burnt, more than 2 tons of CO2 are produced. It seems as if excess atmospheric CO2 will have to be sequestered underground if there is to be any chance to limit global warming. Whereas the current price of ton of coal is $115, the cost of sequestering CO2 underground, returning coal CO2 to its origin in this case, is several times higher! The energy cost of producing and processing coal, and then sequestering the resulting CO2 exceeds the energy value of the initial coal.

This analysis does not include the extraordinary cost of transportation in this proposal, and the resulting consumption of fossil fuels in the process.

Methane (see below) is a powerful greenhouse gas source from mines whether it is routinely vented or flared.

Power line intrusion

The proposed power line and accompanying service road requires a land easement in the Ouachita Forest when there are other access options along established roads and rail lines from the east and west. This is not just a financial evaluation since forest land and wildlife tends to be undervalued in accountant spread sheets. The easement is for 30 years, but the proposed 20 year mining operation, given the history of coal mining in this area and the declining market for coal, may exist for a shorter period. The methods of easement maintenance, e.g. herbicide use, should be detailed. In any case, is the power line to be removed after mining ceases, and whose

responsibility is this?

Methane Hazzard

Methane is the second most important green house gas after CO2, and active and abandoned coal mines contribute about 8% of all US methane. Methane emissions from coal mines has varied between 0.1 and 3 million tons per year. So, in addition to a worker safety issue, minimizing the mine methane emission is important. Does current technology allow methane capture? Are there accurate estimates of methane emissions from this mine? What are the provisions for monitoring methane after closure? Is it possible to estimate climate damage from these emissions?

Acid Drainage

Hundreds of streams in Appalachia have been sterilized by acid mine drainage e.g. elevated concentrations of sulfate, iron, aluminum, and other potentially toxic metals. The extent of such problems with the historically small coal mines in the western Arkansas River Valley should be available from the Arkansas Coal Project administered by the Arkansas Department of Environmental Quality (DEQ). They have completed 157 reclamation projects.

Typical procedures for reclamation of mine waste and acid drainage include rainwater dilution and redistribution and seeding of overburden.3

The potential long term problems with acid drainage, surface and groundwater, is important enough to require a study by an outside agency - not the permittee or DEQ.

Subsidence

Roof bolts are installed in underground mining to prevent roof cave-ins, i.e. subsidence. There is no information in the permit indicating depth of the mining procedure and susceptibility to subsidence. Generalized statements to the effect of "not usually being a problem" are inadequate given the longevity of forest use after the mine is closed. Any pipe or vent hole becomes a potential sinkhole.

Other mining areas in the US, e.g. Appalachia, have had a long experience with these problems, and there could be concrete data on the likelihood of subsidence problems. The Arkansas Office of the State Geologist has some examples of subsidence on their web page but it is not known if they have staff with appropriate expertise. So, I suggest an expert be brought in to study the long term subsidence problem.

Water table disturbance

There is no information on the water table or the likelihood of significant disturbance.

Poteau River and nearby streams

Even though the Poteau River has been a 303(d) stream in Arkansas for many years, there is no baseline water quality information given on the streams or groundwater draining the proposed mining area. The Arkansas Water Center at UAF might be a source for a long term study.

Air quality standards for the Poteau Mountain Wilderness

The mine is with 4 miles of the Poteau Mountain Wilderness and in line with prevailing winds. Methane emissions, dust and other standards for wilderness should be met.

Bonding

The bonding for reclamation on coal mines has been a continuing problem in Arkansas. Once the mine closes, who finishes the clean-up if there is an inadequate bond? The Arkansas severance tax of 10 cents per ton, with revenue split 25/75 split between county and state, is entirely inadequate to keep up with road damage, much less accumulate over the years to cover reclamation, and remediation in the long run. There is sporadic money from the industry, and distributed by the Federal Government, but probably not enough or reliably enough for restoring an abandoned mine. The bonding amount should be large enough to cover eventual liabilities - even long term ones beyond mine closure, and the amount should be available to the public.

Other sources of pollution Although the proposed processing facility is on private land, it doesn't follow that there is no impact on neighbors including the national forest. For instance, wash water from coal washing, coal dust, methane and other gasses as above. And there is truck traffic and noise. 3.5 million tons of coal represents 87,000 big truckloads per year, or 33,000 train cars, resulting in diesel, spills, more dust and road damage. There will be overburden piles with potential drainage issues.

Underground access

If the FS rejects the permit is it possible that a BLM permit might still be valid with underground access to coal via the facilities on private land?

Conclusion: There needs to be much more information about the proposal and the ability of Ouro to meet long term environmental standards. Even if they were a perfect mining company though, this proposal is in the exact opposite direction of addressing climate change.

Footnotes

1. This project proposes producing 3.5 million tons per year, most of it exported. By comparison Arkansas consumed 12 million tons of coal in 2021, almost all for electricity production and almost all imported from Wyoming. Arkansas has had no active coal mines since 2017. In any case the local coal price would not have

been competitive with Wyoming coal.

2. The steel industry consumes 5.9 % of global energy and emits 6-9 % of global CO2 emissions.

3. In rainwater dilution, contaminated water is contained in surface ponds and rainwater (surface water) is allowed to accumulate in the ponds until pollution levels meet DEQ standards, and then it is released. Is this the best solution to pollution - maybe after all possible, reasonable reduction is met.