

# Capturing methane released by mines is a work in progress

**R**ecently, I have been approached repeatedly about the venting of methane gas from the coal mines that are located in the North Fork Valley just east of Paonia. The methane is being vented to protect mine workers. Comments have varied from individuals who are worried about the future of the mines to those who are appalled by the idea that methane is being released into the atmosphere. Several organizations have gone so far as accusing the Grand Mesa, Uncompahgre and Gunnison National Forests of being irresponsible by not prohibiting methane venting.

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managing federal coal resources. The Forest Service role is limited to providing measures to protect surface resources that should be included on leases by BLM, or in the mining plan and permit.

Currently, there are several obstacles to overcome before methane can be captured and used. First, there are no federal or state regulations which control or prohibit methane venting into the atmosphere, and there are no legal mechanisms that can be used to require capturing of the gas. This means that any effort to put the gas to beneficial use will be strictly voluntary.

Secondly, there is the issue of gas ownership; either the gas resource under the coal mine is not under lease, or the gas is under lease to a separate company. For the situation where there is no gas lease, the Grand Mesa, Uncompahgre and Gunnison National Forests are working to rectify this problem by forwarding gas lease parcel nominations to the BLM and, hopefully, getting these leases auctioned.

Lastly, the technology to successfully and economically capture and use the gas requires a great deal of site-specific research and development. The coal companies, the Environmental Protection Association and several private consultants are currently exploring capture options for the North Fork mines.

This forest recently entered into a memorandum of understanding with the Delta-Montrose Electrical Association to jointly promote opportunities for renewable energy sources on the national forest lands, including analyzing the feasibility of generating electricity from the

methane. The forest also approached the federal Mine Safety and Health Administration about the feasibility of flaring the gas, which would burn off the methane to mitigate greenhouse gas released to the atmosphere. We were recently notified that flaring may be possible in the long term, after several years of testing have been completed (at an inactive, sealed mine where safety would not be jeopardized), but would not be approved in the near future.

Mines in the North Fork Valley continue to be a major economic driver for several western Colorado counties and produce about 40 percent of the coal mined in this state. These mines produce some of the cleanest coal in the United States. The coal meets the Clear Air Act standards for "compliant and super compliant" coal because of high British Thermal Unit values, low sulfur, ash, and mercury content. Unfortunately, along with clean coal, the mines also produce fairly large volumes of methane gas that can be very explosive and deadly for miners.

**Finding just the right solution for utilization of methane, thereby reducing greenhouse gas emissions, will not happen overnight but is on the nearby horizon. The GMUG National Forests will continue to "lead the charge" with our partners to explore options because it is the right thing to do for the environment. We are committed to help these mines continue operating while providing for worker safety, and improving environmental compliance.**

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