

Recap: HB 50 Carbon Storage

House Finance Committee



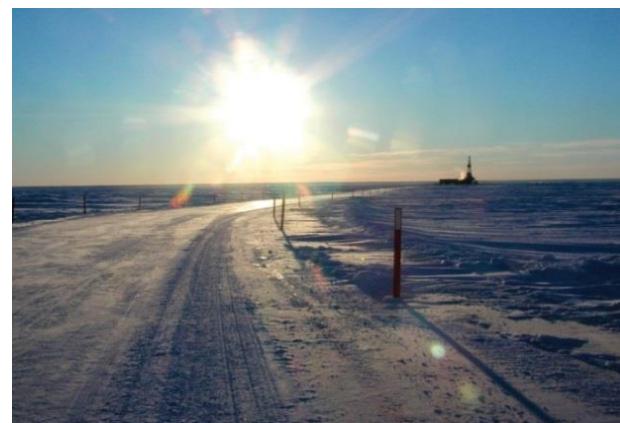
Presented by:

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January 25, 2024



OUTLINE



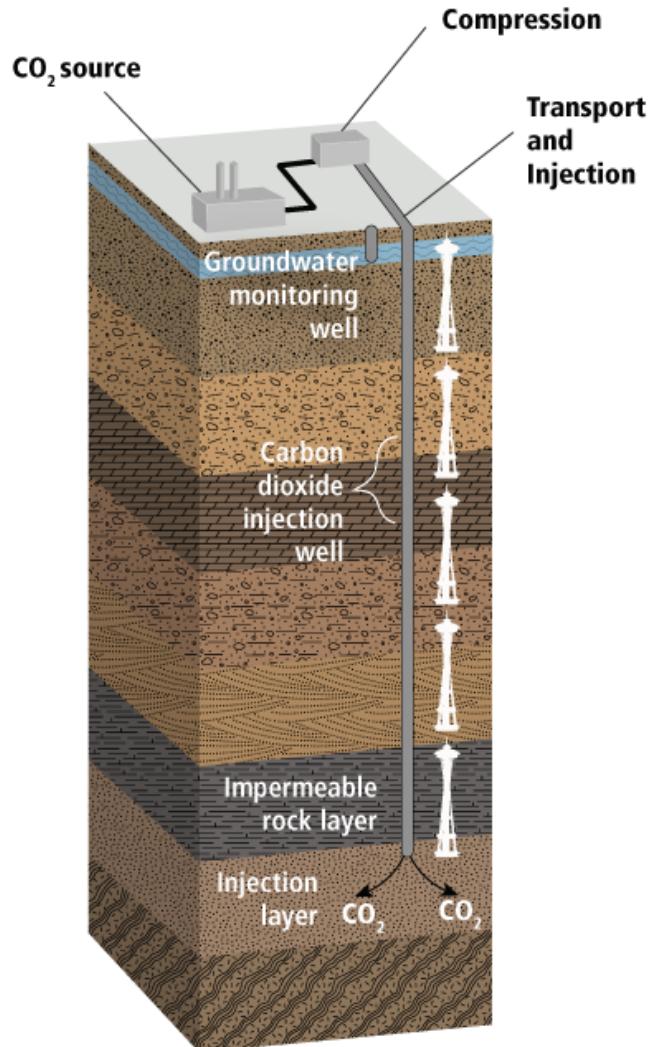
1. Recap: Purpose and Status of HB 50
2. Alaska Oil & Gas Conservation Commission (AOGCC)
Underground Injection Control Class VI well primacy updates
3. Carbon Capture Utilization & Storage (CCUS) licensing updates
from other state jurisdictions
4. CCUS project phases and the legislation
5. Appendix - sectional summary

RECAP: PURPOSE OF HB 50



Make Alaska's subsurface resources available for maximum use

1. Enables the Department of Natural Resources 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 to regulate the geologic storage of carbon dioxide on all lands in the state, including protection of correlative rights



RECAP: STATUS OF HB 50



CS FOR HOUSE BILL NO. 50(RES)

- Several minor drafting style changes for consistency and clarity
- Eliminates policy statements
- Modifies the carbon storage closure trust fund to ensure it is a “non-sweepable” fund
- Removes minimum commercial terms from statute and directs them to be established by regulations, updated every 5 years
- Removes federal 45Q tax credits from AS 43.20.036
- Adds carbon dioxide to AS 46.03.202(10)(B) to the Department of Environmental Conservation’s pipeline jurisdiction

DEVELOPMENTS IN CCUS INDUSTRY



Nationally

- North Dakota:
 - Two facilities actively injecting CO₂
Red Trail Energy online June 2022 & Blue Flint Ethanol online October 2023
 - Six Class VI well applications approved
- Wyoming: Issued first Class VI well approval December 2023
- Louisiana: Received Class VI well primacy from EPA December 2023

Alaska

- Department of Energy grants:
 - Department of Natural Resources \$1 million to develop CCUS database
 - University of Alaska Fairbanks CarbonSAFE Phase II
 - Alaska CCUS Consortium of Santos, Repsol, and ASRC Energy Services for Direct Air Capture feasibility study

CLASS VI PRIMACY UPDATES

AOGCC UPDATE



Authority to Pursue Class VI primacy from EPA granted through passage of SB 48 *Carbon Offset Program on state Land* (Ch.2 SLA 2023):

*"The commission may take all actions necessary to allow the state to acquire primary enforcement responsibility under 42 U.S.C. 300h-1 and 42 U.S.C. 300h-4 (Safe Drinking Water Act of 1974, as amended, 42 U.S.C. 300f - 300j-26), for the control of underground injection related to the recovery and production of oil and natural gas and the control of underground injection in Class I wells, as defined in 40 2 C.F.R. 144.6, as amended, **and the control of underground injection in Class VI wells, as defined in 40 C.F.R. 144.6, as amended.**"*

Appropriation for 2 positions as well as contractual and legal support

CLASS VI PRIMACY PROCESS



Multiyear process based on other states' experience:

AOGCC's aim is 2 years

During the process, AOGCC works with EPA to develop and finalize:

- Governor's and Attorney General's statement
- Memorandum of Agreement with EPA
- Regulatory Crosswalk (a comparison between federal and proposed state regulations)
- Program Description – including the process for application processing
 - How will we implement Class VI?
 - Includes general descriptions, organizational structure, modelling/simulations, consultancies that may support the State, environmental justice, and notice and public participation processes.

EPA INTERACTIONS To DATE



AOGCC and EPA have had a series of interactions over the last year:

- EPA grant invitation and AOGCC's responsive letter of interest submitted
- Introduction meetings and discussions with technical staff
- Kick-off meeting with EPA Region 10 and Washington, D.C. HQ
- EPA's initial review of Alaska CCUS legislation
 - These discussions have highlighted technical changes that the Administration will be bringing forward amendments to address
- EPA Grant – [AOGCC formally applied in December 2023](#)

EPA's REVIEW/POTENTIAL AMENDMENTS



As part of the primacy process, EPA and AOGCC will engage in a “crosswalk” process that compare state statute and regulation with federal code. EPA’s intent is to confirm that proposed state processes are as stringent as federal requirements. EPA’s initial review of the CCUS legislation (August 2023) identified:

1. Exceptions or waivers “for good cause” may lead to stringency questions vs. federal code
2. Liability transfer process and post-closure trust fund period could be inconsistent vs. federal code – as the EPA requires liability to remain with the operator for the full, 50-year post-closure period
3. Penalty provisions – AOGCC has since determined proposed penalties should meet or exceed federal code



AOGCC STAFFING AND RESOURCES

AOGCC is well resourced to pursue the primacy effort:

- Legal Team – Department of Law support, and contracted services with Susan Pollard, former Department of Law regulatory attorney. This team is working on:
 - Crosswalk + regulation package
 - Memorandum of Agreement
- Commissioners and staff:
 - Leading regulation package development, outreach, and public participation efforts
 - **New Hire** – Carbon Reservoir Engineer
 - **New Hire** – Carbon Assistant

REQUESTS FOR SERVICES



- Request For Information for consultant services: **6 responses**
Potential services include: reservoir analysis, reservoir modelling and simulations, project management, environmental justice activities assessments
- Request For Proposals will be issued nearer to the end of the primacy process in anticipation of AOGCC receiving a Class VI storage facility application to process
(estimated September 2025)

LICENSING UPDATES FROM OTHER STATE JURISDICTIONS

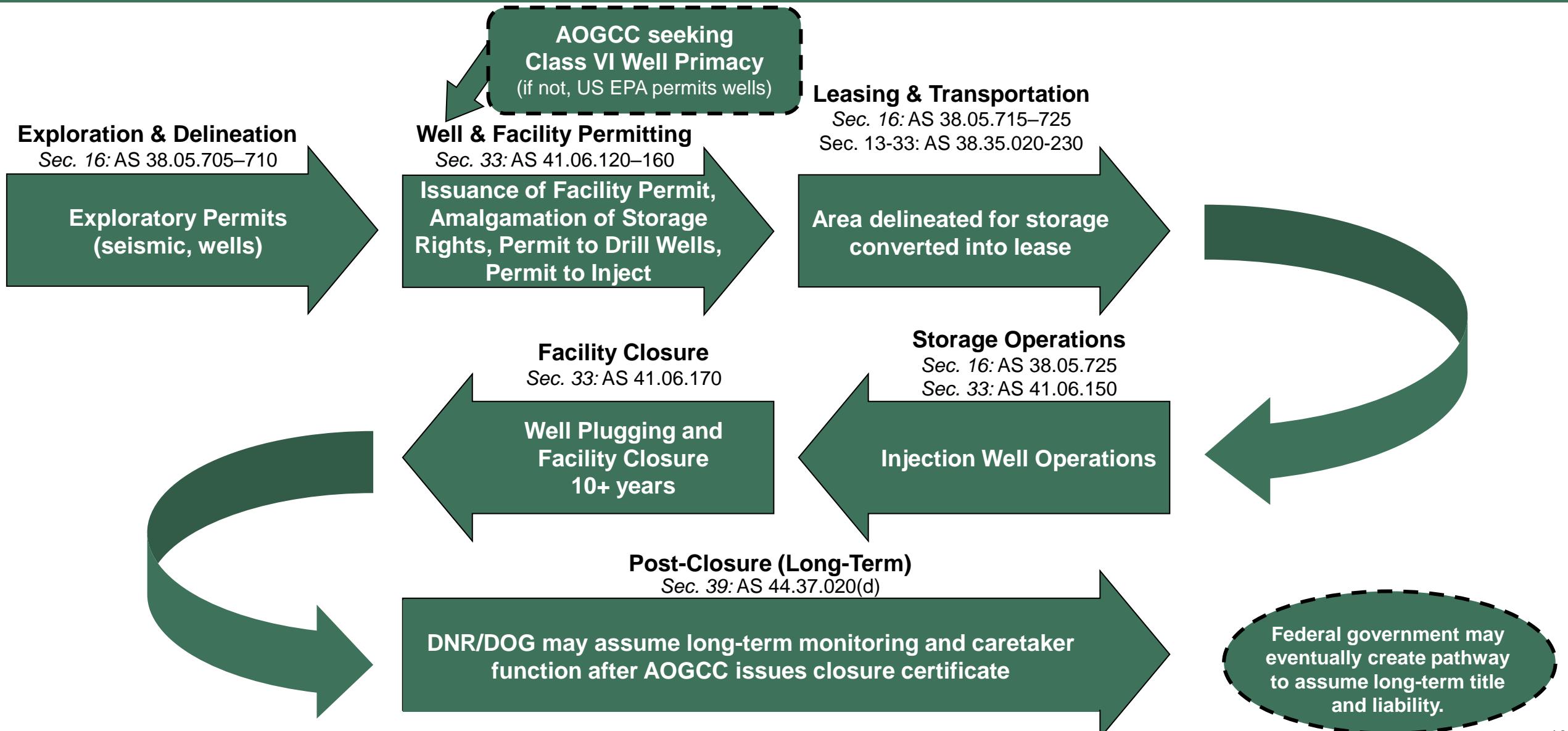
STATE CARBON STORAGE LEASING



State Body	Statutes & Regulations	Leasing Mechanism	Number of Leases	Commercial Terms	Public Process
Wyoming Office of State Lands and Investments	<ul style="list-style-type: none"> No specific carbon storage authorities, held under general land leasing W.S. 36-2-107 & W.S. 36-5-114 through 117 Chapter 5 	<ul style="list-style-type: none"> Special Use Lease – may receive application at any time or issue Request for Proposals 	<ul style="list-style-type: none"> 2 issued. 2 under negotiation 	<ul style="list-style-type: none"> No minimums in statute Tiered bonus bid payments \$15 – \$75 per acre Injection charge \$1 per ton Consumer Price Index escalator 	<ul style="list-style-type: none"> Applicant must obtain consent of existing surface grazing lessees Director of State Lands brings lease before the Board of Land Commissioners for approval at public meeting
Texas General Land Office	<ul style="list-style-type: none"> Texas Health and Safety Code 382 Subchapter K § 382.501 – 382.510 	<ul style="list-style-type: none"> Carbon Storage Lease – Requests for Proposals (RFP) on tracts designated in Gulf of Mexico CO2 Site Characterization 	<ul style="list-style-type: none"> 1 issued. 6 under negotiation 	<ul style="list-style-type: none"> RFP minimums \$50 per acre bonus bid Rent: \$50 per acre Injection charge: \$4 per acre Portion of additional value 	<ul style="list-style-type: none"> General Land Office reviews solicitation responses, negotiates with applicants, and makes recommendation of final lease for approval to School Land Board All offshore tracts
Louisiana Office of Mineral Resources	<ul style="list-style-type: none"> LA Rev Stat § 30:209(e) 	<ul style="list-style-type: none"> Operating Agreement – may receive application at any time. Awarded primacy over Class VI wells 	<ul style="list-style-type: none"> 6 issued. 	<ul style="list-style-type: none"> No minimums in statute Bonus bids: \$0 – \$425 per acre Rent: \$0-\$60 per acre Injection charge: \$1.50 – \$7.50 45Q escalators 	<ul style="list-style-type: none"> Louisiana State Mineral and Energy Board holds a public hearing to review and approve lease negotiated by Office of Mineral Resources

CCUS PROJECT PHASES AND THE LEGISLATION

CCUS PHASES AND LEGISLATION



AUTHORIZATIONS UNDER HB 50



Carbon Storage Exploration License

- 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

DNR

Carbon Storage Facility Permit

- 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 life of project

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Carbon Storage Lease

- 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 Enhanced Oil Recovery reservoirs that transition to sequestration

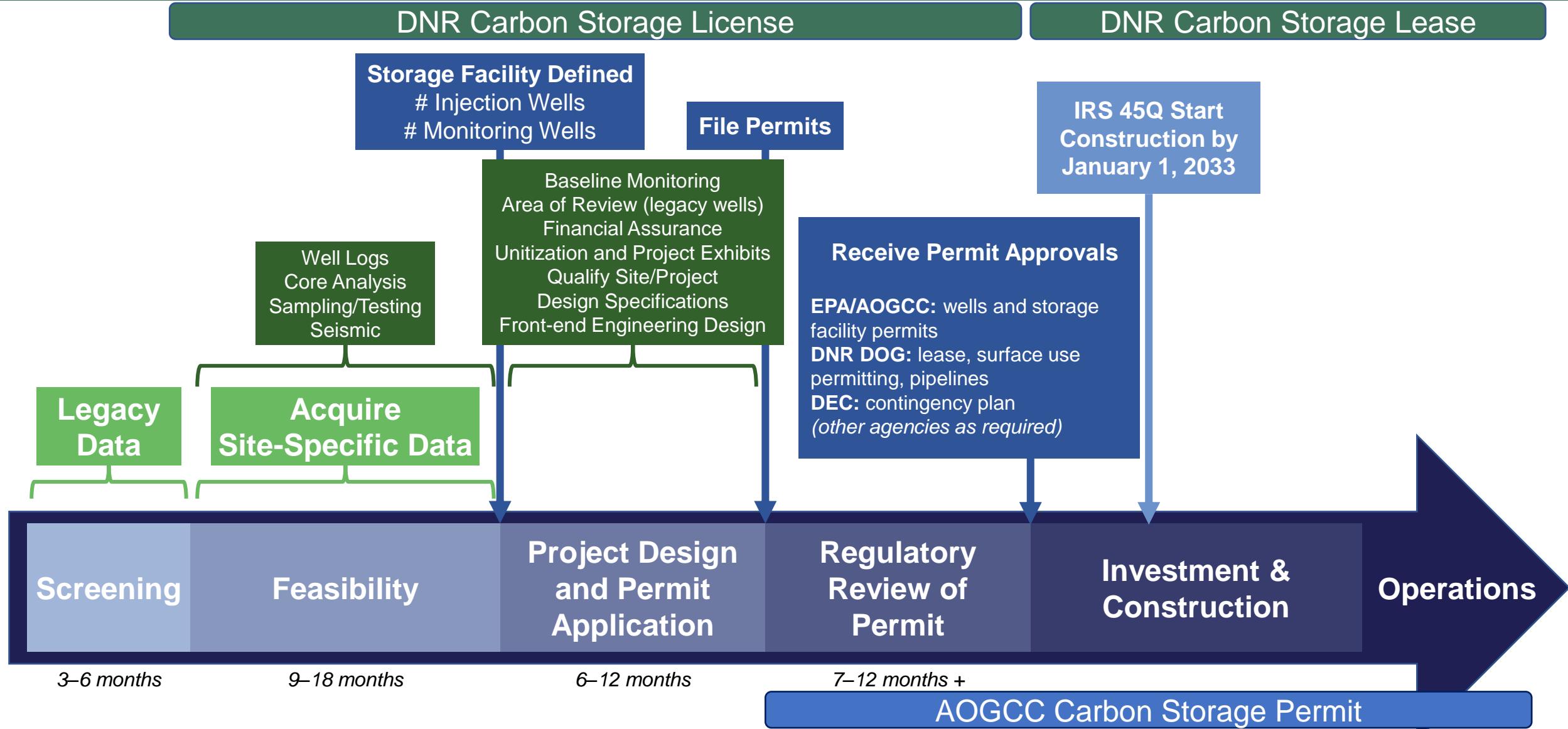
DNR

Closure Certificate

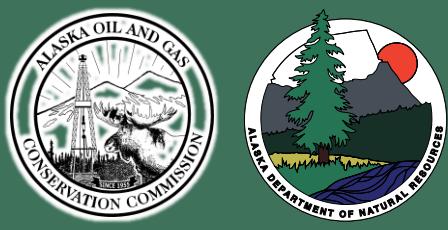
- Operator may apply at least 10 years post-injection
- Public notice & hearing
- Must demonstrate stabilization of CO₂ plume and remediation activities complete
- Title to CO₂ and long-term monitoring and maintenance transfer to state
- Funded by carbon storage trust fund over life of project

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CCUS PROJECT THEORETICAL TIMELINE



QUESTIONS?



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