Susitna River COALITION
Supporting Salmon, Wildlife, and Community

October 25, 2024

The Alaska Oil and Gas Conservation Commission (AOGCC)
333 west 7th Avenue
Anchorage, AK 99501

Submitted electronically to aogcc.ccus@alaska.gov

Re: Docket Number: R-24-002
Carbon Storage Facility Regulations
Class VI Primacy Application

The Susitna River Coalition (SRC) is a community-based organization in Talkeetna dedicated to protecting the Susitna watershed and supporting the ecosystems and communities that rely on it. On behalf of our membership of 14,000 individuals, groups, and businesses, we submit these comments regarding the Alaska Oil and Gas Conservation Commission's (AOGCC) application for Class VI primacy from the EPA.

While carbon capture and storage (CCS) could play a role in reducing emissions, transferring regulatory oversight of Class VI wells to the AOGCC introduces significant risks. This shift could expose the state of Alaska to long-term liabilities, financial burdens, and environmental hazards while diverting focus from more effective energy solutions.

1. AOGCC's Limited Capacity and Incompatibility with Class VI Regulation

The AOGCC's expertise is rooted in regulating oil and gas operations, which differs from the unique, long-term challenges associated with underground CO2 storage. Class VI wells require specialized oversight, including continuous monitoring for potential leaks and ensuring the secure, permanent containment of CO2. Overseeing these operations would require the AOGCC to develop new resources, provide additional training, and build technical expertise - tasks the EPA has been managing since 2010.

States like North Dakota have faced difficulties managing Class VI primacy, including cost overruns and administrative challenges. The AOGCC risks overextending its capabilities by

taking on these new responsibilities. Allowing the EPA to maintain regulatory authority ensures that oversight remains consistent and objective while reducing unnecessary strain on the state's resources. These multifaceted permit applications require input from experts in geology, geochemistry, risk assessment, finance, and law, along with advanced computational tools for evaluating reservoirs and forecasting subsurface behavior. *(EPA/NRAP Report: Rules and Tools Crosswalk)* Building the necessary capacity for such specialized tasks could overwhelm the AOGCC, given its limited experience with CCS projects within the state.

2. Financial and Legal Risks from CO2 Leakage

CO2 leakage is a real and serious risk at every stage of the CCS process - during transportation, injection, and long-term storage. The 2020 Denbury (now Exxon) pipeline rupture in Satartia, Mississippi, resulted in almost 50 residents requiring hospital treatment, along with evacuations and environmental damage, and releasing over 31,000 barrels of CO2, demonstrating the unpredictability of CO2 infrastructure. *(APNews: Mississippi Pipeline Rupture)* Alaska could face similar risks, especially with old or poorly sealed wellbores providing pathways for CO2 to escape.

Financial responsibility for CO2 leaks and remediation in Alaska is shared between the storage operator, the state, and the Carbon Storage Closure Trust Fund. While this system aims to minimize the state's financial exposure, uncertainties remain about long-term liability, the adequacy of the trust fund, and the risk of costs exceeding available resources - leaving taxpayers potentially vulnerable. Concerns have arisen about cost overruns, particularly after the "completion phase," when the state assumes responsibility for long-term monitoring and maintenance. If leaks occur beyond this phase and the trust fund proves insufficient, the financial burden could shift to the state, public utilities, and ultimately taxpayers. Monitoring and remediation may be required for decades, as geological shifts could compromise storage sites, posing a significant long-term liability that could strain public funds and resources.

3. Misalignment with Alaska's Energy Goals and Opportunity Costs

Pursuing Class VI primacy could divert attention and resources away from more effective energy strategies. The proposed CCS project linked to a new coal-fired plant in Alaska underscores this risk, with an estimated $3.6 billion capital cost. *(Institute of Northern Engineering: Low Carbon Feasibility Study)* According to energy experts at the 2024 Mat-Su Economic Conference in Wasilla, investments should focus on reliable, low-risk solutions, especially during a time of economic uncertainty. Making the wrong investment decisions carries a real opportunity cost. To ensure success, the focus must be on reliability, affordability, and redundancy - criteria that carbon capture and low-grade coal struggle to meet.

CCS technology is not only costly but energy-intensive. Brent Sheets from the University of Alaska's Petroleum Development Laboratory noted that 25% of the power output from the proposed CCS project would be used just to operate the capture equipment. This reduces the efficiency of the entire energy system, compounding Alaska's already high energy costs.

Prioritizing smaller and scalable projects distributed throughout the Railbelt offers a more sustainable and cost-effective path forward - a point frequently emphasized by senior staff and board members of Matanuska Electric Association (MEA). A 2020 study by the National Renewable Energy Laboratory (NREL) found that shifting the Railbelt region to 76% renewable energy with mostly wind and solar by 2040 would be the most economical option. Focusing on CCS instead risks creating stranded assets if the technology becomes economically unviable.

HB 50 could jeopardize Alaska's bid for Class VI primacy, which gives the state authority to regulate CO2 storage wells under the EPA's UIC program. By promoting CO2 use for Enhanced Oil Recovery (EOR) instead of focusing solely on permanent storage, the bill signals that Alaska prioritizes oil production over long-term climate goals. Section 41.06.185 of HB 50 even exempts EOR projects from carbon storage regulations, undermining CCS's purpose. Effective regulation must ensure captured CO2 is stored permanently, not used to extend the life of oil fields.

4. Long-Term Monitoring and Community Safety

Ensuring the long-term containment of CO2 in underground formations is inherently uncertain. Geological shifts, unforeseen faults, or old oil and gas wells can provide escape routes for stored CO2, negating the climate benefits of CCS. (*Institute for Energy Economics and Financial Analysis*) Notable examples of failures in gas containment include the 2015 Aliso Canyon gas leak in California, which released 97,000 metric tons of methane, marking the worst man-made greenhouse gas disaster in U.S. history. Another instance is the In Salah CCS project in Algeria, which began injecting CO2 in 2004 but was suspended in 2011 due to concerns over seal integrity and unusual movements of the trapped CO2, despite a total cost of $2.7 billion. (*In Salah Fact Sheet: Carbon Dioxide Capture and Storage Project*) Once injected, CO2 must be monitored for decades, if not centuries, to detect leaks and address environmental impacts.

The Mississippi pipeline rupture offers a warning about the potential risks. Similar incidents in Alaska could contaminate groundwater, harm ecosystems by soil acidification and lowering pH levels in aquatic environments, and require costly remediation efforts. If the AOGCC is granted Class VI primacy, it would assume responsibility for long-term oversight, further increasing the state's financial liability.

5. The Energy Cost of Carbon Capture and the Renewable Advantage

CCS offers limited benefits in reducing emissions - especially when it supports the development of new fossil fuel plants, such as coal facilities. While CCS captures carbon after coal is burned, it does not reduce the amount of coal needed to produce electricity, meaning no energy savings are achieved. In contrast, renewable sources like wind and solar generate electricity without burning fossil fuels, directly reducing both fossil fuel consumption and emissions.

Additionally, CCS is an energy-intensive process that requires significant power to capture, compress, transport, and store CO2. Much of this energy still comes from fossil fuels, which offsets some of the emissions reductions achieved. Renewables, on the other hand, become even more effective when paired with energy efficiency measures - such as better insulation, smart grid technology, and efficient appliances - that reduce overall electricity demand and lower the need for energy generation.

With wind and solar energy costs steadily declining, building new infrastructure with these technologies is more affordable than retrofitting old coal plants with CCS or constructing brand new fossil fuel plants to use with CCS. While CCS may extend the life of fossil fuel infrastructure, renewables provide a sustainable, long-term solution aligned with climate goals. They reduce emissions, enhance energy efficiency, and pave the way for a more resilient low-carbon future.

6. Public Funding Concerns

Large-scale CCS projects depend heavily on public funding because private investors are hesitant to take on the financial risks due to high costs, infrastructure demands, and the need for long-term price stability. Granting Class VI primacy could shift these financial burdens to State funds and public utilities - and ultimately, taxpayers and ratepayers - creating a kind of “social security system” for aging fossil fuel technologies. This would subsidize companies seeking to prolong operations under the guise of CCS, diverting resources from investments in newer, more efficient energy solutions.

7. Partnering for Transparent and Community-Aligned CCS

AOGCC’s extensive knowledge in oil and gas development uniquely positions it to work alongside other regulatory bodies to support effective CCS projects in Alaska. By collaborating with the EPA, there is an opportunity to enhance public trust through additional transparency and shared best practices, ensuring CCS initiatives are well-aligned with community interests.

Encouraging public participation can further strengthen these efforts, offering valuable insights that enrich decision-making and project outcomes. Providing Alaskans with opportunities for

input, access to project information, and open forums helps foster a shared vision for sustainable energy solutions in Alaska.

Conclusion: Rejecting Class VI Primacy and Pursuing Smarter Energy Investments

The AOGCC's application for Class VI primacy introduces challenges for Alaska. The agency lacks experience in managing the complex, long-term responsibilities required for effective CCS oversight. Shifting these duties to the AOGCC could create financial liabilities, environmental risks, and administrative burdens, potentially limiting the state's capacity to pursue other energy priorities.

Focusing on established solutions - such as renewables, energy efficiency, and infrastructure improvements - would provide more immediate and reliable benefits for Alaska's energy future. Retaining EPA oversight of Class VI wells ensures independent, specialized regulation while preventing unnecessary strain on state resources.

The Susitna River Coalition recommends the state to abandon the AOGCC's pursuit of Class VI primacy and instead focus on investments that build a sustainable and resilient energy future for Alaska.

Thank you for the opportunity to comment.

Best Regards,

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Resources referenced in the above comments:

- Rules and Tools Crosswalk: A Compendium of Computational Tools to Support Geologic Carbon Storage Environmentally Protective UIC Class VI Permitting A study by the EPA (United States Environmental Protection Agency) and NRAP (National Risk Assessment Partnership), 2022
- "Federal order reached after Mississippi pipeline rupture" Article in AP News, April 7, 2023

- Cook Inlet Region Low Carbon Power Generation With Carbon Capture, Transport, and Storage Feasibility Study Prepared by Frank Paskvan, UAF and EERC, an agency of the University of N. Dakota
- Carbon Capture's Methane Problem Study by Institute for Energy Economics and Financial Analysis, 2022
- In Salah Fact Sheet: Carbon Dioxide Capture and Storage Project Carbon Capture and Sequestration technologies at MIT