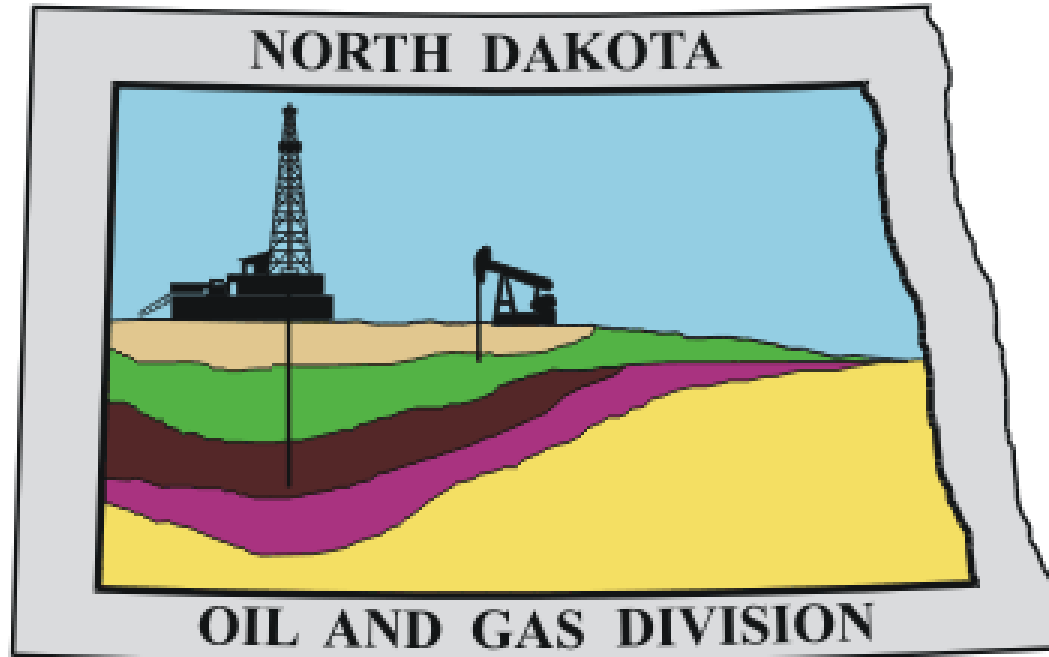


North Dakota Oil and Gas Division



<http://www.oilgas.nd.gov>

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*600 East Boulevard Ave. – Dept 405
Bismarck, ND 58505-0840
(701)328-8020*

IOGCC Task Force Report

Interstate Oil and Gas Compact Commission



Plains CO₂ Reduction Partnership



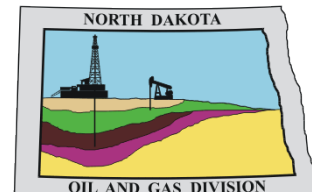
Task Force on Carbon Geologic Storage



Phase III Project



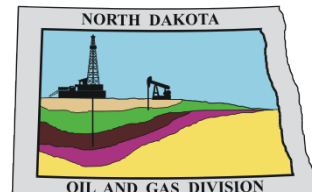
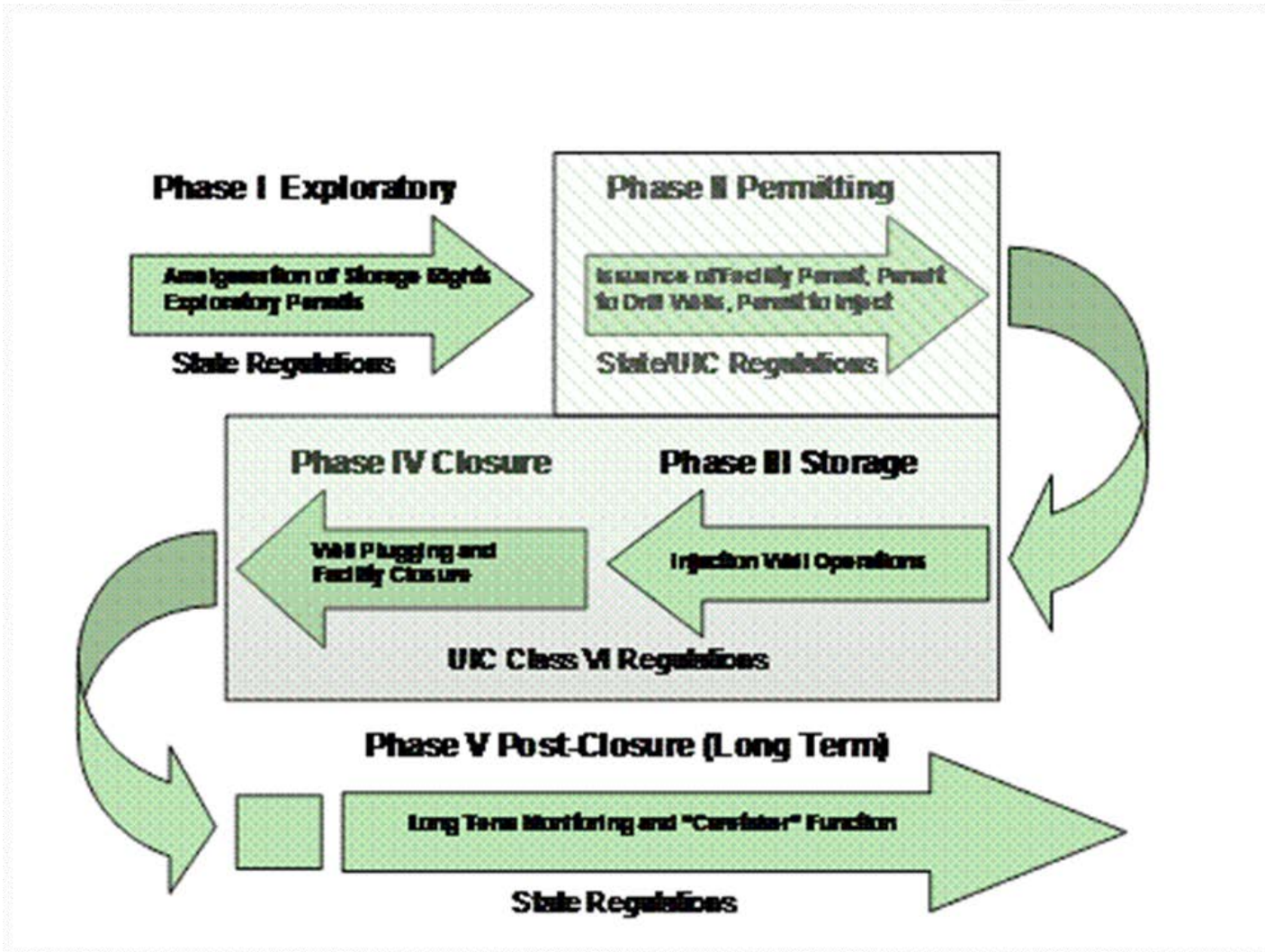
Guidance for States and Provinces On Operational and Post-Operational Liability



NDIC – DMR Oil and Gas Division

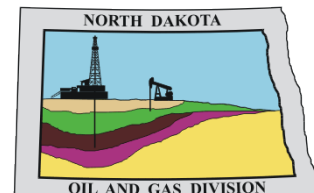


IOGCC Task Force Report



Two Basic Principles

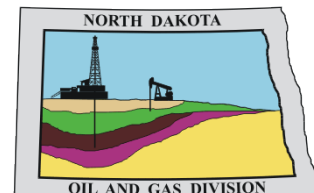
1. It is the public interest to promote geologic storage of CO₂ in order to reduce anthropogenic emissions.
2. The States pore space should be regulated and managed as a resource under the resource management philosophy as opposed to a waste disposal regulatory framework.



Waste Disposal Framework

- Sidesteps the Public's Role in both the creation of CO₂ and the mitigation of its release into the atmosphere
- Places the burden solely on Industry to rid itself of "waste" from which the public must be "protected"
- Lacking citizen buy-in with respect to responsibility for the problem as well as the solution will have a negative impact on CO₂ storage as a viable methodology for reducing anthropogenic CO₂ emissions

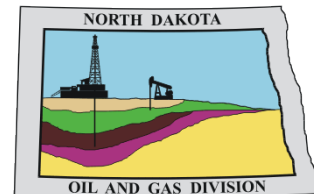
© CO2CRC



Resource Management Framework

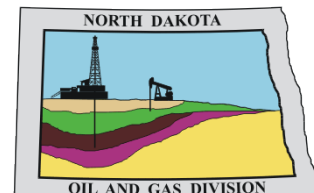
- A resource management framework allows for the regulatory complexities that accompany CO₂ Storage to be integrated into a unified regulatory framework and proposes a “public and private sector partnership”
 1. Environmental protection
 2. Ownership and Management of pore space
 3. Maximize Storage Capacity
 4. Long Term Liability

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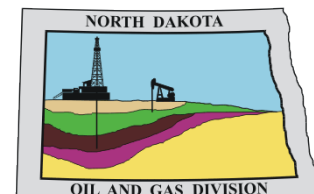
North Dakota CO₂ Storage Workgroup

- Formed in 2008
- Public and Private partnership consisting representatives from:
 - Oil and Gas Division of the North Dakota Industrial Commission
 - Attorney General's Office
 - Department of Health
 - Lignite Energy Council
 - North Dakota Petroleum Council
 - Energy and Environmental Research Center (EERC)
- Tasked with the development of regulatory framework for the long term storage of CO₂
- Ownership of Pore Space in Geologic Strata



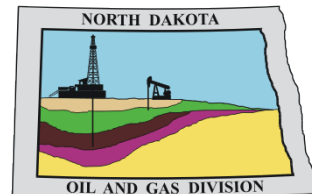
Legislation

- 2009 Legislation
 - Senate Bill No. 2095 Effective July 2009
 - Covered Geologic Storage of CO₂
 - Granted Regulatory Authority to the Industrial Commission.
 - Carbon Dioxide Trust Fund
 - Carbon Dioxide Storage Facility Administrative Fund
 - Senate Bill No. 2139 Effective April 2009
 - Title of Pore Space to the owner of the overlying Surface Estate
 - Severing Pore Space Prohibited, leasing pore space is not a prohibited severance



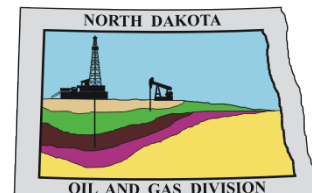
Rule Making

- 2010 New Administrative Chapter 43-05-01 “Geologic Storage of Carbon Dioxide”
 - Effective April 2010
- ❖ ND regulatory framework in place
- EPA Class VI Rule December 10, 2010 – 1422 UIC Program
- 2011 Legislation- House Bill No. 1014 Appropriations Committee
 - Carbon Dioxide Storage Facility Administrative Fund
 - NDIC was appropriated \$532,000 from the General Fund
 - One full-time position for up to three years until fee income is sufficient to provide funding for the administration of the provisions of NDCC Chapter 38-22
 - Goal: Obtain Class VI Primacy
- September 7, 2011 EPA acting regulatory authority
- 2013 Amendments to NDAC Chapter 43-05-01 to meet federal stringency (from 18 pages to 69 pages)



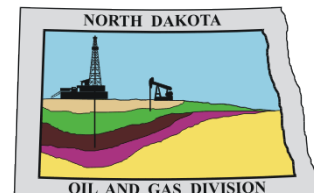
Regulatory Barriers

- EPA federal authority
 - SDWA – UIC Program
 - Class VI Rule
- North Dakota laws and Regulations
 - Statute – CO₂ Underground Storage
 - Subsurface Pore Space Policy
 - Administrative Rules
- 2 Regulatory jurisdictions
- Project Development Deterrent



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- ❖ Solution – North Dakota Class VI Primacy



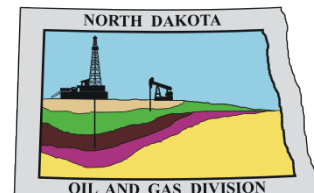
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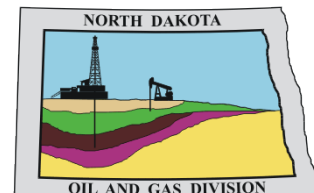
❖ Solution – North Dakota Class VI Primacy

❖ Primacy Application Submitted June 21, 2013



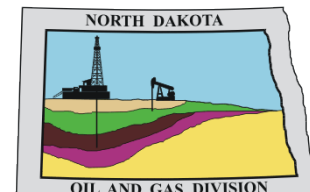
Crosswalk Stats

- Class VI Primacy Crosswalk
 - 150 Pages Complete
 - 465 Federal Citations (boxes)
 - 12 Definitions
- §1422 Program Crosswalk
 - 67 Complete Pages
 - 346 Federal Citations
 - 59 Additional Definitions
- Totals
 - 217 Pages Complete (60 pages blank)
 - 811 Federal Citations
 - 71 Definitions



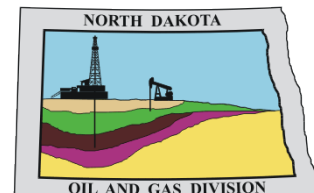
Crosswalk Stats

Federal Requirement	Federal Citation	State Citation and Regulatory Text (document title, page number, section/paragraph)	Different From Federal Requirement?
GENERAL REQUIREMENTS			
PART 124--PROCEDURES FOR DECISION MAKING			
SUBPART A--GENERAL PROGRAM REQUIREMENTS			
40 CFR 124.3 Application for a permit			
Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA). (1) Any person who requires a permit under the RCRA, UIC, NPDES, or PSD programs shall complete, sign, and submit to the Director an application for each permit required under §§ 270.1 (RCRA), 144.1 (UIC), 40 CFR 52.21 (PSD), and 122.1 (NPDES). Applications are not required for RCRA permits by rule (§ 270.60), underground injections authorized by rules (§§ 144.21 through 144.26), NPDES general permits (§ 122.28) and 404 general permits (§ 233.37).	40 CFR 124.3(a)(1)	43-05-01-07.1 Permitting Subsection 1 a	a. _____ Any person who is required to have a permit shall complete, sign, and submit a permit application to the commission.
The Director shall not begin the processing of a permit until the applicant has fully complied with the application requirements for that permit. See §§ 270.10, 270.13 (RCRA), 144.31 (UIC), 40 CFR 52.21 (PSD), and 122.21 (NPDES).	40 CFR 124.3(a)(2)	43-05-01-07.1 Permitting Subsection 1 c	c. _____ The commission shall not begin processing a permit until the applicant has fully complied with the application requirements for that permit.
Permit applications (except for PSD permits) must comply with the signature and certification requirements of §§ 122.22 (NPDES), 144.32 (UIC), 233.6 (404), and 270.11 (RCRA).	40 CFR 124.3(a)(3)	43-05-01-07.1 Permitting Subsection 2	2. _____ All permit applications, reports, or information submitted to the commission must comply with the following signature and certification requirements.
§ 124.5 Modification, revocation and reissuance, or termination of permits.			
(Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).) Permits (other than PSD permits) may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Director's initiative. However, permits may only be modified, revoked and reissued, or terminated for the reasons specified in § 122.62 or § 122.64 (NPDES), 144.39 or 144.40 (UIC), 233.14 or 233.15 (404), and 270.41 or 270.43 (RCRA). All requests shall be in writing and shall contain facts or reasons supporting the request.	40 CFR 124.5(a)	43-05-01-12 MODIFICATION, OR REVOCATION AND REISSUANCE OR TERMINATION OF PERMITS. Subsection 1	1. _____ Permits are subject to review by the commission. Any affected person (i.e. the storage operator, local governments having jurisdiction over land within the area of review, and any person who has suffered or will suffer actual injury or economic damage other than as a member of the general public) may request that the commission review permits issued under this chapter for one of the reasons set forth below. All requests must be in writing and must contain facts or reasons supporting the request. If the commission determines that the request may have merit or at the commission's initiative for one or more of the reasons set forth below, the commission may review the permit. After review, the commission may modify or revoke a permit. Permits may be modified or revoked and reissued when the commission determines one of the following events has occurred:



Building a CO₂ Storage Program

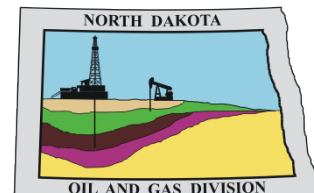
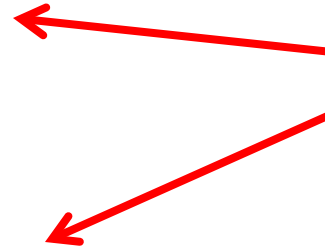
- Legislation
 - Underground Storage of CO₂
 - Subsurface Pore Space Policy
- Administrative Rulemaking
 - Geologic Storage of CO
- Class VI Primacy Regulatory Authority
- Reservoir Modeling Software
 - GEM Software
- Database
 - RBDMS CO₂



Building a CO₂ Storage Program

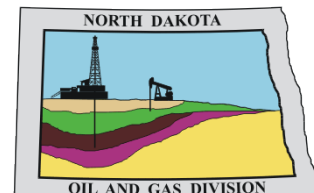
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Complete



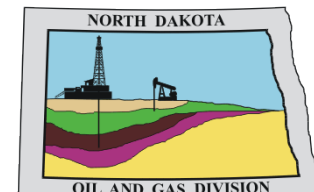
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- Complete**
- Pending**
- EPA**
- Approval**



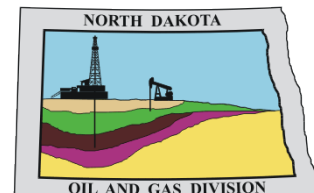
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- Complete**
- Pending**
- EPA**
- Approval**
- September 1, 2013**

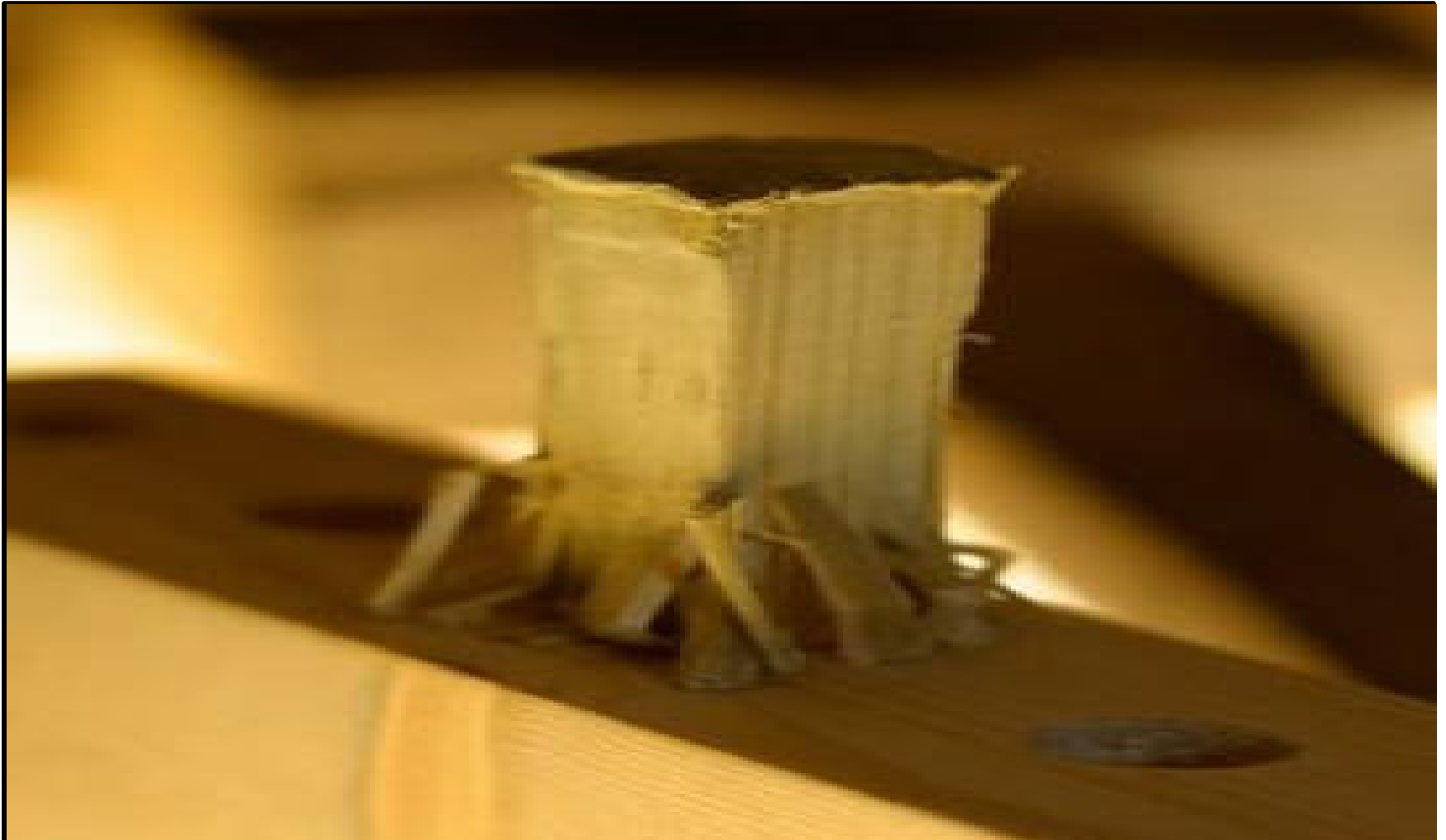


Building a CO₂ Storage Program

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 - Reservoir Modeling Software
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- Complete**
- Pending**
- EPA**
- Approval**
- September 1, 2013**
- Immediate Need**



Questions?



NDIC – DMR Oil and Gas Division

