Memorandum

To: U.S. Department of the Interior

From: Crystal Valley Methane Working Group

Date: December 1, 2021

Re: Coal Mine Methane Destruction Project at the Redstone-area Mines in Colorado

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The Crystal Valley Methane Working Group is a coalition of nonprofit, public and private organizations and local governments working together to address coal mine methane pollution in western Colorado. The geography we represent has historically been a major coal mining region, and as our communities have largely transitioned to new economies, we remain saddled with significant methane pollution leaking from abandoned coal mines. The majority of this coal mine methane is federally owned, and the Department of the Interior (DOI) and Bureau of Land Management (BLM) have not identified a regulatory mechanism for capture and destruction of the methane pollution despite a long-running dialogue with local stakeholders, including local governments, who have conceived potential projects to do so.

The abandoned coal mines above Redstone in Pitkin County are currently venting an estimated 1.3 million cubic feet per day of methane, equivalent to the climate pollution of 180,000 passenger vehicles annually. According to the Colorado Energy Office, the mines above Redstone are some of the most gassy in Colorado, and their emissions create as much warming as the entirety of Pitkin County on an annual basis. Methane is a super pollutant for global warming. When released into the air, methane absorbs the sun's heat and has a warming potential of 86 times that of carbon-dioxide (CO_2) over a 20-year timespan. Fossil fuel methane emissions trap almost 30 times the atmospheric heat compared to CO_2 over a century. Therefore, destroying methane is a powerful tool to blunt temperature increase and mitigate climate change.

Recognizing the importance of addressing coal mine methane pollution in Colorado, Senator Bennet developed provisions in the Colorado Outdoor Recreation Economy Act (CORE Act) to establish a pilot program within the BLM to facilitate projects that would destroy coal mine methane pollution. Several such projects have been conceived by private enterprises in Colorado, working in collaboration with local governments and other stakeholders including Crystal Valley Methane Working Group organizations. These projects are unable to move forward in the absence of a regulatory framework such as that directed in the CORE Act. Unfortunately, the CORE Act has not yet been passed by Congress, and the climate crisis demands urgent action.

We therefore request that DOI utilize its existing and broad authority under Section 302 of the Federal Land Policy and Management Act (FLPMA) to permit a coal mine methane destruction project at the abandoned Redstone-area mines in Colorado. We furthermore request that DOI authorize testing activities at the mines to inform project development. We lastly request that DOI reinitiate the waste mine methane rulemaking that was initiated in 2014 to facilitate coal mine methane destruction activities on all federal lands.

FLPMA Section 302(b) provides authority for DOI to authorize coal mine methane destruction.

FLPMA Section 302(b) directs the Secretary of the Interior to regulate "the use, occupancy, and development" of federal lands "through easements, permits, leases, licenses, published rules, or other instruments as the secretary deems appropriate. 43 U.S.C. § 1732(b). This broad authorization allows BLM to authorize land uses through competitive processes or noncompetitively through private negotiations. *See, e.g.,* 43 C.F.R. § 2920.5-4(b). Conveyances pursuant to FLPMA are to be construed narrowly, and only the specific commodity named in the conveyance to be used or disposed of, with all other resources remaining under federal ownership and control. *See, e.g., U.S. v. Grand River Dam Auth.*, 363 U.S. 229, 235 (1960) ("all federal grants are construed in favor of the Government lest they be enlarged to include more than what was expressly included"); *U.S. v. Alaska,* 521 U.S. 1, 35 (1997) (a grant of federal property "must be construed strictly in the United States' favor").

Under current Interior Board of Land Appeals (IBLA) decisional law (*Vessels Coal Gas, Inc.*), coal mine methane cannot be captured or destroyed using oil and gas leases because such methane is not a "gas deposit" within the meaning of the Mineral Leasing Act (MLA). Therefore, FLPMA is the appropriate statute under which to authorize Redstone-area methane destruction projects given the Department's current interpretation of coal and gas deposits. 30 U.S.C. § 193 ("the deposits of coal …. and gas, … in lands valuable for such minerals, … shall be subject to disposition only in the form and manner provided in [the MLA]…").

Accordingly, BLM should use its authority under FLPMA Section 302(b) to lease the rights to capture coal mine methane, whether through a competitive or noncompetitive process. 43 U.S.C. § 1732(b). Aside from a FLPMA lease, BLM could use "other instruments" to allow for coal mine methane capture and use. For example, the agency could enter into a contractual relationship with a third party pursuant to FLPMA Section 302(b) under which BLM would retain ownership of the methane and the third party would be paid a service fee to mitigate climate pollution on federal lands by destroying methane emissions. Either of these scenarios would provide a workable path forward for the Redstone-area methane destruction projects.

The federal agencies should collaborate on one NEPA process for the Dutch Creek methane destruction project.

The abandoned Redstone-area coal mines are on U.S. Forest Service land managed by the Aspen-Sopris Ranger District of the White River National Forest. Therefore, in addition to a FLPMA authorization, the project will require approval from the U.S. Forest Service. We recommend the agencies collaborate on one Environmental Impact Statement (EIS) for the project that would authorize both the methane capture and destruction in the context of DOI's minerals management responsibilities and the surface use plan of operations in the context of the Forest Service's surface management responsibilities. While ultimately each agency will need to issue its own decision, efficiencies can be gained in a collaborative NEPA process.

It's not unusual for federal agencies to collaborate on NEPA for projects which require multiple agencies' authorization. For example, the Forest Service and BLM frequently collaborate on

NEPA for master development plans, with each agency issuing its own decision. Each agency would thus complete its own decision process as set forth in its respective regulations, including protest, objection and appeals processes.

We note that the governing management plan for the area, which is the 2002 White River National Forest Land and Resource Plan as amended by the 2015 White River National Forest Oil and Gas Leasing EIS, closed the area to oil and gas leasing. The 2015 Oil and Gas Leasing EIS pertains to leasing of federal minerals pursuant to the MLA and the Federal Onshore Oil and Gas Leasing Reform Act (FOOGLRA). As described above, Redstone-area methane destruction projects would be authorized under FLPMA Section 302(b) rather than the MLA, and so the oil and gas leasing closure does not preclude the agencies from issuing a lease for this project or require a forest plan amendment. Of course, the Forest Service may determine that a plan amendment is required for other elements of the project.

Test wells are needed in the immediate future to inform project development.

A private entrepreneur, Delta Brick & and Climate Company, has conceived the technical aspects of a project to capture and destroy coal mine methane at the abandoned Dutch Creek Number 1 and 2 Mines, with possible inclusion of the Coal Basin Mine and LS Wood Mine. The company has conducted significant research to determine the nature and source of the methane pollution leaking from the mine. This research has included field surveys with methane detection equipment. Venting methane has been observed in significant quantities from many sites, with concentrations as high as 3% at the surface. Delta Brick & Climate Company believes these observations corroborate the expected emissions as laid out in the 2016 Colorado Energy Office report and 2017 EPA report. Based on this research, Delta Brick & Climate Company has developed technical components of a project with reasonable certainty of success.

At this stage in project development, test wells are necessary to gain more specific understanding of the methane resource and develop prototypes of the technology that would be used for this methane destruction project. Test wells are required prior to finalizing a proposal that would be the subject of a NEPA process for the full project.

Activities associated with the test wells would include the destruction of federally owned methane. Therefore, we request your assistance with identifying a process by which BLM can authorize test wells for this project in the immediate future.

DOI should reinitiate the waste mine methane rulemaking.

In 2014, BLM issued an advance notice of proposed rulemaking to establish a program to capture, use, or destroy waste mine methane that is released as a direct consequence of underground mining operations on federal leases for coal and other minerals.[1] This rulemaking never moved forward for reasons that are unknown to us. While we are requesting a near-term FLPMA authorization for a specific project at the abandoned Redstone-area mines, we also would like to see coal mine methane emissions addressed at a much larger and more coordinated

[1] 79 FR 23923, available at https://www.federalregister.gov/documents/2014/04/29/2014-09688/waste-mine-methane-capture-use-sale-or-destruction.

scale. Therefore, we recommend DOI reinitiate the waste mine methane rulemaking as soon as the Department's regulatory schedule allows in order to establish a programmatic framework for these activities across all federal lands.

In conclusion, DOI has an opportunity to help western Colorado address a significant source of climate pollution while contributing to the greenhouse gas management economy and the sustainable future of western communities. The Crystal Valley Methane Working Group would be glad to meet with DOI and/or BLM officials, or provide additional information regarding this important issue.