ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE
February 3, 2025
1:02 p.m.

MEMBERS PRESENT

Representative Maxine Dibert, Co-Chair
Representative Carolyn Hall
Representative Donna Mears
Representative Zack Fields
Representative Dan Saddler
Representative Julie Coulombe
Representative Bill Elam

MEMBERS ABSENT

Representative Robyn Niayuq Burke, Co-Chair
Representative George Rauscher

COMMITTEE CALENDAR

PRESENTATION(S): CARBON CAPTURE UTILLLIZATION AND STORAGE UPDATE

- HEARD

PRESENTATION(S): CARBON OFFSET UPDATE

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

HALEY PAINE, Deputy Director
Division of Oil and Gas
Alaska Department of Natural Resources
Anchorage, Alaska
POSITION STATEMENT: Presented a PowerPoint regarding the Carbon Capture Utilization and Storage (CCUS) program.

CHRIS WALLACE, Senior Petroleum Engineer
Alaska Oil and Gas Conservation Commission (AOGCC)
Anchorage, Alaska

POSITION STATEMENT: Answered questions regarding the Carbon Capture Utilization and Storage program.

TREVOR FULTON, Carbon Offset Program Manager
Office of Project Management and Permitting
Alaska Department of Natural Resources
Anchorage, Alaska
POSITION STATEMENT: Presented a PowerPoint regarding the Carbon Offset Program.

ACTION NARRATIVE

1:02:28 PM

CO-CHAIR MAXINE DIBERT called the House Resources Standing Committee meeting to order at 1:02 p.m. Representatives Hall, Mears, Fields, Saddler, Coulombe, Elam, and Dibert were present at the call to order.

PRESENTATION(S): Carbon Capture Utilization and Storage Update

1:04:23 PM

CO-CHAIR DIBERT announced that the first order of business would be a presentation by Haley Pain, Deputy Director of the Division of Oil and Gas, Alaska Department of Natural Resources (DNR) regarding the Carbon Capture Utilization and Storage (CCUS) program

1:05:21 PM

HALEY PAINE, Deputy Director, Division of Oil and Gas, Alaska Department of Natural Resources, presented an update concerning the Carbon Capture Utilization Storage (CCUS) program [hard copy included in the committee packet]. She explained that the purpose of her presentation was to review the topics, provide updates, and answer questions. She said that her program was referred to as "the rock bill." She referred to Governor Mike Dunleavy's 2023 introduction of a packet of bills referred to as the "carbon management bills" which included a carbon offset bill and a bill which enabled DNR to license Alaska's pore space to store carbon deep underground. She referred to slide 2 which provided an outline of her presentation and read as follows [original punctuation provided]:

1. Carbon capture, use & storage (CCUS)
2. Agency roles under House Bill 50 (2024)

3. Department of Natural Resources (DNR) implementation of House Bill 50 (2024)
4. DNR regulations
5. Summary

MS. PAINE explained that CCUS is a suite of technologies that enables the capture and storage of carbon dioxide. She moved to the next slide and explained the technologies illustrated, pointing out that CO2 has been used for enhanced oil recovery for decades, and the carbon capture technology is based on that science. She described the primary points in slide 3, titled "What is CCUS?" which read as follows [original punctuation provided]:

Carbon capture, utilization and storage is a process that:
- Captures carbon dioxide (CO_2) emissions from:
- industrial processes
- point sources like coalfired power plants, or
- directly from the air, and
- Reuses or stores it so it will not enter the atmosphere

1:09:35 PM

MS. PAINE moved to slide 4, titled "Core Purposes of HB 50 (2024)," which read as follows [original punctuation provided]:

Make Alaska's subsurface resources available for maximum use
1. Enables DNR to lease state lands for geologic storage of carbon dioxide and issue right-of-way leases for carbon dioxide transportation pipelines
2. Empowers the Alaska Oil and Gas Conservation Commission (AOGCC) to regulate the geologic storage of carbon dioxide on all lands in the state, including protection of correlative rights

MS. PAINE discussed what considerations would be taken into account with an exploration license for carbon storage such as porosity and permeability and a secure cap rock. She explained that HB 50 (2024) outlined responsibilities for DNR and the Alaska Oil and Gas Conservation Commission (AOGCC), shown in slide 5, titled "Agency Responsibilities," which read as follows [original punctuation provided]:

DNR – Landowner

- Manage the state's pore space resources for the benefit of Alaskans
- Issue carbon storage exploration licenses & leases
    - Commercial payments
    - Work commitments and annual reporting
    - Permitting and compliance of operations
    - Multiple-use management
- Review right-of-way permits for CO2 pipelines
- Perform long-term monitoring of facility after regulatory closure
    - Carbon storage closure trust funds

AOGCC – Subsurface Regulator

- Quasi-judicial agency with regulatory powers over subsurface of all lands in state
- Issue storage facility permits
    - Safeguard human health and the environment from underground injection
    - Class VI well primacy
    - Protect other mineral interests and amalgamate property rights
    - Waste prevention determinations
- Assess storage capacity and volumes
- Review and issue site completion certifications

1:14:15 PM

MS. PAINE responded to a question from Representative Mears regarding primacy of Class VI wells by explaining that AOGCC has provided that since it was unable to seek Class VI primacy through SB 48 (2023), they subsequently turned to developing the regulatory packet for submitting a Class VI application. The target date for submission to the Environmental Protection Agency (EPA) is the summer of 2025.

1:15:30 PM

MS. PAINE, in response to questions from Representative Elam, explained that the largest stationary sources of CO2 are located on the North Slope and are associated with gas handling, recycling, and keeping Prudhoe Bay pressurized. There are also gas and coal-fired plants in Central and Interior Alaska that are additional sources of CO2. As a source for earning revenue, she explained that the framework was being set up by DNR, but no applications had been received.

1:17:19 PM

MS. PAINE responded to Representative Saddler's question by explaining that both AOGCC and DNR have been working expeditiously to effectuate the Class VI primacy because of its time-sensitive nature. She pointed out the federal government drives the timeline once the application is submitted. The AOGCC is hopeful that the process will take 12 to 24 months once the application is in place.

1:18:34 PM

MS. PAINE addressed a question from Representative Coulombe by explaining that DNR provides the framework for CCUS, but the operators bear the actual costs for exploration and development. The exploration phase would be within five years, and the trust fund related to CCUS is operator funded.

1:20:34 PM

MS. PAINE, in response to a question from Representative Saddler, explained what conditions would be taken into consideration when choosing sites for CCUS. Depleted gas reservoirs in Alaska fit many of the criteria. Other targets used for carbon capture are deep saline aquifers and unmineable coal seams. There is a rigorous process for going from the application stage to getting an exploration license.

1:24:04 PM

MS. PAINE, in response to a question from Representative Coulombe, explained that there has been interest expressed by several countries including Japan for using carbon capture sites in Alaska.

1:25:22 PM

MS. PAINE explained the role of AOGCC as the subsurface regulator for Alaska, pointing out their part in all levels of subsurface permitting, site closure certification, and monitoring extending out for 50 years. She discussed how DNR had worked to put the program in place. This is graphically illustrated on slide 6, titled "DNR Steps To Implement HB50 (2024)." Slide 7, titled "Regulations Development Timeline," illustrated the timeline for enacting the CCUS regulations, listing the steps followed by DNR from passage of the bill on May 15, 2024, to the regulations effective date of February 16,

2025.

1:30:26 PM

MS. PAINE responded to questions from Representative Hall and Representative Coulombe regarding the public comments. She explained that there was an expected level of public engagement. The comments made during the scoping phase of the process tended to be from industry and entities interested in carbon storage. The comments to the draft regulations were more concerned with clarification as well as interest in the post-operational period which extends to 50 years. She showed slide 8, titled "Carbon Storage Regulations," which read as follows [original punctuation provided]:

- Amended 11 AAC 05.110
  - $500 application fee for carbon storage lease or license
  - $250 transfer of interest fee
- Amended 11 AAC 80.045
  - Define field gathering line for purposes of carbon dioxide transportation
- Amended 11 AAC 84 to add new Article 9, Carbon Storage Licensing and Leasing
- Final regulations effective Feb. 16, 2025

1:34:45 PM

MS. PAINE addressed a question from Representative Saddler regarding a possible secondary business that might emerge for the purpose of monitoring the capped wells for the post operational period. Even if the monitoring was done by a second entity, it would still have to be bonded and meet DNR standards for Class VI well programs.

1:37:45 PM

MS. PAINE described the amendments made to existing regulations and the creation of an entirely new article. She showed slides 9 and 10, titled "Article 9 Regulations." She summarized the amended carbon storage regulations and described the regulations set forth in Article 9 regarding carbon storage licensing and leasing. She compared the regulatory framework to Chapter 82 and Chapter 83, which guide oil and gas from lifecycle analysis, to lease administration, to closure. These regulations require that a company must demonstrate the ability to undertake and complete large-scale projects as well as show the ability to

obtain and comply with state and federal permits. A company must also meet specific financial requirements. She pointed out that there is a constitutional directive to make things competitive and ensure the maximizing of the state's resources.

1:42:26 PM

MS. PAINE responded to a question from Representative Saddler regarding "best interest findings" by describing some of the negotiating process as well as the public process which is involved.

1:43:41 PM

MS. PAINE, in response to a question from Representative Coulombe, explained that the trust fund was basically an extra insurance policy which is in place to address unforeseen situations that might arise in the future. The specific uses of the funds are set out in regulations.

1:45:52 PM

MS. PAINE responded to a question from Representative Fields regarding primacy by describing how changes in jurisdictions can work, using an example from Louisiana.

1:47:26 PM

CHRIS WALLACE, Senior Petroleum Engineer, Alaska Oil and Gas Conservation Commission (AOGCC), Answered questions regarding how primacy can change from federal to state jurisdiction.

1:48:26 PM

MS. PAINE described how the DNR regulations deal with site closure, specifically as they apply to abandonment, dismantlement, removal, and restoration. The regulations allow for a staged approach in cleaning up the site and a commitment to satisfactory restoration. She addressed the question of whether closed sites compromise drinking water by pointing out how much deeper the wells go and the rigorous protections that are in place. She showed slide 11, titled "Summary," which read as follows [original punctuation provided]:

- DNR filed regulations with Lieutenant Governor January 17, 2025, to enact provisions of HB50 (2024)

- DNR is prepared to receive applications starting February 16, 2025, for carbon storage exploration licenses
- Website under development with technical database to assist in site screening set for 1st Quarter 2026

1:53:53 PM

The committee took an at-ease from 1:53 p.m. to 1:55 p.m.

PRESENTATION(S): Carbon Offset Program Update

1:55:24 PM

CO-CHAIR DIBERT announced that the next order of business would be a presentation by Trevor Fulton, Carbon Offset Program Manager for DNR regarding the Carbon Offset Program.

1:55:57 PM

TREVOR FULTON, Program Manager, Carbon Offset Program , Alaska Department of Natural Resources, presented a PowerPoint regarding the Carbon Offset Program. He introduced his remarks by referring to the governor's Senate Bill 48, signed in May of 2023, as the "tree bill." He explained that DNR has been charged with administering the Carbon Offset Program and Carbon Leasing programs. In addition, Senate Bill 48 also authorized the Alaska Oil and Gas Conservation Commission (AOGCC) to work on Class VI well primacy from the EPA. He showed slide 2, titled "Overview: Senate Bill 48," which read as follows [original punctuation provided]:

Created with the passage of the Governor's Senate Bill (SB) 48 (May 2023)
- Two programs: Carbon Offset Program and Carbon Leasing
- Authority for Alaska Oil and Gas Conservation Commission to pursue Class VI well primacy from the Environmental Protection Agency for geologic sequestration of CO2
- Criteria for project evaluation
- Requirement to keep project areas open for public use and other resource development
- Limits project terms to 55 years
- Caps the commission given to project developers for contracted work at 30%

- Designates 20% of project revenues to the Renewable Energy Grant Fund
- Requires an annual report to the Legislature

MR. FULTON showed slides 3 and 4, titled "Overview: Carbon Offset Program," which read as follows [original punctuation provided]:

Program Goals
- Create nature-based, carbon-reducing projects
- Generate new revenue and other co-benefits
- Help meet voluntary market demand for decarbonization

Projects
- Long-term management actions that increase carbon stocks on state forestlands, tidelands, wetlands, and other ecosystems
- One more use among the state's multiple-use mandate

Carbon Offsets
- Tradeable credits
- Used to "offset" emissions

2:01:35 PM

MR. FULTON responded to questions from Representative Saddler and Representative Elam by describing the benefits of using Alaska's forests, tidelands, and other ecosystems as a method of capturing and storing carbon which creates greater carbon stocks year over year on state land. Alaska is harnessing the carbon reduction benefits of the natural resources. These carbon benefits can be quantified and are proved to a third-party entity known as the Carbon Registry or Carbon Crediting Program. In this way, Alaska increases carbon stocks on state lands and monetizes it.

2:03:50 PM

MR. FULTON addressed questions from Representative Coulombe and Representative Elam by explaining how a factory or an emitter of greenhouse gases uses carbon offsets. He explained that most companies will first try to reduce their emissions, but when they reach a point where other factors enter in, such as higher expenses, they will look for carbon offset programs. Because carbon emissions are not localized but are instead a global issue, purchasing offsets in Alaska works toward balancing, or offsetting, the carbon levels. At this point in time, carbon

offsets in most states are voluntary although they are mandatory in California.

2:07:05 PM

MR. FULTON responded to a question from Representative Fields regarding mariculture's potential role in carbon offsets by describing the work and research being done in what is referred to as the "blue carbon sector" which includes mangrove restoration, sea grass, and wetland restoration. Some of those methodologies are in place in other parts of the world, and DNR is keeping track of those projects. He added that the carbon leasing program might be a better fit for mariculture than the carbon offset program in which an aqua culture lease might extend to include carbon leasing. He pointed out that companies which have set goals of becoming net zero or carbon neutral by a specific date will use carbon offset purchases to help them reach their goal.

MR. FULTON explained that a ton of carbon would be produced by driving a car approximately 2,500 miles or taking a round-trip flight from Anchorage to Los Angeles. Through the use of fossil fuels, the average American creates about 16 tons of carbon a year. He showed slide 5, titled "Carbon Offsets," which read as follows [original punctuation provided]:

> Definition
> "Carbon Offset: a way for a company or person to reduce the level of carbon dioxide for which they are responsible by paying money to an organization that works to reduce the total amount produced in the world, for example by planting trees."
> - Oxford Dictionary
>
> Carbon offsets are measured in metric tons of CO2 equivalent and are bought and sold on the global voluntary carbon market.

MR. FULTON moved to slide 6, titled "Carbon Offset Project," which illustrated the cycle of carbon offsets starting with the release of emissions; to carbon being pulled from the atmosphere by trees and plants; to the certification and tracking carbon credits; to carbon credits sold to buyers to offset carbon emissions.

2:13:54 PM

MR. FULTON returned to slide 5 to address a question from Representative Saddler who asked for clarification of the phrase "for which they are responsible." He acknowledged that the companies believe using carbon offsets is good for business and voluntarily hold themselves accountable as opposed to something being imposed on them.

2:15:05 PM

MR. FULTON, in response to a question from Representative Hall, explained that globally there are four carbon registries which operate as non-profits and which have similar fee structures for the hundreds of thousands of carbon credits they administer.

2:16:12 PM

MR. FULTON responded to a question from Representative Elam regarding how many jobs might be created for Alaskans by this program, explaining that it depends on the program, but generally the job generation is not as robust as the revenue generation. Globally, carbon marketing is approximately a 2-billion-dollar industry, but by 2030 this is projected to be a 10-to-50-billion-dollar industry. For Alaska, 20 percent of the earnings from the carbon offset program would go into the renewable energy fund, and 80 percent would go into the general fund.

2:19:34 PM

MR. FULTON pointed out that Senate Bill 48 was written to be broad in scope in order to include more than just forest projects. He showed slide 7, titled "Program Scope," which read as follows [original punctuation provided]:

- Nature-based projects, not just forest based
- Department of Natural Resources manages 100+ million acres of land, 40,000 miles of coastline, and all freshwater resources of the State
- Other opportunities could include:
    - Biochar
    - Reducing wildfire
    - Ocean/river deacidification
    - Enhanced rock weathering

2:23:10 PM

MR. FULTON responded to Representative Saddler's comments regarding the net results of crushing rock for carbon capture by pointing out that mining companies might be able to use extracted rock for those purposes.

2:24:55 PM

MR. FULTON addressed questions from Co-Chair Dibert and Representative Coulombe regarding forest management and the forest fires by explaining that there is a risk or buffer pool in the carbon registry for the purpose of covering possible catastrophic incidents. He explained that one of the intents of the original bill was to encourage better forestry management.

2:28:03 PM

MR. FULTON moved to slide 8, titled "Program Status," which read as follows [original punctuation provided]:

May 2023
SB 48 enacted

July 2024
Regulations adopted and effective

August 2024
Request for Proposals (RFP) issued seeking a project development partner for forest carbon projects

November 2024
Contract awarded to Terra Verde, an Alaska-based carbon project developer and forestry consultant

Current
Tanana Valley forestlands being evaluated for project feasibility; future areas to be assessed include Kenai Peninsula, Mat-Su Valley, and Haines

MR. FULTON showed slide 9, titled "Tanana Valley Project," which showed a graph illustrating the process for registering and putting carbon offset projects in place. Using the Tanana Valley Project as an example, he talked through the timeline outlined on the slide, which read as follows [original punctuation provided]:

- Target dates are approximate

- Next steps include evaluation, best-interest finding, field work, modeling, and verification
- ~18 months from project listing to credit issuance
- Consider each step a go/no-go "stage-gate"; some are State decision points, others are registry decisions

2:32:46 PM

MR. FULTON responded to a question from Representative Fields regarding whether the state could work with other landholders such as the federal government to set aside and help manage forests, in part, to mitigate forest fire hazards. He acknowledged the value of such partnerships but explained that under the carbon registry protocols, Alaska could do this only on lands where the state has management responsibility. He moved to the final slide, titled "Carbon Leasing Program," which read as follows [original punctuation provided]:

Purpose
- Provides process for third parties to lease State land for carbon management purpose
- Creates private sector carbon management opportunities
- Third parties develop projects; State compensated for the use of land through lease fees and/or a percentage of project revenue Status
- May 2023

SB48 signed
- June - July 2023

Public scoping for draft regulations
- Q3 2023 - Q4 2024

Regulations drafted and submitted to Department of Law for review

2:36:26 PM

MR. FULTON, in response to a question from Representative Coulombe, explained that both the Alaska Mental Health Trust and some Native corporations have been in the process of putting carbon offset programs in place. He concluded his presentation by explaining that the state followed different procedures beginning with best interest findings.

2:40:37 PM

ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 2:40 p.m.