

**ALASKA STATE LEGISLATURE
SENATE RESOURCES STANDING COMMITTEE**

March 10, 2023

3:31 p.m.

MEMBERS PRESENT

Senator Cathy Giessel, Co-Chair
Senator Bill Wielechowski, Vice Chair
Senator Scott Kawasaki
Senator James Kaufman
Senator Forrest Dunbar (via teleconference)
Senator Matt Claman

MEMBERS ABSENT

Senator Click Bishop, Co-Chair

COMMITTEE CALENDAR

SENATE BILL NO. 49

"An Act relating to the geologic storage of carbon dioxide; and providing for an effective date."

- HEARD & HELD

PREVIOUS COMMITTEE ACTION

BILL: SB 49

SHORT TITLE: CARBON STORAGE

SPONSOR(S): RULES BY REQUEST OF THE GOVERNOR

01/27/23	(S)	READ THE FIRST TIME - REFERRALS
01/27/23	(S)	RES, FIN
03/10/23	(S)	RES AT 3:30 PM BUTROVICH 205

WITNESS REGISTER

JOHN BOYLE, Commissioner-Designee
Department of Natural Resources
Anchorage, Alaska

POSITION STATEMENT: Provided introductory remarks on SB 49.

JOHN CROWTHER, Deputy Commissioner
Department of Natural Resources

Anchorage, Alaska

POSITION STATEMENT: Participated in presenting SB 49.

HALEY PAINE, Deputy Director
Division of Oil and Gas
Department of Natural Resources
Anchorage, Alaska

POSITION STATEMENT: Participated in presenting SB 49.

ACTION NARRATIVE

[3:31:50 PM](#)

CO-CHAIR CATHY GIESSEL called the Senate Resources Standing Committee meeting to order at 3:31 p.m. Present at the call to order were Senators Kawasaki, Claman, Wielechowski, Kaufman, Dunbar via teleconference, and Co-Chair Giessel.

SB 49-CARBON STORAGE

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CO-CHAIR GIESSEL announced the consideration of SENATE BILL NO. 49 "An Act relating to the geologic storage of carbon dioxide; and providing for an effective date."

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JOHN BOYLE, Commissioner-Designee, Department of Natural Resources, Anchorage, Alaska, stated that his introductory remarks on SB 49 were based on his recent experience at CERAWeek. In that venue he was able to speak with representatives from some of the largest oil and gas companies that operate in Alaska, private equity groups, financiers, and infrastructure investment firms. Overall, he said there was incredible excitement about Alaska's intention to create a statutory framework to enable carbon capture, utilization, and storage projects. He characterized hydrogen as critical in assisting energy transformation and highlighted that a key component to these activities is managing the CO₂ output from industrial processes.

COMMISSIONER-DESIGNEE BOYLE explained that SB 49 seeks to create a broad framework for the state to develop a program that allows leasing, injection, and regulation of carbon dioxide into underground reservoirs. There is great interest from the broader investment community and also industry who see the opportunity to capitalize on the IRS Section 45Q tax credits to help incentivize new enhanced oil recovery methods utilizing carbon

dioxide while also enabling them to meet the stringent environmental benchmark of net zero. The administration sees this as a critical need for the state to address. Having the framework for this carbon capture, utilization, and storage program in place will put the state at a competitive advantage and in prime position to attract capital.

COMMISSIONER DESIGNEE BOYLE stated that the committee will hear from experts who can talk about Alaska's strategic advantage in its ownership of broad swaths of state land and the underlying mineral estate, which makes it simple for companies because it's a one-stop-shop. It won't be necessary to deal with a myriad of private landowners, which is often the case in other states and countries.

COMMISSIONER DESIGNEE BOYLE highlighted the opportunities in Cook Inlet and on the North Slope for carbon storage in depleted reservoir space; in the Interior that is very attractive for carbon capture projects; to extend the life of coal-fired plants; and for new investors and existing producers and companies interested in lowering the carbon intensity of their operations. He also pointed out that because the state's underground pore space is a mineral asset of the state, 25 percent of the revenue collected from CCUS would be deposited into the permanent fund. He said this process will take time, but the administration believes that it is in the state's best interest to pursue this opportunity.

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HALEY PAINE, Deputy Director, Division of Oil and Gas, Department of Natural Resources, Anchorage, Alaska, reviewed the outline for the presentation.

1. Introduction
2. CCUS project overview
3. Funding collection and revenue
4. High-level sectional summary
5. Section 14 Detail of DNR/DOG statutes
6. Sections 15-31 summary
7. Section 31 Detail of AOGCC statutes
8. Section 32-39 summary

MS. PAINE reviewed the constitutional directive under Article VIII of the Constitution of the State of Alaska.

- It is the policy of the State to encourage the settlement of its land and the development of its

resources by making them available for maximum use consistent with the public interest.

- The legislature may provide for the leasing of, and the issuance of permits for exploration of, any part of the public domain or interest therein, subject to reasonable concurrent uses.

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MS. PAINE described how SB 49 adheres to the constitutional directive in art VIII. She spoke to the following:

- Enables the State to maximize use of its pore space resource consistent with public interest.
- Provides for reasonable concurrent uses and protection of all parties.
- Empowers the Department of Natural Resources (DNR) and Alaska Oil and Gas Conservation Commission (AOGCC) to utilize existing authorities and expertise on carbon dioxide geologic storage

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MS. PAINE displayed the diagram on slide 5 and recapped the description of carbon capture, use, and storage (CCUS):

Capture

Capturing CO₂ from fossil or biomass-fueled power stations, industrial facilities, or directly from the air.

Use

Using captured CO₂ as an input or feedstock to create products or services.

Transport

Moving compressed CO₂ by ship or pipeline from the point of capture to the point of use or storage.

Storage

Permanently storing CO₂ in underground geologic formations, onshore or offshore.

She noted that the target reservoirs would be depleted oil and gas reservoirs, saline aquifers, and potentially unmineable coal seams.

SENATOR KAWASAKI asked how DNR knows there is enough space for sequestration in any of those geologic formations.

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MS. PAINE answered that it's possible to do predictions and engineering calculations based on the well data and pressure logs to determine how much oil and gas the formation held originally, and extrapolate the size of the container. She agreed that DNR had not spent much time assessing either saline aquifers or unmineable coal seams. However, they've learned from other jurisdictions that saline aquifers tend to be more expansive than oil and gas reservoirs and have more potential. She acknowledged that further study and analysis was required.

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JOHN CROWTHER, Deputy Commissioner, Department of Natural Resources, Anchorage, Alaska offered his understanding that Alaska has the geology and formations to scale that are required for sequestration and long term storage. He added that any project would need to move through the characterization stage to confirm the geology, but Alaska generally has very prospective and encouraging geology.

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MS. PAINE reviewed slide 6 that highlights the reasons to move forward now with CCUS. It read as follows:

Why Now?

- The CCUS market is rapidly expanding, both within the U.S. and worldwide
- Federal legislation in the prior 18 months has included direct grants and tax incentives for CCUS, increasing industry interest, including outreach to the Department of Natural Resources (DNR)
- Federal funds are available for states seeking Class VI well permitting, showing federal support for state primacy
- Protracted project timelines and milestone requirements in the tax credit structure necessitate prompt action
- Sets the stage for continued development of Alaska's oil resources, and potential major gas development
- Corporations are actively seeking opportunities to meet their own carbon management goals

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MS. PAINE explained that the Safe Drinking Water Act of 1974 established the Underground Injection Control (UIC) Program. To

implement the program, the EPA developed classes of injection wells based on the characteristics of the injected fluid and the depth to which it was injected. In 2010 the EPA created Class VI wells exclusively for the injection of critical CO₂. She directed attention to the diagram on slide 8 that describes the project phases of CCUS.

MS. PAINE said the EPA is keen to have states assume primacy and take charge of permitting for specific wells, especially for Class II and Class VI wells. AOGCC already has primacy for Class II wells for oil and gas injection and has experience with more than 950 injection wells, so the expertise to take on Class VI wells is already well within their wheelhouse.

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SENATOR KAWASAKI asked about the consequence if the legislature were to decide not to fund 404 primacy.

MS. PAINE answered that a project operator could apply directly to the EPA for a Class VI well permit if the state doesn't move forward to assume primacy. The main difference will be that it takes EPA longer to conduct the review and issue a permit. North Dakota has primacy and is able to review an application and issue a permit in about eight months, whereas the timeline for the EPA is about three years. To date the EPA has only permitted two Class VI wells. It has about 40 permits pending, but none are in Region 10.

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SENATOR GIESSEL asked whether 404 primacy and Class VI wells were intertwined, because the question was about the former and the answer was about the latter.

MR. CROWTHER clarified that 404 primacy and primacy for Class VI wells were separate authorities, both of which were eligible for assumption by the state. SB 49 is focused on Class VI wells under the Safe Drinking Water Act Underground Injection Control Program.

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SENATOR KAUFMAN commented that slides 8 and 9 about the CCUS project stages and the project timeline were creeping towards a level one, master control schedule that shows the necessary tasks. He asked if there was good clarity about what and when everything needs to occur. He also expressed interest in a more detailed schedule and knowing about anything that could be done with existing authorizations.

CO-CHAIR GIESSEL said she'd like Ms. Paine to wait to respond until all the questions about slide 8 were answered.

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SENATOR CLAMAN asked for an explanation of the different injection well classes.

MR. CROWTHER paraphrased from EPA website.

The Underground Injection Control program consists of six classes of injection wells. Each well class is based on the type and depth of the injection activity, and the potential for that injection activity to result in endangerment of a USDW.

Class I wells are used to inject hazardous and non-hazardous wastes into deep, isolated rock formations.

Class II wells are used exclusively to inject fluids associated with oil and natural gas production.

Class III wells are used to inject fluids to dissolve and extract minerals.

Class IV wells are shallow wells used to inject hazardous or radioactive wastes into or above a geologic formation that contains a USDW.

Class V wells are used to inject non-hazardous fluids underground. Most Class V wells are used to dispose of wastes into or above underground sources of drinking water.

Class VI wells are wells used for injection of carbon dioxide (CO₂) into underground subsurface rock formations for long-term storage, or geologic sequestration.

SENATOR CLAMAN asked over which wells Alaska currently has primacy.

MR. CROWTHER answered that the state has primacy for Class II wells.

MS. PAINE added that the EPA allows states to assume a la carte primacy for Class II and Class VI wells, but all other classes

have to be assumed together. She noted an earlier reference to AOGCC having the authority to assume Class I primacy but deciding it didn't need the breadth of the other classes at that time.

4:03:24 PM

MS. PAINE directed attention to slide 9 and the generalized project timeline to implement geologic CO₂ storage. She noted that it was adopted from North Dakota so the estimated times are based on that jurisdiction. She made the following points:

- ~ The screening phase is a desktop exercise that looks at legacy data, the CO₂ source, whether the capture technology is reasonably priced, and the distances between the source and sink to estimate transportation costs.
- ~ Feasibility is the phase where site-specific data is acquired. This could include additional seismic surveys, drilling stratigraphic test wells to get a sense of the subsurface, and collecting core data. Monitoring stations will be needed to get baseline data on the conditions in the groundwater and the atmosphere to inform things as the project moves forward. North Dakota estimates this to take 9-18 months.
- ~ Project design and permit application is the phase where the site-specific information is used to do modeling. The models look beyond the first injection to estimate the plume at a particular rate after 10-20 years of injection, and how long it will take for the plume to stabilize after injection ceases. Data continues to come in to inform the models. Vendor contracts, designing the permit, and submitting the application for the Class VI well permit come at the end of this phase.
- ~ Regulatory review of the permit is estimated to take from 7-12 months in North Dakota, with permit approval at the end of the process. This timeline could be extended in other states.
- ~ The investment and construction phase has the important IRS marker for construction to begin by January 1, 2033 to qualify for the 45Q tax credit.
- ~ The overall timeline can easily extend beyond four years.

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CO-CHAIR GIESSEL noted that Alaska always takes longer, and asked if there were any lawsuits objecting to states applying for Class VI primacy.

MR. CROWTHER responded that there is a diverse suit of groups nationally that support CCUS, including environmental groups

that believe it is appropriately part of carbon management. There are also groups that argue that CCUS isn't enough of a solution because it doesn't reduce emissions to zero immediately. To the question about litigation, he said it has focused primarily on the transportation of CO₂ over long distances, often interstate. DNR doesn't anticipate legal challenges in the near term and it would not be over long distance transport.

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SENATOR CLAMAN asked how the Class VI primacy fits into the timeline and whether that should be part of the evaluation.

MR. CROWTHER responded that primacy should be pursued on the front end, but it could be at the same time as the screening and feasibility phases. He added that the value of the state assuming primacy at the start is that the estimated 7-12 months for the regulatory review of the permit could easily take more than 24 months if the EPA were to do the review.

SENATOR CLAMAN summarized that starting the primacy at the same time as the screening phase would ideally result in the state having primacy by the time the permits need to be filed. If primacy hasn't been approved, then the applications go to the EPA, which is a longer timeframe.

MR. CROWTHER said he agreed generally. The timeline was for a private sector project developer, so it's a guess how they choose to proceed as the state initiates the primacy effort. Given the EPA statement to support state efforts to assume primacy, a developer might initiate some things contemporaneously.

Speaking to Senator Kaufman's question about what more the state could do to promote CCUS developments and investments, he said there probably are other opportunities the state could pursue, but it is focused on the three components in SB 49 to assume Class VI primacy, make state land available, and provide a regulatory framework through AOGCC.

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MS. PAINE continued to slide 10 and the Red Tail Energy Project to provide context for the timeline. She explained that this was the first project North Dakota approved under Class VI primacy. It is an ethanol facility that has a very high concentration of CO₂ as a byproduct of the fermentation process associated with producing ethanol. The emissions are 180,000 metric tons/year

and the project surface area is about 3,480 acres. She said the green dot in the image on the left is the injection well, the white dot to the northwest is the monitoring well that tracks the plume migration, the purple outline represents the modeled area for the CO₂ plume to spread over the life of the facility, and the white dotted outline reflects the extent of the storage facility permit area that can be used. The black dotted outline reflects the area of review. This is the extent of the area that is examined and monitored for a Class VI permit. She noted that the picture on the right was of the exploration well.

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MS. PAINE provided the following information about North Dakota and the Red Tail Energy Project:

- ~ North Dakota applied for Class VI primacy in 2013.
- ~ The Red Tail Energy Project started in 2016.
- ~ It took 5 years for the project to go from site screening to design.
- ~ Starting the process was the signal to industry that enabled the investment decisions to drill the wells, conduct the seismic, and collect the cores.
- ~ This shows that some activities can be ongoing during the primacy application process.
- ~ North Dakota was granted primacy authority for Class VI wells in 2018.
- ~ The Red Tail Energy Project was permitted in 2021.
- ~ Commercial operation commenced in June, 2022.

She noted that the graphic on the left not only shows the phases but also provides a feedback loop.

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MS. PAINE explained that slide 12 identifies the sections of SB 49 that correspond to the different phases. It shows the sections associated with exploration and delineation, well and facility permitting, leasing, storage operations, facility closure, and post-closure. She noted that Sections 14 and 31 are the primary sections, but overall the legislation addresses everything an investor needs to know throughout the process.

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MS. PAINE advanced to slide 13 to review the four project authorizations included in SB 49. She spoke to the following:

Carbon Storage Exploration License - issued by DNR

- Grants exclusive right to explore area for carbon storage site
- 5-year term
- Work commitment and annual rental requirements
- Conversion to lease based on obtaining Carbon Storage Permit and completion of work commitment
- Does not authorize specific activities - require further permits

SENATOR WIELECHOWSKI said he assumes the wells that will be used to store the CO₂ are those whose leases have expired, so the state would not be faced with buying back leases.

MS. PAINE answered that buying back leases is not anticipated. There are opportunities for existing lessees to use CO₂ for enhanced oil recovery and transition to carbon sequestration, and for an existing oil and gas lessee to obtain a carbon storage license. Carbon storage does not condemn or end an existing property right or lease.

SENATOR WIELECHOWSKI asked if the expectation was for the state to lease the carbon storage sites to private entities who will run and manage them.

MS. PAINE confirmed that the state, through DNR, would be acting as the landowner who leases the land for a fee. AOGCC will be the regulator on the project to ensure subsurface protections.

SENATOR WIELECHOWSKI mentioned \$2.50 and asked how much the state might be expected to receive.

MS. PAINE requested clarification that he was asking about the overall revenue from a CCUS project.

SENATOR WIELECHOWSKI mentioned the \$85 45Q tax credits and asked whether the state would receive \$2.50 and the lessee \$82.50.

MS. PAINE said \$2.50 is a floor; the actual fee will be negotiated as part of the exploration license and based on the size of the area. She also pointed out that the lessee has costs associated with capture, transportation, and operation of the injection facility. She said the per ton injection fee is just one way to realize revenue; others include sharing the 45Q tax credits, bonus bids, and gross revenues.

SENATOR WIELECHOWSKI asked if the expectation was that an oil and gas company could lease out a well and write that off their corporate income taxes.

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MR. CROWTHER suggested the Department of Revenue (DOR) speak to the question specifically, but his understanding was that allowable lease expenditures under existing law are for the production of oil and gas. In some circumstances that can include enhanced oil recovery, but not projects solely for carbon storage and sequestration.

CO-CHAIR GIESSEL said the committee could have DOR testify to that specifically.

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MS. PAINE continued to discuss the project authorizations described on slide 13:

Carbon Storage Facility Permit - issued by AOGCC

- Approves use of subsurface storage "container"
- Amalgamates pore space based on geological and engineering data
- Provides for protection of other mineral and property interests
- Establishes monitoring and bonding requirements
- Guides operations over the life of the project.

Carbon Storage Lease - issued by DNR

- Exclusive right to store CO₂ in reservoir on state lands as defined under the Storage Facility Permit
- Includes terms for revenue to the state
- Valid over life of injection and site closure
- Required for EOR reservoirs that transition to sequestration

Closure Certificate - issued by AOGCC

- Operator may apply at least 10 years post-injection
- Public notice & hearing
- Must demonstrate stabilization of CO₂ plume and remediation activities complete
- Title to CO₂ and long-term monitoring and maintenance transfer to state

- Funded by carbon storage trust fund over life of project

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MS. PAINE advanced to slide 14 and described the ongoing oversight during the CO₂ injection phase to ensure it is behaving as modeled:

- Onsite inspection program
- Wellwork sundries
- Drilling permits
- Monthly reports
 - Metering
 - Injection
 - Volumes
- Pressure surveys
- Well logs
- Data from monitoring wells
- Plume monitoring

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MS. PAINE advanced to slide 16 to describe funding sources:

Regulatory Program

AOGCC

- Carbon Dioxide Storage Facility Administrative Fund
 - Sec. 31: AS 41.06.165
 - Creates fund to cover AOGCC operating costs associated with oversight of carbon storage, like fees collected for oil and gas oversight
 - Income account revenue sources:
 - Fees received under AS 41.06.165(a) - per ton fee
 - Fees received under AS 41.06.125 (permit review) and 41.06.200 (determining storage amounts)
 - Earnings on the fund

Leasing & Licensing State Lands

DNR

- Carbon storage exploration licenses and leases
 - Sec. 14: AS 38.05.710 & AS 38.05.720

- Establishes a minimum rental rate of \$20 per acre.
- Establishes a minimum injection charge of \$2.50 per ton of carbon dioxide
- Other commercial terms as applicable
- Sec. 14: AS 38.05.735
 - Payments from carbon storage exploration licenses and carbon storage leases flow to the general fund and Alaska Permanent Fund (Art. IX, Sec. 15, Alaska Constitution)

[4:32:07 PM](#)

SENATOR WIELECHOWSKI asked 1) where the \$20 and \$2.50 rates came from and 2) is there a legal requirement to deposit the percentage into the permanent fund.

MS. PAINE answered that DNR established the \$20 rental rate and \$2.50 injection charge as minimums after surveying the publicly available data. They're floors similar to what the state established for the oil and gas regime. She deferred the second question to Mr. Crowther.

MR. CROWTHER said DNR understands the pore space to be a mineral resource, which is obligated to be deposited into the Alaska Permanent Fund. A Supreme Court case related to the Cook Inlet Natural Gas Storage (CINGSA) facility also identified pore space used for storage as a mineral resource.

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MS. PAINE advanced to slide 17 to discuss the funding for the carbon storage closure trust fund:

Sec. 4: AS 37.14.850. Carbon storage closure trust fund.

- Industry-funded and state-administered trust fund to be used solely for long-term monitoring of the site during the Post-Closure Period
- Income account revenue sources:
 - Payments received under AS 37.14.850(c)
 - AS 41.06.180. Carbon storage facility injection surcharge (Bill Sec. 31)
 - Amount set by AOGCC on issuance of storage facility permit
 - Based on anticipated expenses to be incurred post-closure phases

- Earnings on the account
- State may utilize funds directly or purchase policies as markets mature

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MS. PAINE advanced to slide 18 to discuss three hypothetical revenue opportunities:

1. Regional Power Facility

- 250,000 metric tons/year, \$2.50 metric ton/year
- 20-year life
- Acreage ~1200 acres during injection, \$20 acre/year

2. North Slope Emitting Facility

- 2,000,000 metric tons/year (50/50 EOR & Storage), \$2.50 metric ton/year (Storage)
- 20-year life
- Acreage ~10,000 acres during injection, \$20 acre/year

3. CO₂ Import & Sequestration Facility

- 10,000,000 metric tons/year, \$2.50 acre/year
- 40-year life
- Acreage ~ 50,000 acres during injection, \$20 acre/year

MR. CROWTHER restated that the foregoing were hypothetical projects so they do not forecast the cost to capture the emissions. The intention was to show that if the project occurs, these were the kinds of revenue that could be expected under SB 49 as currently drafted.

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SENATOR CLAMAN asked if the idea in the third example was for a third party to capture the carbon, transport it to Alaska, and pay the state for storage.

MR. CROWTHER responded in the affirmative.

SENATOR CLAMAN asked whether the department had identified an entity that would capture the carbon and transport it to Alaska for storage, because the cost of transportation could be rather expensive.

MR. CROWTHER agreed that in that scenario the transportation of the CO₂ would be a major cost. He also mentioned the presenter earlier in the week who talked about barging CO₂ over short distances as well as trans-ocean shipping and the potential to drive the cost of transport down.

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MS. PAINE advanced to slide 19 and described the following hypothetical revenue opportunities:

- Not all CO₂ emissions are feasibly captured - technology continues to rapidly develop
- Capital expenditures to retrofit existing facilities cannot be met by existing incentives in some cases
- Import of CO₂ is dependent on further development of shipping technology and infrastructure
- Timing from bill passage, if project through screening phase:
 - Licensing Revenues < 2 years
 - Leasing Revenues < 5 years

CO-CHAIR GIESSEL asked if she previously said a project had to start by 2032

MS. PAINE confirmed that construction has to start by the end of 2032 to qualify for the 45Q tax credit.

CO-CHAIR GIESSEL commented that sooner was better to pass this policy.

MS. PAINE agreed.

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MS. PAINE directed attention to the chart on slide 20 that shows the hypothetical revenue opportunities in the three hypothetical scenarios for the use of the state's pore space She opined that the numbers were a fair representation of lifetime revenues for both a small and large project.

CO-CHAIR GIESSEL asked whether the state or producer would incur the cost of insurance.

MR. CROWTHER answered that the chart focuses on the acreage rental fee and the injection fee, which would be deposited into the administrative fund. That revenue would accumulate over time

for the long-term liability of the state, so DNR doesn't envision the state needing to participate in the insurance market. However, an operator might choose to purchase insurance to cover its operations.

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SENATOR KAUFMAN offered his understanding that hypothetical scenario 2 (North Slope Facility Standalone CCUS Project) did not anticipate shipping CO₂ to the North Slope.

MR. CROWTHER confirmed that the example was based on the existing North Slope Central Gas Processing Facility.

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MS. PAINE transitioned to the sectional summary of SB 49, starting with Sections 1-14 on slide 22. She noted that she would provide more detail on sections 14 and 31.

Section 1

Short title of bill: Carbon Capture, Utilization, and Storage Act

Section 2 (AOGCC)

Grants AOGCC jurisdiction to regulate carbon storage unit operations in the state like oil and gas (bill Sec. 14)

Section 3 (AOGCC)

Authorizes AOGCC to seek primary enforcement authority for permitting and regulating Class VI injection wells for CO₂

Section 4 (DNR/AOGCC)

Creates Carbon Storage Closure Trust Fund to provide non-sweepable fund for post-closure operations of State agencies (bill Sec. 31, proposed AS 41.06.180)

Section 5 (DNR)

Adds carbon storage (bill Sec. 14) to mineral estate disposal exemption for agricultural lands disposal in AS 38.05.069(e)

Section 6 (DNR)

Adds carbon storage (bill Sec. 14) exemption to AS 38.05.070(a) for when state lands are leased for purposes other than extrication of natural resources

Section 7 (DNR)

Adds carbon storage to provisions requiring lessees to pay damages to landowners and to post bonds for that purpose; and

providing lessee access to access to the mineral estate if a surface owner refuses to engage in a surface use agreement; this is the same statutory process that exists for other mineral estate development of split estate created by AS 38.05.125

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SENATOR WIELECHOWSKI paraphrased the first sentence of Section 7 and asked what kind of liability SB 49 exposes the state to in a worst case scenario, and whether the state expected to purchase insurance for such damages.

MS. PAINE responded that it was an existing provision in all oil and gas leases and it had never been used. As a general rule, the surface owners and project operators resolve any issues to their mutual benefit. She also pointed out that this was just for the surface estate and that the footprint of a carbon storage facility was very small.

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MS. PAINE continued the sectional summary.

Sections 8-11 (DNR/DOG)

Adds carbon storage program (bill Sec. 14) to mineral leasing statutes under AS 38.05.135, primarily providing for revenue collection

Section 12 (DNR)

Adds carbon storage provision to exemptions for coal bed methane under AS 38.05.180(gg) and unconventional gas under AS 38.05.180(ff) because carbon storage leasing might be possible on unmineable coal seams

Section 13 (DNR)

Adds carbon storage leases to prohibition in the Kachemak Bay oil and gas closure area

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SENATOR WIELECHOWSKI asked if other refuges or areas that prohibit oil and gas exploration or development could be leased out.

MS. PAINE answered that nothing was different for carbon storage leasing than what is allowed for oil and gas leases. Later in the bill several other areas are excluded, but the same exclusion applies for oil and gas leases. She restated that the carbon storage leases are intended to mirror the permissions for oil and gas leases.

SENATOR WIELECHOWSKI noted the controversy in the MatSu Valley years ago when drilling for coal bed methane extended under private property. He asked whether the bill envisions CO₂ being stored under private property.

MR. CROWTHER answered that provisions later in the bill speak to AOGCC's authority to amalgamate property interests from unconsenting parties, which is similar to the authority that's available for oil and gas.

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SENATOR WIELECHOWSKI asked about the liability associated with a storage facility extending under an unconsenting landowner's property.

MR. CROWTHER said he's neither a geologist nor an engineer, but DNR envisions that the damages for an unconsenting property owner would be financial. He continued to explain that the injections would be very deep and into geologic structures that make them secure for containing oil and gas or carbon dioxide, and generally secure from affecting surface properties. He clarified that there is no relationship to the fracking process.

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SENATOR WIELECHOWSKI asked whether property owners who might not want any pipes or drilling equipment on their land would be protected.

MR. CROWTHER said Section 7 speaks to that concern, and a surface owner can be affected. In Alaska, the mineral estate is dominant so the mineral estate owner, often the state, has the right to lease for the exercise of those rights. The existing statute doesn't prohibit the use, but the operator would be liable for damages incurred by that use. This might require the operator to proactively post a bond to prepare for such a conflict.

CO-CHAIR GIESSEL stated that the discussion would continue on Monday. She held SB 49 in committee.

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There being no further business to come before the committee, Co-Chair Giessel adjourned the Senate Resources Standing Committee meeting at 4:59 p.m.