

**ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE**

February 15, 2023

1:24 p.m.

MEMBERS PRESENT

Representative Tom McKay, Chair
Representative George Rauscher, Vice Chair
Representative Josiah Patkotak
Representative Kevin McCabe
Representative Dan Saddler
Representative Stanley Wright
Representative Jennie Armstrong
Representative Donna Mears
Representative Maxine Dibert

MEMBERS ABSENT

All members present

COMMITTEE CALENDAR

HOUSE BILL NO. 50

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

- HEARD & HELD

OVERVIEW: Statehood Defense Efforts by Department of Natural Resources, Department of Fish and Game, Department of Environmental Conservation, and Department of Law

- REMOVED FROM AGENDA

PREVIOUS COMMITTEE ACTION

BILL: HB 50

SHORT TITLE: CARBON STORAGE

SPONSOR(s): RULES BY REQUEST OF THE GOVERNOR

01/27/23	(H)	READ THE FIRST TIME - REFERRALS
01/27/23	(H)	RES, FIN
02/10/23	(H)	RES AT 1:00 PM BARNES 124
02/10/23	(H)	Heard & Held
02/10/23	(H)	MINUTE (RES)
02/15/23	(H)	RES AT 1:00 PM BARNES 124

WITNESS REGISTER

AARON O'QUINN, Manager
Leasing Section
Division of Oil and Gas
Department of Natural Resources
Anchorage, Alaska

POSITION STATEMENT: On behalf of the sponsor, House Rules by request of the governor, gave a PowerPoint presentation, titled "HB 50 Carbon Capture, Utilization, and Storage Sectional Analysis."

JOHN CROWTHER, Deputy Commissioner
Department of Natural Resources
Anchorage, Alaska

POSITION STATEMENT: Answered questions during the hearing on HB 50.

BRETT HUBER, Chair
Alaska Oil and Gas Conservation Commission
Department of Commerce, Community, and Economic Development
Anchorage, Alaska

POSITION STATEMENT: Answered questions during the hearing on HB 50.

ACTION NARRATIVE

[1:24:42 PM](#)

CHAIR TOM MCKAY called the House Resources Standing Committee meeting to order at 1:24 p.m. Representatives Rauscher, McCabe, Saddler, Wright, Armstrong, Dibert, Mears, and McKay were present at the call to order. Representative Patkotak joined the meeting in progress.

HB 50-CARBON STORAGE

[1:25:53 PM](#)

CHAIR MCKAY announced the only order of business would be HOUSE BILL NO. 50, "An Act relating to the geologic storage of carbon dioxide; and providing for an effective date."

[1:26:50 PM](#)

AARON O'QUINN, Leasing Section Manager, Division of Oil and Gas, Department of Natural Resources, on behalf of the sponsor, House Rules by request of the governor, gave a PowerPoint presentation, titled "HB 50 Carbon Capture, Utilization, and Storage Sectional Analysis" [hard copy included in the committee packet]. He drew attention to slide 2, which provided the summary of the carbon capture, utilization, and storage (CCUS) project process. He pointed out that the presentation would cover funding, the sectional analysis of HB 50, and a review of governing statutes, including the Alaska Oil and Gas Conservation Commission (AOGCC) statutes.

MR. O'QUINN moved to slide 3, titled "CCUS Project Process," and gave a summary of the CCUS project and the Alaska statutes which relate to each step. He directed the committee to a flowchart, which described the life of a CCUS project. This process was described as exploration, permitting, investment, leasing, storage, facility closure, and post-closure.

MR. O'QUINN moved to slide 4 and addressed the CCUS project's projected timeline, which is estimated to be between five and ten years from conception to construction and injection.

[1:31:11 PM](#)

MR O'QUINN moved to slide 5, titled "Funding: Administrative Fund," which read as follows [original punctuation provided]:

- Sec. 31: AS 41.06.165. Fees; carbon dioxide storage facility administrative fund
- Creates fund to cover AOGCC operating costs associated with oversight of carbon storage, like fees collected for oil and gas oversight
- Intent is to ensure available funding for responsible oversight of carbon storage facilities. Balance is expected to be expended on a cash flow basis
- Income account revenue sources:
 - Fees received under AS 41.06.165(a)
 - Fees received under AS 41.06.125 and 41.06.200
 - Earnings on the fund
- Legislature must appropriate from the administrative fund for:
 - AOGCC operating expenses
 - Expenses incurred by cooperating agencies (e.g., DEC or DNR) supporting administration of carbon storage facilities

MR O'QUINN reviewed the types of funding that would be created by HB 50 and the regulating statutes. He explained that the administrative fund's purpose would be to fund AOGCC as well as the oversight of carbon storage facilities.

[1:32:10 PM](#)

REPRESENTATIVE SADDLER asked whether AOGCC's primacy request would represent a bottleneck in the progress of carbon capture projects.

JOHN CROWTHER, Deputy Commissioner, Department of Natural Resources, clarified that the primacy pursuit would have to be reviewed and authorized by the U.S. Environmental Protection Agency (EPA), so there could be a bottleneck during this process. However, other states are in similar situations, and he pointed out that EPA has issued guidance memos that indicate there would be favorability for states seeking primacy, as well as funding opportunities. He added that the fiscal note only deals with the startup of seeking primacy. In response to a follow-up question, he suggested that if HB 50 advances this session, it is possible primacy would occur within two to three years.

[1:34:50 PM](#)

REPRESENTATIVE MCCABE asked whether anything has been learned from consultants, such as Stantec, regarding the efficacy of the project.

MR. O'QUINN referenced a Stantec report that compared other states and their approaches to the primacy issue. He gave an example of an application by Louisiana for the primacy of a Class VI well. He told the committee that several reports would be available, one of which would analyze commercial terms from different jurisdictions in order to evaluate how minimum values proposed in the bill compare to other jurisdictions, and this could be compared to the maturity of the market.

REPRESENTATIVE MCCABE requested copies of the Stantec and Gaffney Cline reports, along with any other associated materials.

[1:38:33 PM](#)

MR. O'QUINN, in response to Representative Rauscher, expressed the understanding that once an application receive primacy it would be handed to the state, and it would not have to reapply. He stated that he would check with EPA and Louisiana and report the answer back to the committee.

REPRESENTATIVE SADDLER, concerning slide 4, asked whether the same unitization that exists now would be used for the injection process.

MR. O'QUINN responded that these would be new units, as current units are for oil and gas production, and a new property right would need to be established.

MR. CROWTHER, in response to a follow-up question, explained that the bill would create the idea of potential coexistence of the oil and gas operations with carbon sequestration. These oil and gas operations would still be available for production without interference from the carbon sequestration.

CHAIR MCKAY expressed the understanding that the Alaska Oil and Gas Conservation Commission (AOGCC) is funded completely by the oil and gas industry. Concerning this, he requested an explanation of the funding for the administration of carbon sequestration.

MR. CROWTHER expressed the understanding that the AOGCC funding structure would be the same for carbon sequestration. He deferred to AOGCC.

[1:42:07 PM](#)

BRETT HUBER, Chair, Alaska Oil and Gas Conservation Commission, Department of Commerce, Community, and Economic Development, described where the funding for carbon storage would come from. He explained that the regulatory cost charge is assessed volumetrically so it is spread across the industry. Concerning funding, he stated that there would be a regulatory cost charge and a regulatory cost structure. He suggested that this would be funded by the industry, as it is not supposed to come from the general fund.

[1:44:35 PM](#)

MR. O'QUINN moved to slide 6, titled "Funding: Closure Trust Fund," which read as follows [original punctuation provided]:

- Sec. 4: AS 37.14.850. Carbon storage closure trust fund.
- Creates two accounts: income account and operating account
- Intent: Not subject to annual fiscal sweep, ensures funding for closed storage sites after DNR takes title and liability
- 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
- Legislature must appropriate from the income account and earnings to the operating account

MR. O'QUINN explained that the second revenue source would be the Carbon Storage Closure Trust Fund, and the state could use this to monitor a closed facility and remediate any issues that might come up in post-closure.

CHAIR MCKAY noted that carbon dioxide (CO₂) is inert and not toxic like hazardous materials buried in landfills. He expressed the understanding that CO₂ would not be an environmental threat.

MR. CROWTHER responded that CO₂ is in the atmosphere around us and is non-toxic in a general atmospheric sense. In terms of workplace safety, he suggested that CO₂ would have a very different profile from other materials managed by industrial operations.

REPRESENTATIVE SADDLER asked about the different functions of the income and operating accounts referenced on slide 6.

[1:47:37 PM](#)

MR. O'QUINN responded to Representative Sadler's question by explaining that the Carbon Storage Closure Trust Fund was designed to be a non-sweepable fund, and this is because it would be for a long-term purpose. He moved on to slide 7, titled "Funding: DNR Rents and Charges," which read as follows [original punctuation provided]:

- Secs. 9-11: AS 38.05.135(c)-(e)
- Incorporates authority to collect rents, royalties, and charges as is done with other mineral leasing
- Sec. 14: proposed AS 38.05.710. Carbon storage exploration licensing
- Establishes a minimum rental rate of \$20 per acre
- Establishes a minimum injection charge of \$2.50 per ton of carbon dioxide
- Sec. 14: proposed AS 38.05.735. Payments from carbon storage exploration licenses and carbon storage leases
- 25% of revenue is deposited in the Alaska Permanent Fund (Art. IX, Sec. 15, Alaska Constitution)
- Remaining revenue is deposited in the general fund

He pointed out that the slide outlines some of the projected revenues from royalties and charges, including the twenty-five percent allocation to the permanent fund as mineral revenue.

[1:48:50 PM](#)

REPRESENTATIVE ARMSTRONG asked how AOGCC came up with the minimum rate and injection charge. She expressed the opinion that the charge seems to be low.

MR. O'QUINN responded that the markets were surveyed, and he pointed out that the mature markets, which are highly competitive, do have higher fees. He explained that because Alaska has a young storage market, in statute there would be a floor for the revenues. He suggested that there was a desire for the market to develop, and then higher rents and injection fees would be anticipated.

REPRESENTATIVE ARMSTRONG asked why a 45(Q) exemption was not included. She expressed concern that since the state does not exempt the federal tax credits, it would become a negative revenue. Under the scenario proposed on slide 6, she expressed the understanding the state would take a "huge hit" on corporate income tax.

MR CROWTHER acknowledged that the 42(Q) exemption was not addressed in the proposed legislation. He agreed that it was a relevant issue and could be a topic to be addressed in the legislation. He said it was not a deliberate choice to leave it out, but the framework mechanisms had been the focus.

[1:51:53 PM](#)

REPRESENTATIVE SADDLER asked for the confirmation that these would not be new fees but rather the replication of analogous fees. He expressed the understanding that the proposed legislation would just bring the new property use into the statutes.

MR. O'QUINN responded in agreement.

REPRESENTATIVE WRIGHT questioned what the high end of the fee charges would be.

MR. O'QUINN responded that rentals have been \$50, and higher in more competitive areas. He stated that carbon taxes are driving some of these numbers. He stated that the proposed legislation would just set up the framework in the state, and this would allow the industry to come to Alaska with its carbon for sequestration.

REPRESENTATIVE SADDLER requested additional clarification about the 45(Q) tax credits, as well as the revenue stream.

[1:55:18 PM](#)

MR. O'QUINN described how operators in Alaska would be assessed a corporate income tax. He explained that Alaska has incorporated the Internal Revenue Service (IRS) code, and by this incorporation, it would be possible that the IRS 45(Q) tax credits would also appear in the Alaska revenue code. He offered the understanding that this had not been taken into consideration when the proprietary leasing and permitting components of HB 50 were prepared. He stated that he is not a tax expert.

REPRESENTATIVE MCKAY expressed the understanding that these would be two completely separate transactions. He surmised that a company would pay fees to the state, but what it writes off on federal taxes would be of no consequence to the state.

[1:57:26 PM](#)

REPRESENTATIVE ARMSTRONG pointed out a previous presentation that had described the tax implication. She used North Dakota as an example, as it had reported a net revenue loss of 17.59 million in corporate income tax because the way the 45(Q) tax credit works. She noted that the fiscal note from the Department of Revenue (DNR) references this as well. In response to further questions from Chair McKay, she explained

that DNR took the North Dakota example and estimated Alaska numbers.

MR. O'QUINN, in response to the example of North Dakota, pointed out that the internal revenue code adopted would be the Alaska code; therefore, Alaska essentially has its own 45(Q) tax code. Although the intention of HB 50 would be to establish the property and permitting rights, he acknowledged that the revenue statute for the tax code may need to have additional revisions.

[2:00:02 PM](#)

CHAIR MCKAY asked for clarification that 25 percent of the revenue from carbon capture would go into the permanent fund and dividends would be paid.

MR. CROWTHER concurred, explaining that the mineral revenues associated with the development would go into the permanent fund. He further expounded on the federal and state tax code conversation.

[2:02:12 PM](#)

REPRESENTATIVE ARMSTRONG mentioned she has started working on an amendment that addresses the 45(Q) tax credit.

REPRESENTATIVE MCCABE suggested that DNR add specific numbers to the framework of the proposed bill. He drew a parallel between this process and oil exploration.

[2:04:14 PM](#)

CHAIR MCKAY confirmed that DNR could be present at the next meeting to "flush this out."

REPRESENTATIVE PATKOTAK, for future consideration, questioned if the property were not state owned how this would apply to the injection process. He pointed out that past legislation had exempted state property from being rolled into a state assessment tax. He used the example of Point Thomson and questioned the value assessment of carbon once it is put in the ground.

[2:05:46 PM](#)

MR. O'QUINN moved to slide 8, "Sectional Summary." He went through Section 1 through Section 7 with brief comments on each section.

[2:08:55 PM](#)

REPRESENTATIVE MCCABE stated that Section 7 has caused concern with some of his constituents. He read into the record a portion of the Stantec report. He expressed the desire to make it clear that the state would not be injecting toxins into the ground.

[2:10:46 PM](#)

REPRESENTATIVE SADDLER questioned whether the owner of agricultural lands, designated so in perpetuity, would be allowed to extract minerals in the subsurface of the land.

MR. O'QUINN described the process of disposal for lands designated for agricultural purposes. He stated that provisions would be in the agreements for subsurface mineral leases of these lands.

REPRESENTATIVE MEARS pointed out that the language of HB 50 only mentions carbon capture for mineral uses.

MR. O'QUINN pointed out that in AS 38.05 through AS 38.05.183 includes the majority of the provisions for mineral leasing. He pointed out that the proposed legislation would add carbon storage to the range under AS 38.05.700.

[2:13:23 PM](#)

MR. O'QUINN continued his commentary on slide 8, Section 8 through Section 14. He moved to slide 9, titled "CCUS Project Theoretical Timeline" and slide 10, titled "Section Detail: Section 14 DNR/DOG)."

[2:19:23 PM](#)

REPRESENTATIVE SADDLER commented on the right of first refusal concerning the leasing process for carbon capture. He suggested that this would put the state in a poor bargaining position.

MR. CROWTHER explained that the lessee would have to meet a high bar in order to take advantage of the right of first refusal.

[2:20:14 PM](#)

REPRESENTATIVE MCCABE reiterated how land rights operate in a competitive process. If a company had an active oil or gas lease, it would need to meet the highest bid in order to have the right of first refusal. He questioned what would prevent a company who already holds the lease to drill a hole for carbon sequestration from going forward.

MR. CROWTHER explained that a lessee would be allowed to drill a new hole and inject CO2 in order to enhance the production of oil and gas. However, under the terms of this legislation, if the company were to do a pure carbon sequestration project, it would have to acquire a carbon storage lease.

[2:23:32 PM](#)

REPRESENTATIVE RAUSCHER asked how the [Cook] Inlet platforms would be affected.

MR. CROWTHER explained that the platforms were one of the considerations, and these companies would have the right of first refusal before allowing another gas and oil operator to convert or expand into a storage lease.

REPRESENTATIVE RAUSCHER asked whether taxes were being paid for the area of the platform or the underground area.

MR. CROWTHER responded that the surface infrastructure is the primary driver of the property tax generated.

[2:25:20 PM](#)

REPRESENTATIVE MEARS asked about the performance requirements involved in the rights of first refusal.

MR. O'QUINN affirmed an operator cannot simply warehouse acreage, as there would be a work commitment. He returned to Representative Rauscher's question about the platforms and stated that if the storage operator is not the same as the oil and gas operator, it would be the responsibility of the new operator to dismantle the platform.

REPRESENTATIVE SADDLER asked about the property tax revenue structure.

MR O'QUINN stated that the proposed legislation would not address taxation.

[2:29:02 PM](#)

MR. O'QUINN spoke about converting an exploration lease to a long-term lease. He stated that this would delineate what acreage the lessee would actually be using. He also described the process of changing the terms of the lease when the purpose of the well changes to a carbon capture well. He noted that all plans would be reported to DNR.

MR. O'QUINN continued to slide 11, titled "Sectional Summary: Secs. 15-31" and described the amendments, definitions, and the new sections. He described the conforming amendments in Section 15 through Section 31. He continued to slide 12, calling specific attention to where Section 31 would be in the timeline.

MR. O'QUINN moved to slides 13 through 15, which fall under the title, "Section Detail: Section 31 (AOGCC)." He stated that these slides concern conforming amendments dealing with geothermal and carbon dioxide, protecting reservoir and water integrity, bringing carbon dioxide into the jurisdiction of AOGCC, public health mandates, and waste management. He noted the details about how companies would go to AOGCC with concepts and project designs to apply for permits. In addition, he pointed out that AOGCC and DNR would have the authority to regulate and the powers to protect the waters, the resources, and public health.

REPRESENTATIVE MCKAY mentioned his experience in fracking and the protection of natural resources. He said this bill has similarities to fracking regulations and the engineering required to protect clean drinking water.

[2:39:18 PM](#)

MR. O'QUINN agreed that drinking water would be protected under EPA's Safe Drinking Water Act.

REPRESENTATIVE MCCABE put on the record that the minimum depth of the injection well would be 2,600 feet.

CHAIR MCKAY mentioned that some of the reservoirs are 10,000 to 12,000 feet deep.

REPRESENTATIVE MEARS asked whether there is a statutory requirement for a minimum well depth for storage.

MR. O'QUINN said there is no statutory depth for wells at this time; however, there would be a broad regulatory authority granted to AOGCC, and AOGCC likely would be promulgating regulations concerning the condition CO2 would need to remain in.

[2:43:23 PM](#)

REPRESENTATIVE MCCABE inquired how "waste" is defined in the proposed legislation.

Mr. CROWTHER explained the regulations concerning waste would include the full utilization of the carbon capture resource, and it would prohibit inefficient, excessive, or improper operation of storage facilities.

[2:44:49 PM](#)

MR. O'QUINN continued with the applicable statutes related to the proposed bill.

REPRESENTATIVE SADDLER asked about corrosion and reservoir integrity.

Mr. CROWTHER explained that reservoir integrity would concern maintaining pressure by injecting CO2 at the correct rates, and this is opposed to the corrosive qualities of carbon dioxide.

MR. O'QUINN explained that when injecting CO2, it must meet a specific standard of purity and not have particulate matter.

[2:50:14 PM](#)

MR. O'QUINN continued his discussion of Section 31, which covers post-closure administration, penalties for violations, authority for agreements, and definitions.

[2:53:24 PM](#)

REPRESENTATIVE SADDLER referred to Section 06.170 and asked about the state's liability. He questioned the risks in capturing quantities of carbon dioxide.

MR. CROWTHER explained that CO2 basically remains in the wells in perpetuity. He suggested that companies would not be willing to take on the responsibility for long-term liabilities. He expressed the opinion that companies would understand the operational risks, the technical process risks, and the commercial risks; however, maintaining liability on the books for 100 years would be challenging, as companies do not know how to put a number on this. He explained that this is why other states in these circumstances have said they would assume title with the CO2 underground. The risks might include CO2 migrating into another underground reservoir, compromising the productivity of the operation. However, from a trap and seal perspective, he stated that there has not been an observed risk of a 7,000-foot reservoir release to the surface, even with seismic events.

[2:57:37 PM](#)

CHAIR MCKAY noted scenarios concerning companies drilling through disposal zones to deeper zones and expressed the understanding that this, and any problems that arise, would be covered under AOGCC's regulations, and not covered in the bill, as it would be too complicated. In a different scenario, he pointed out that there may be a limited number of wells, with the owner of the well required to pay the state to use the well. He questioned what would happen if other companies wanted to inject their CO2 into this well.

MR CROWTHER responded that the company who holds the exploration license would pay the state the injection charge, while tolling the other operators. He stated that this would be a commercial arrangement between them.

CHAIR MCKAY questioned what would happen if the owner of the well would not let other operators dispose of waste in the well.

MR CROWTHER stated that from a storage perspective, the operator would be acquiring the exclusive rights; therefore, under the proposed legislation, there would be an exclusive right for sequestration. If another party wanted to participate in this, there would have to be commercial terms. He acknowledged there could be other issues with this.

[3:01:20 PM](#)

CHAIR MCKAY made closing comments. He announced that HB 50 was held over.

3:01:48 PM

ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 3:01 p.m.