FISCAL AND ECONOMIC IMPACT STATEMENT
FOR ADMINISTRATIVE RULES

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Return Address:	Injection & Mining 617 N. Third St. Baton Rouge, LA, 70802	Rule Title:	Statewide Order No. 29-N-6 LAC 43:XVII. Ch. 6. Class VI CO_2 Sequestration
		Date Rule Takes Effect:	Upon Promulgation

SUMMARY
(Use complete sentences)

In accordance with Section 953 of Title 49 of the Louisiana Revised Statutes, there is hereby submitted a fiscal and economic impact statement on the rule proposed for adoption, repeal or amendment. THE FOLLOWING STATEMENTS SUMMARIZE ATTACHED WORKSHEETS, I THROUGH IV AND WILL BE PUBLISHED IN THE LOUISIANA REGISTER WITH THE PROPOSED AGENCY RULE.

I. ESTIMATED IMPLEMENTATION COSTS (SAVINGS) TO STATE OR LOCAL GOVERNMENTAL UNITS (Summary)

There will be an increase in expenditures to the Louisiana Department of Natural Resources (LDNR) as a result of the proposed rules required by Act 517 of 2009. The proposed rules govern Class VI wells for the sequestration of carbon dioxide in subsurface geologic formations, ultimately limiting emissions of this greenhouse gas. LDNR anticipates minimal costs to the program in FY 21 (which will be absorbed within their existing budget) because LDNR will not receive approval from the United States Environmental Protection Agency (USEPA) to issue permits for these types of wells until FY 22.

Expenditures will increase over FY 22 and FY 23 as the program is fully staffed and implemented and will require approximately $1.135 M for full implementation by FY 23. Funding for the program will come from the newly created Carbon Dioxide Geologic Storage Trust Fund (CDGSTF), federal grants, and State General Fund (Direct) (SGF). The largest impact to the SGF will be in FY 23, with an expected impact of approximately $500,000. Reliance on the SGF is minimal for FY 24 and beyond as the CDGSTF is expected to have accrued sufficient funds for program operations, in addition to federal grants.

There will be no impact to local governmental units.

II. ESTIMATED EFFECT ON REVENUE COLLECTIONS OF STATE OR LOCAL GOVERNMENTAL UNITS (Summary)

There will be an increase in revenue collections to LDNR beginning in FY 22 and increasing each subsequent fiscal year. LDNR will experience small increases to the Oil and Gas Regulatory Fund each fiscal year ($10,000 by FY 23) and significant increases to the new CDGSTF each fiscal year ($315,000 by FY 23). LDNR anticipates 4 to 6 sites by the end of FY 24 with estimated revenue to the CDGSTF between $1.6 M - $2.4 M. Future grant funding will increase each fiscal year and will be based on the Class VI well count.

There will be an impact to the SGF to the extent that Class VI wells are constructed under state property thereby creating leasing revenues. However, the number and location of the Class VI wells is speculative and future revenues are indeterminable.

III. ESTIMATED COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS, SMALL BUSINESSES, OR NON-GOVERNMENTAL GROUPS (Summary)

There will be positive economic benefits to individuals, businesses, and other non-governmental groups as a result of this program. Individuals who own surface rights in the area of Class VI sequestration projects will be able to negotiate leases for storage rights in the subsurface. Non-governmental groups in the industrial sector will benefit from increased construction as well as the federal tax credits received by the operator who is sequestering the carbon dioxide underground.

IV. ESTIMATED EFFECT ON COMPETITION AND EMPLOYMENT (Summary)

There will be a positive impact on employment in the industrial construction sector as there will be an increase in the availability of construction jobs in order to build pipeline infrastructure and injection sites for the Class VI wells. However, this is a new industry in the United States and therefore potential impacts, while positive, are indeterminable.

Signature of Agency Head or Designee

Thomas F. Harris, Secretary

Typed Name & Title of Agency Head or Designee

10/6/2020

Date of Signature

Legislative Fiscal Officer or Designee

10/7/20

Date of Signature

FISCAL AND ECONOMIC IMPACT STATEMENT
FOR ADMINISTRATIVE RULES

The following information is required in order to assist the Legislative Fiscal Office in its review of the fiscal and economic impact statement and to assist the appropriate legislative oversight subcommittee in its deliberation on the proposed rule.

A. Provide a brief summary of the content of the rule (if proposed for adoption, or repeal) or a brief summary of the change in the rule (if proposed for amendment). Attach a copy of the notice of intent and a copy of the rule proposed for initial adoption or repeal (or, in the case of a rule change, copies of both the current and proposed rules with amended portions indicated).

The Class VI Geologic Sequestration of Carbon Dioxide Rule is a new rule proposed for adoption. This rule governs oversight of the Class VI sequestration program. The Class VI well category is a federal designation from the United States Environmental Protection Agency (USEPA); Class VI wells inject carbon dioxide gas underground for the long-term containment of carbon dioxide in subsurface geologic formations, ultimately limiting emissions of this greenhouse gas. The Louisiana draft rule regulates Class VI wells from inception to plugging and abandonment and subsequent site care, ensuring the protection of the Underground Sources of Drinking Water (USDW) and the health, safety, and welfare of the public and the environment.

B. Summarize the circumstances, which require this action. If the Action is required by federal regulation, attach a copy of the applicable regulation.

The Louisiana Department of Natural Resources - Office of Conservation is applying for Primary Enforcement Authority (primacy) from the USEPA for the Class VI Geologic Sequestration of Carbon Dioxide program. The IRS has changed the Section 45Q Tax Credit such that a larger credit will be given for each metric ton of carbon dioxide that is injected underground for permanent storage under this program, but has stated that construction of these wells must begin before January 1, 2024 to be eligible for the credit. As a result, many operators are now planning to permit Class VI injection wells in Louisiana by 2024. Currently, Louisiana does not have primacy for these wells, so the USEPA is currently responsible for reviewing Class VI applications and issuing Class VI permits for projects located in Louisiana. The Office of Conservation - Injection and Mining Division currently has primacy from the USEPA for Class I, II, III, IV, and V wells, and is seeking primacy for Class VI to protect the USDW and the health, safety, and welfare of the public in a consistent manner with all other injection wells in the State of Louisiana.

In the Louisiana Regular Session of 2009, House Bill 661 was passed (Act 517) enabling the Commissioner of Conservation to pursue Class VI primacy. HB 661 enacted the Louisiana Geologic Sequestration of Carbon Dioxide Act, which is comprised of "R.S. 19:2(12) and Chapter 11 of Title 30 of the Louisiana Revised Statutes of 1950, to be comprised of R.S. 30:1101 through 1111, relative to the storage of carbon dioxide." The proposed Class VI Injection Wells rule is at least as stringent as the corresponding federal rule (40 CFR 124, 144, 145, and 146).

C. Compliance with Act 11 of the 1986 First Extraordinary Session

(1) Will the proposed rule change result in any increase in the expenditure of funds? If so, specify amount and source of funding.

The proposed rule change will result in an expenditure increase. By FY 23, the program is anticipated to require approximately $1.135 million dollars for full implementation. The program will be funded by a combination of the Louisiana Department of Natural Resources Carbon Dioxide Geologic Storage Trust Fund (CDGSTF), the Louisiana State General Fund (General Fund), and federal grants received from the USEPA. The above-listed CDGSTF is funded primarily by fees levied on operators; General Fund dollars are not deposited into this Fund.

(2) If the answer to (1) above is yes, has the Legislature specifically appropriated the funds necessary for the associated expenditure increase?

(a) __x__ Yes. If yes, attach documentation.

(b) _____ NO. If no, provide justification as to why this rule change should be published at this time

FISCAL AND ECONOMIC IMPACT STATEMENT
WORKSHEET

I. A. COSTS OR SAVINGS TO STATE AGENCIES RESULTING FROM THE ACTION PROPOSED

1. What is the anticipated increase (decrease) in costs to implement the proposed action?

COSTS	FY 21	FY 22	FY 23
Personal Services	$ 0	$ 220,000	$ 967,000
Operating Expenses	$ 0	$ 37,000	$ 50,000
Professional Services	$ 0	$ 22,000	$ 12,000
Other Charges	$ 23,000	$ 66,000	$ 74,000
Equipment	$ 0	$ 0	$ 32,000
Major Repairs & Constr.	$ 0	$ 0	$ 0
TOTAL	**$ 23,000**	**$ 345,000**	**$ 1,135,000**
POSITIONS (#)	0	4	7

2. Provide a narrative explanation of the costs or savings shown in "A. 1.", including the increase or reduction in workload or additional paperwork (number of new forms, additional documentation, etc.) anticipated as a result of the implementation of the proposed action. Describe all data, assumptions, and methods used in calculating these costs.

The Personal Services category contains personnel costs, including salaries and related benefits. There are no Personal Services costs for FY 21 because the Louisiana Department of Natural Resources (LDNR) will not be obtaining primacy of the Class VI program until FY 22. LDNR anticipates receiving primacy mid-FY 22, so the anticipated annual cost for personnel for FY 22 reflects four personnel that will be hired in a staggered fashion during the second, third, and fourth quarters of FY 22. The Personal Services costs for FY 23 reflect four full-time staff employed for the entire year as well as the addition of three positions in the first quarter of FY 23; this estimate also includes annual pay increases for the original four allocated positions. A minimum of seven new staff members (6 Petroleum Scientists and 1 Accountant) will be needed to administer this program (increase in TO of seven new staff members).

Operating Expenses and Professional Services have no costs in FY 21 because LDNR does not anticipate receiving primacy until mid-FY 22. For FY 22 and FY 23, the Operating Expenses category includes staff training and conference participation, advertising (required for permit applications), equipment maintenance, equipment rentals, storage rentals, fuel costs and vehicle maintenance for field-based staff, and office supplies. The bulk of the Operating Expenses category is for training and conference participation. Exhaustive staff training on carbon dioxide sequestration technology is critical for this program to succeed, and LDNR currently lacks expertise in this area to train staff in-house. Conference participation is important because the field of carbon sequestration is emerging globally, and the science and engineering behind these processes (which LDNR staff will be reviewing during the permit review process) is changing rapidly. LDNR has successfully participated in limited no-cost training during FY 21, but these opportunities are rare.

For FY 22 and FY 23, Professional Services charges include paying a court reporter for public hearings on a per hearing basis as well as a utilizing a third-party contractor to run large scale reservoir models for certain permits, a task for which LDNR staff is only beginning to develop expertise. LDNR expects costs for the third-party modeler to decrease each year as LDNR staff are trained and obtain modeling expertise, which is why FY 23 shows a decrease in Professional Services compared to FY 22.

Other Charges in FY 21, prior to receiving primacy, include approximately $20,000 to publish the Class VI regulations in the *Louisiana Register* and $3,000 to purchase reservoir modeling software, knowledge of which is required to receive Class VI primacy and important for limiting third-party modeler costs, as discussed in Professional Services above. In FY 22 and FY 23, this category will include charges for all interagency purchases, including IT services and computer purchasing ($16,000 across both years), computer software ($3,000), telecommunications ($7,000), and *Louisiana Register* charges for modest updates to the Class VI state regulations as needed ($4,000). This category also includes the Indirect Cost Rate charges associated with receiving funds via a Federal Grant ($110,000).

Equipment charges are not predicted to be incurred until FY 23, at which time LDNR will need to purchase a field vehicle for inspections of Class VI facilities and wells. Site inspections are required by the federal rule and thus the proposed Louisiana Class VI regulations as well. LDNR is also planning to purchase handheld gas monitors for carbon dioxide and hydrogen sulfide (to ensure safety of inspection staff when visiting sequestration facilities) which are also included in the FY 23 Equipment Charges expense.

No costs are anticipated in the Major Repairs and Construction category for this program.

3. Sources of funding for implementing the proposed rule or rule change.

SOURCE	FY 21	FY 22	FY 23
State General Fund	$ 23,000	$ 28,000	$ 521,000
Agency Self-Generated	$ 0	$ 0	$ 0
Dedicated	$ 0	$ 57,000	$ 314,000
Federal Funds	$ 0	$ 260,000	$ 300,000
Other (Specify)	$ 0	$ 0	$ 0
TOTAL	$ 23,000	$ 345,000	$ 1,135,000

4. Does your agency currently have sufficient funds to implement the proposed action? If not, how and when do you anticipate obtaining such funds?

With the passage of HB 661 in 2009 (La. R.S. 30:22; La. R.S. 30:1101-1111), LDNR has the methodology in place to fund this program when primacy is received. Funding will occur in three parts: a new dedicated fund named the Carbon Dioxide Geologic Storage Trust Fund (CDGSTF), federal funding, and funds from the Louisiana General Fund.

The CDGSTF, created in La. R.S. 30:1110, is funded from a variety of inputs and allows for the LDNR to withdraw up to $750,000 per year for administration of the program. By FY 24, monies deposited into the CDGSTF are predicted to exceed $750,000. As such, the full $750,000 can be utilized at that point (see II.B response, below, for detail on CDGSTF revenue). However, because the program cost is predicted to exceed $750,000, additional funding will be required.

The anticipated primary source for this additional funding will be from USEPA. LDNR currently receives an annual grant (the UIC Grant) for program oversight of Class I - Class V wells. Based on discussions with the USEPA and national carbon sequestration working groups, the UIC Grant amount is anticipated to grow when Class VI primacy is received, with future growth based on Class VI well count (i.e. the number of Class VI wells permitted by the LDNR and drilled). The UIC Grant is a 75% federal grant with a required 25% state match.

Because the maximum annual withdrawal from the CDGSTF for program administration is limited to $750,000 by La. R.S. 30:1110, the 25% state match for the UIC Grant must come from an existing revenue source. LDNR will utilize funds first from the CDGSTF to meet the state match. Monies from the General Fund will only be needed if the annual operating budget for the program is not fully funded by a combination of federal funds and the CDGSTF. However, LDNR will work to revise the cap on the CDGSTF in upcoming legislative session to ensure sufficient funding of the program without relying on the General Fund; if this cap is not addressed and General Fund dollars are not available, the program may issue fewer permits per year, which will limit programmatic revenue.

In summary, LDNR will need relatively few funds from the State General Fund for FY 21($23,000) and FY 22 ($28,000), but may need to rely more heavily on the General Fund for FY 23 if the program is to be fully staffed (up to $521,000). Reliance on the General Fund for FY 24 will be minimal or possibly non-existent. However, if the combination of federal funds and the CDGSTF are not sufficient to fully fund the program, General Fund dollars will be needed to fully account for added staff. If the program is not fully funded increased permitting timelines can be expected, possibly limiting the total number of approved facilities, and ultimately reducing state income from the program. Even with these potential setbacks, LDNR leadership believes that it is critical to obtain primacy of this program from the USEPA, which is reportedly experiencing critically low staffing levels at this time.

B. <u>COST OR SAVINGS TO LOCAL GOVERNMENTAL UNITS RESULTING FROM THE ACTION PROPOSED.</u>

1. Provide an estimate of the anticipated impact of the proposed action on local governmental units, including adjustments in workload and paperwork requirements. Describe all data, assumptions and methods used in calculating this impact.

   The new proposed rule is not anticipated to impact local governmental units.

2. Indicate the sources of funding of the local governmental unit, which will be affected by these costs or savings.

   No local government funding sources are anticipated to be affected by the new proposed rule.

II. EFFECT ON REVENUE COLLECTIONS OF STATE AND LOCAL GOVERNMENTAL UNITS

A. What increase (decrease) in revenues can be anticipated from the proposed action?

REVENUE INCREASE/DECREASE	FY 21	FY 22	FY 23
State General Fund	$ 0	$ 0	$ 0
Agency Self-Generated	$ 0	$ 0	$ 0
Dedicated Funds			
Oil and Gas Regulatory Fund	$ 0	$ 3,000	$ 10,000
Carbon Dioxide Geologic Storage Trust Fund	$ 0	$ 57,000	$ 315,000
Federal Funds	$ 0	$ 260,000	$ 300,000
Local Funds	$ 0	$ 0	$ 0
TOTAL	**$ 0**	**$ 320,000**	**$ 625,000**

A. Provide a narrative explanation of each increase or decrease in revenues shown in "A." Describe all data, assumptions, and methods used in calculating these increases or decreases.

The State General Fund may be impacted by this new program. If Class VI injection sites are constructed such that the injected carbon dioxide plume resides under state property (e.g. navigable waterways, offshore Louisiana to the three-mile mark, or tax-adjudicated lands), the operator will need to be granted pore space storage rights from the State Mineral & Energy Board. Because the locations of these sites are currently unknown, leasing revenue is also unknown, and conservatively reported as no revenue. However, given that the majority of these sites are predicted to be located in south Louisiana, where the vast majority of state-owned lands exist, it is highly likely that some revenue will be generated through leasing or operating agreements with the State of Louisiana. Likewise, increased revenue for various agencies of the state is possible in the event storage operations are sited underneath property owned directly by those agencies.

The Dedicated Funds for the Louisiana Office of Conservation (LA OC) consist mainly of the Oil and Gas Regulatory Fund, which is funded primarily from fee collections. LA OC anticipates an increase in fee collections for some existing fees, as well as the creation and collection of new Class VI fees. Class VI fees will be deposited in the CDGSTF rather than the existing Oil and Gas Regulatory Fund per La R.S. 30:1110.

Current fees set to increase include fees collected by the Pipelines Division of LA OC. The Pipelines Division currently collects hearing fees of $755 per public hearing and pipeline inspection fees of $44.80 per mile of pipeline. The new Class VI sequestration facilities will require new pipeline infrastructure which will incur both of these types of pipeline-related fees—the one-time hearing fee and the recurring pipeline inspection fees. LA OC anticipates that one new Class VI facility will be constructed in FY 22 and three additional facilities in FY 23, each of which would require a hearing and an estimated average of 25 miles of new pipeline infrastructure. The fees for these construction activities would total approximately $2,000 in the initial year of each project and $1,000 annually thereafter.

The Injection and Mining Division will continue to collect the Organization Report (OR-1) fee, which is an annual fee of $105 collected each year upon renewal of the OR-1; this existing fee will continue to contribute to the Oil and Gas Regulatory Fund rather than the CDGSTF. However, new fees associated with Class VI permits will go into the new CDGSTF. New fees include the following collections: application fees, annual site regulatory fees, and a tonnage fee charged per metric ton of injected carbon dioxide. The application fee is currently set by LA OC at $252 per monitor well (Class V well), and the Class VI application fee has not yet been set. Although each site will be different, the average anticipated well count per site is two injection wells and nine monitor wells, for a total of $2,772 per site in application fees. This is based on the assumption that the Class VI application fee will be the same amount as the Class V application fee. The application fee is a one-time, nonrecurring fee. The annual site regulatory fee is set at an amount not to exceed $50,000, recurring annually. The final new fee assessed will be the tonnage fee. The calculation of this fee is statutorily set at no more than (($5,000,000/144)/the total injection tonnage of carbon dioxide) in La. R.S. 30:1110, ensuring that this assessed fee is spread over twelve years of operation. Please note that this calculation was updated in Act 370 of the Louisiana 2020 Regular Session; previous versions called for the fee to be spread over 120 months rather than 144. This fee calculates to an average of approximately $416,667 annually per site. Due to construction timelines, the first year that LDNR anticipates receiving this injection tonnage fee is FY 23. Collection of all fees ceases as to those operators who have contributed $5,000,000 to the CDGSTF, until the balance of the fund falls below $4,000,000 for the operator. After the fund falls below $4,000,000 for the operator based on expenditures or commitments to expend monies from the CDGSTF, the collection of fees from those operators will resume. Similarly, collection of all fees ceases as to those operators who have already contributed $5,000,000 to the CDGSTF when the CDGSTF balance exceeds an authorized amount determined by multiplying $5,000,000 by the number of active and completed storage facilities within the state. Collection of fees from these operators will resume once the balance of the CDGSTF falls below this authorized amount. Most injection sites are not expected to reach these maximum balances until the twelfth year of operation, at the earliest. The first facility to begin injecting carbon dioxide is predicted to begin injection in mid-FY 23, so only half of the annual site tonnage fee is included. By FY 24, between two and four sites are predicted to begin injection, and each site will average about $416,667 for the tonnage fee annually.

III. COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS, SMALL BUSINESSES, OR NONGOVERNMENTAL GROUPS

A. What persons, small businesses, or non-governmental groups would be directly affected by the proposed action? For each, provide an estimate and a narrative description of any effect on costs, including workload adjustments and additional paperwork (number of new forms, additional documentation, etc.), they may have to incur as a result of the proposed action.

   One way that positive regional economic impacts are predicted to occur is due to the IRS 45Q tax credit, a federal tax credit created for carbon dioxide sequestration. Quantification of this impact is difficult to calculate because of the lack of historical data. Ultimately, the average sequestration facility will qualify for $50/metric ton of carbon dioxide injected in annual federal tax credits by 2026; credits will persist for the first twelve years of injection operations on a per-facility basis. Currently, a minimum of three new sites are predicted, but many more are likely; roughly twelve companies are currently in conversations with LDNR regarding permitting details and timelines. New injection well construction, pipeline construction, and facility enhancements are predicted to boost spending in the industrial construction sector, with most of the new sites being constructed between 2021 - 2030.

   This program will also affect landowners who possess surface rights. The right to store carbon dioxide underground must be gained from surface owners in a manner similar to the way that storage rights for subsurface hydrocarbon storage is currently leased to private companies. Landowners who live within the modeled plume boundaries will be receiving payments from granting the pore space rights to the company that is sequestering the carbon dioxide underground. Landowners will be negotiating these agreements with the facility operator, so specifics as to generated revenue are not known at this time.

   This program is not predicted to Impact small businesses, consistent with findings in the EPA Cost Analysis for their Class VI federal rule promulgation (75 Fed. Reg. 237, 77275 (Dec. 2010)).

B. Also provide an estimate and a narrative description of any impact on receipts and/or income resulting from this rule or rule change to these groups.

   As stated above, with the limited information available at this time due to the emerging popularity of carbon sequestration, it is difficult to quantify impact on receipts or income, other than stating that positive economic impacts are predicted.

IV. EFFECTS ON COMPETITION AND EMPLOYMENT

Identify and provide estimates of the impact of the proposed action on competition and employment in the public and private sectors. Include a summary of any data, assumptions and methods used in making these estimates.

Construction of these new Class VI carbon sequestration sites and injection wells is predicted to positively impact the industrial construction sector. Because only one of these facilities currently exists in the United States (in Illinois), data is scarce concerning economic impacts on competition and employment. It is likely that the availability of construction jobs will increase in order to build pipeline infrastructure and the injection sites, but quantifiable predictions are not available at this time.