STATE OF LOUISIANA
CLASS VI UNDERGROUND INJECTION CONTROL
PROGRAM DESCRIPTION

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Class VI Underground Injection Control Program Description

1. Program Scope, Structure, Coverage and Processes

The U.S. Environmental Protection Agency (USEPA) granted primary enforcement authority (primacy) over Class I, II, III, IV, and V injection wells—excluding all Indian lands—to the Louisiana Department of Natural Resources (LDNR), Office of Conservation (OC), Injection and Mining Division (IMD) on April 23, 1982. Since then, the Louisiana Underground Injection Control (UIC) Program has strived to implement the approved program description, applicable rules and regulations, and USEPA directives. References in this Work Plan to we, us, or our are intended to mean the Office of Conservation, Injection & Mining Division.

The applicable UIC programs for Class I, III, IV and V injection wells are authorized under Section 1422 of the Safe Drinking Water Act (SDWA), while the Class II program related to oil and gas activities is authorized under SDWA Section 1425.

The LDNR is revising the existing 1422 program to include program oversight for Class VI Carbon Sequestration wells. The USEPA promulgated federal requirements for the underground injection of carbon dioxide in 2010; this submittal will demonstrate that the Louisiana UIC program with Class VI oversight is at least as stringent as its federal counterpart.

In summary, the Louisiana IMD is seeking to amend our primacy authority such that Class I-VI wells under SDWA Sections 1422 and 1425 will be included. Louisiana IMD is the sole implementation agency for our current primacy program; this will continue as Class VI wells are added to the program.

2. Implementing Agency Organizational Structure

Staff in the Louisiana IMD have education, skills, and in-house experience with most of the technical and policy areas relevant to evaluating Class VI permit applications, issuing Class VI permits, and overseeing geologic sequestration (GS) projects throughout their life span. The state plans to implement a "team" approach to permitting by dividing permit applications among staff with relevant areas of expertise. However, some third-party contractor experience will be needed in the early stages of the program with modeling and risk analysis. It is anticipated that third-party modelers will be utilized during the permit review stages at the onset of primacy, but as IMD staff are trained and gain experience, reliance on third-party modelers will become minimal. Third-party risk analysts may need to be contracted out in perpetuity; IMD does not currently have expertise in this area and it is uncertain whether they will obtain it in the future.

The table below identifies the sources of this expertise.

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Expertise Area	In-House	Contractor
Site characterization, e.g., geologists, hydrogeologists, geochemists, and log analysts/experts to review site characterization data submitted during permitting and throughout the project duration.	✓	
Modeling, e.g., hydrogeologists and environmental/reservoir modelers to evaluate area of review (AoR) delineation computational models during permitting and AoR reevaluations.	✓	✓
Well construction and testing, e.g., well engineers, log analysts/experts, and geologists to review well construction information and operational reports on the performance of Class VI wells and review/evaluate testing and monitoring reports.	✓	
Finance experts to review financial responsibility information during permitting and annual evaluations of financial instruments.	✓	
Risk analysts to evaluate emergency and remedial response scenario probabilities and remediation cost estimates.		✓
Policy/regulatory experts on the UIC Program and the Class VI Rule to evaluate compliance with Class VI Rule requirements.	✓	
Enforcement/compliance, e.g., staff who can initiate and pursue appropriate enforcement actions when permit or rule requirements are violated.	✓	
Inspectors including well engineers or log analysts/experts to inspect wells or witness construction activities, workovers, and/or mechanical integrity tests.	✓	

An organizational chart of the Louisiana IMD is attached in Appendix I.

The state estimates that running the Class VI Program will cost approximately $345,000 in the first year of primacy and $1.135 million in the second year with annual adjustments thereafter. The majority of these costs are associated with hiring seven staff to support the Class VI program. Sources of funding include: the Louisiana Carbon Dioxide Geologic Storage Trust Fund (CDGSTF), UIC grants from the USEPA, and the Louisiana General Fund (state dollars). The table below illustrates how the state anticipates these funds will be allocated to various program activities.

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Activity	Percent of budget
Permit application reviews and permit issuance.	30%
Project oversight/review of operating data and testing and monitoring data and reports.	35%
Inspections/witnessing construction or tests.	5%
Data management.	5%
Enforcement/compliance-related activities.	10%
Program oversight/administration.	15%

3. Permitting, Administrative and Judicial Review Procedures

Permitting Procedures

The state's Class VI Program requires all owners or operators seeking to inject carbon dioxide for the purpose of geologic sequestration to obtain a Class VI permit to construct or convert a well and gain approval to operate prior to commencing injection activities.

Class VI permit applications will be reviewed by staff of the Louisiana IMD and issued in accordance with LAC 43:XVII, Subpart 6 (Statewide Order 29-N-6).

Reviewing Class VI Permit Applications

When Louisiana IMD receives a permit application, staff will review it to determine if it contains all of the information outlined in LAC 43:XVII.605-609. Any deficiencies will be noted and, if necessary, the agency will request additional information from the applicant.

After confirming that all of the required information was submitted with the permit application, agency staff will review the Class VI permit application using a multi-step process, as described below.

First, staff will perform a technical review to determine that the submitted data is accurate and of high quality, has undergone appropriate quality assurance procedures, is representative of the project and the site, and is sufficiently complete to support a full technical evaluation.

Next, a full technical evaluation of the submitted information will be performed to support the decision on the suitability of the site per the requirements at LAC 43:XVII.615. This includes an evaluation of the geologic system, the well, and the proposed operations to ensure that the project will be protective of USDWs as well as the health, safety, and welfare of the public.

The agency will require the owner or operator to conduct an environmental justice (EJ) review and submit a report as part of the application process. An EJ review will be encouraged in the pre-permitting process and required early in the formal permitting process. At a minimum, the state will

require the report to consider the data and factors available in the EPA-developed EJView tool and identify any portions of the AoR which encompass EJ areas.

When the application is submitted, IMD staff will use the EPA-developed EJView tool to evaluate the location of the project. The EJ impact report submitted by the applicant will be reviewed to ensure that it is thorough, contextualized, and agrees with the data from the EJView tool. If a proposed site is found to be located in communities with high EJ risk factors, the Commissioner of Conservation may extend the public comment period for the application and may also require a more inclusive public participation process, including targeted public outreach and creation of better visual tools and approachable language. If the EJ review is especially complex or time-consuming, IMD may opt to outsource this assessment to a qualified third-party reviewer.

In addition to the site location questions considered in the Environmental Justice review, a weighing of siting, environmental effects, and a cost benefit analysis is required in the application as a result of *Save Ourselves, Inc., et al vs. the Louisiana Environmental Control Commission, et al*[1]. The five required question responses, colloquially known as the "Louisiana Constitutional Considerations," the "IT Question Responses," or the "Save Ourselves Questions," are hereafter the "SOS Decision Questions", and are presented in Appendix II. Answers to these questions must provide adequate detail with sufficient justification and supporting data to enable IMD to conduct a balanced review of environmental, social, economic, and other factors as required by the Louisiana Constitution.

As needed throughout the permit application review process, agency staff will discuss the application with the owner or operator to ensure that needed information is provided as expeditiously as possible.

Draft Permit Issuance and Public Participation

Upon completion of the permit application evaluation, Louisiana IMD will tentatively determine whether to prepare a draft permit or to deny the application. If the agency prepares a draft permit, the agency will prepare a fact sheet summarizing the project and issue a public notice of the comment period and a public hearing according to procedures listed in LAC 43:XVII.611.E.

The agency will also notify any states, tribes or territories within the area of review of the GS project and document the results of this consultation, pursuant to LAC 43:XVII.611.E.3.iii. See Section 12 for additional information on procedures for this notification.

After completion of the public hearing and review of public comments, a final permitting decision will be made and, if appropriate, a Class VI permit will be issued. The permit will authorize the applicant to construct the injection well or convert an existing well to Class VI. The agency will also issue a response to all relevant public comments received.

1. Save Ourselves v. La. Envtl. Control Comm'n, 452 So. 2d 1152 (La. 1984)

Approving Injection in a Class VI Well

Following well drilling/conversion and completion activities, the permit applicant will submit information that the agency will consider in determining whether to approve operation of the injection well. If the information provided meets all the requirements in LAC 43:XVII.619 the agency will authorize the applicant to inject carbon dioxide.

Administrative and Judicial Review of Permits

Administrative reviews of Class VI permits will take place in accordance with La. R.S. 30:6 and 1105.
Judicial reviews of Class VI permits would be conducted in accordance with La. R.S. 30:12 and 15.

4. Permit, Permit Applications, Reporting and Manifest Forms

The permit application form will be Form UIC-60 CCS, a draft of which is included in Appendix III. This form will be used both for the initial permit submitted as well as the permit re-evaluation which shall occur at a frequency of five years or less as prescribed by LAC 43:XVII.609.M.1.

Prior to the approval of injection, a testing and monitoring plan must be approved by the IMD, per LAC 43:XVII.625.A. The requirements of this plan will be reported as follows:

1. The operator will report the analysis of the carbon dioxide stream required in LAC 43:XVII.625.A.1 as a summary report with cover letter and appended analyses.
2. The operator will submit pressure, rate, and volume monitor data required by LAC 43:XVII.625.A.2 as an excel or comma-delineated sheet with a graphical presentation; including the raw data as required under LAC 43:XVII.629.A.1.h.
3. The operator will submit corrosion monitoring data as required by LAC 43:XVII.625.A.3 as a report with a cover letter.
4. The operator will submit groundwater data for any monitored zones per LAC 43:XVII.625.A.4 as a summary report with cover letter and appended analyses.
5. Prior to conducting an external or internal mechanical integrity test, casing inspection log, or pressure fall-off test as stipulated in the approved monitoring and testing plan and required under LAC 43:XVII.625.A.5 and 6, the operator must first apply for a work permit using Form UIC-17, included as Appendix IV. Upon approval of the work permit by IMD, the operator may conduct the proposed operation and upon completion must then submit a summary of the work conducted on Form UIC WH-1 (with appended data), included as Appendix V.
6. Other monitoring required in the approved testing and monitoring plan and required under LAC 43:XVII.625.A.7-9 will be submitted as a summary report with cover letter and appended analyses and data.

Monitoring in accordance with the approved plan must be submitted semi-annually as prescribed in LAC 43:XVII.629.A.1; with certain reports including mechanical integrity test results submitted within 30 days of the test per LAC 43:XVII.629.A.2; and with a report of any non-compliance submitted within 24 hours per LAC 43:XVII.629.A.3.

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5. Compliance Tracking and Enforcement Program

Compliance Monitoring

Compliance monitoring will, at a minimum, include on-site inspections conducted by authorized agents of the Louisiana IMD and a review of operating and monitoring reports submitted in compliance with LAC 43:XVII.629 to verify that the construction, completion, operation, maintenance, and site closure of GS projects are performed according to approved plans and specifications and meet all permit and regulatory requirements.

The state's compliance monitoring program includes the following activities:

- Reviewing plans and reports (e.g., well completion reports, test results, workover reports) submitted by permit applicants or owners or operators.
- Conducting site inspections to verify or witness construction, operation and testing/maintenance procedures. Site inspections will be conducted by the agency's authorized agents.
- Investigating complaints alleging improper construction, completion, operation or maintenance of a GS project.
- Performing compliance monitoring (e.g., reviewing monitoring, operating and maintenance data) to verify compliance with permit conditions, regulations and any other conditions or stipulations.
- Conducting annual inspections and compliance follow-up inspections of GS projects.

Enforcement Procedures

Any person violating LAC 43:XVII Subpart 6, Chapter 6 (Statewide Order 29-N-6), any condition of a Class VI permit, or any rule or order of the IMD is subject to enforcement action. The agency is responsible for initiating, pursuing and resolving enforcement actions.

Enforcement proceedings may result in modification, revocation or suspension of any permit issued under authority of the UIC Program.

The agency will attempt to handle all minor violations through informal means, such as correspondence between agency staff and the alleged violator. If initial correspondence does not result in the resolution of minor violations, a Notice of Violation (NOV) may be issued. If the violation(s) grows in size or scope, IMD may issue a Compliance Order without a civil penalty. The final enforcement stage, typically reserved for non-compliance that is egregious or may endanger the USDW, is the issuance of a Compliance Order in which a civil penalty is assessed. Issuance of NOVs, Compliance Orders, and Compliance Orders with civil penalties are entered and tracked through the database titled SONRIS, maintained by IMD staff.

If a Compliance Order with civil penalty is required, the state may seek civil penalties up to $5,000 per day per violation under La. R.S. 30:1106.D(1).

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6. Schedule for Issuing Class VI Permits

The agency anticipates that up to 14 well permit applications may be submitted during the first two years after approval of the state Class VI Program, including nine permit applications in year 1 and five permit applications in year 2. It should be noted that of the nine anticipated well applications in year 1, four are associated with a single operator in a limited geographical area, applications for which have already been submitted to EPA Region 6.

The agency expects that reviewing Class VI permit applications will require nine to twelve months per project following the date a complete permit application is submitted under proposed staffing levels and with full applicant cooperation.

7. State Priorities for Issuing Class VI Permits

It is anticipated that during the first two years after approval of the state Class VI program, at least six permits will be issued by IMD. Priority in the application queue will be based primarily on the relative date of submittal and then weighted by application completeness and size and nature of the project.

8. Mechanical Integrity Testing Requirements

To evaluate the absence of significant leaks, owners or operators of Class VI wells must, following an initial annulus pressure test, continuously monitor injection pressure, rate, injected volumes, pressure on the annulus between tubing and long-string casing, and annulus fluid volume, pursuant to LAC 43:XVII.621.A. 6. Additionally, annulus pressure tests must occur on an annual basis and after performing any well workovers that involve unseating the tubing or packer, pursuant to LAC 43:XVII.627.A.2.

At least once every 12 months, owners or operators must use an approved tracer survey or a temperature or noise log to determine the absence of significant fluid movement pursuant to LAC 43:XVII.627.A.3.

The agency may require additional or alternative tests if the results presented by the owner or operator are not satisfactory to demonstrate mechanical integrity.

The agency expects to review the results of approximately 20 MITs from Class VI well owners or operators each year.

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9. Procedures to Notify Operators of the Requirement to Apply for and Obtain a Permit

Class I and Class V Wells

Louisiana IMD does not currently have any known Class I or Class V wells that inject carbon dioxide as a primary injection stream.

Class II ER Wells

The agency will evaluate information about Class II enhanced oil recovery wells (e.g., carbon dioxide injection and production data or information related to the other factors at LAC 43:XVII.603.G.2 and identify whether any projects are approaching risk thresholds. Because IMD has primacy for both the 1422 and 1425 programs, no inter-agency cooperation will be required to convert a Class II well to a Class VI well.

If such increased risk is present, the agency will contact the owners or operators of these wells and inform them that they must apply for a Class VI permit. Agency staff will provide information about the state's Class VI regulation and about applying for a Class VI permit pursuant to LAC 43:XVII.603.G. Permitting of these wells will be conducted as described in Section 3 above.

10. Injection Well Inventory

Louisiana IMD staff currently enter new well information into our agency database, SONRIS. As modifications occur to wells during the operational lifetime of each well, the information contained in SONRIS is updated accordingly. Data queries are executed to export well inventories for all well class types, and Class VI wells will be no exception.

11. Exempted Aquifers

Owners or operators of Class II ER wells may apply to expand the areal extent of Class II aquifer exemptions. Such requests must be submitted concurrently with Class VI permit applications, pursuant to LAC 43:XVII.603.F.

If such requests are received, the agency will evaluate the application to determine that the area of the proposed expansion is sufficiently large to contain the carbon dioxide plume and pressure front and was determined in a manner that is consistent with the AoR modeling required under LAC 43:XVII.615.B and whether the request meets the criteria at 40 CFR 146.4.

Following this evaluation and a determination that the proposed expansion of the areal extent of the aquifer exemption meets the requirements at 40 CFR 144.7(d) and 146.4, the agency will forward the request to the EPA Region 6. No designation of an expansion of the areal extent of a Class II ER aquifer exemption for GS injection will be final unless approved by the USEPA Administrator as a revision. Other than USEPA-approved expansions of the areal extent of existing Class II aquifer exemptions, no aquifer exemptions will be issued for Class VI injection-related activities.

12. Transboundary Notification and Documentation Procedures

Due to the potentially large AoRs associated with GS projects, interstate issues may need to be taken into account. Pursuant to La. R.S. 354.A.10 and B.6, the state will notify authorities in any

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states, tribes, and territories of Class VI permit applications where the AoR crosses jurisdictional boundaries.

Permit applicants must provide a list of contacts for those states and tribes identified to be within the AoR of the Class VI project pursuant to LAC 43:XVII.607.C.2.s.

Based on this information and a review of the extent of the AoR, the state will notify appropriate staff in affected jurisdictions in writing to provide information about the proposed project and invite them to provide input during the permit application review process or participate in/monitor the public participation process associated with the permit application.

The state will document all input received and the responses provided. This documentation will be made a part of the administrative record for the permit application.

13. Injection Depth Waivers

Louisiana IMD will not approve nor issue injection depth waivers.

14. Financial Responsibility.

The state's regulation, at LAC 43:XVII.609.C requires owners or operators of Class VI wells to demonstrate and maintain financial resources to perform all required corrective action, plug the injection well, conduct post injection site care and site closure, and perform any needed emergency and remedial response.

Agency staff with financial expertise will review the cost estimates provided by applicants to verify that they are sufficient to cover these activities and evaluate the financial instruments the applicant proposes to use to verify that they qualify and are appropriate.

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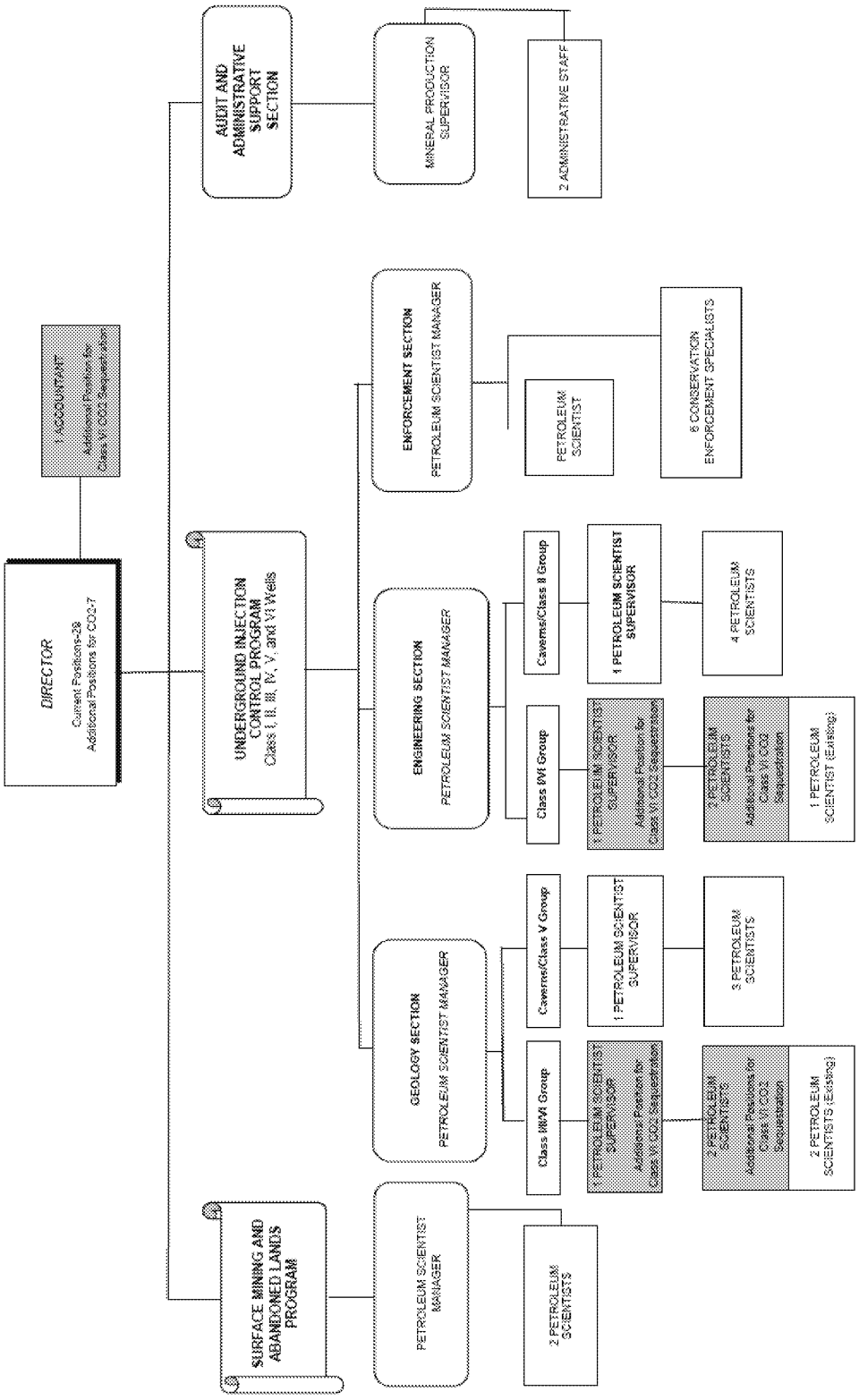
APPENDIX I: Louisiana Injection and Mining Personnel Organization Chart



APPENDIX II: SOS Decision Questions

1. Have the potential and real adverse environmental effects of the proposed project been avoided to the maximum extent possible?

2. Does a cost benefit analyses of the environmental impact costs versus the social and economic benefits of the proposed project demonstrate that the latter outweighs the former?

3. Are there alternative projects which would offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits?

4. Are there alternative sites which would offer more protection to the environment than the proposed site without unduly curtailing non-environmental benefits?

5. Are there mitigating measures which would offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits?

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APPENDIX III: Form UIC-60 CCS

OFFICE OF CONSERVATION

INJECTION AND MINING DIVISION
617 N. 3rd St.
BATON ROUGE, LA, 70802

FORM UIC-60 CCS
PERMIT APPLICATION

APPLICATION TYPE:	☐ New Class VI Injection Well	☐ Class VI Conversion (SN _____)

APPLICANT INFORMATION					
1. OPERATOR NAME:		**2.** OPERATOR CODE:		**3.** OPERATOR PHONE:	
4. OPERATOR ADDRESS:		**6.** FACILITY ADDRESS:			
5. OPERATOR EMAIL:					
7. CONTACT NAME:		**8.** CONTACT NUMBER			

WELL INFORMATION			
9. WELL NAME:		**10.** WELL NUMBER:	
11. PARISH:		**12.** FIELD:	
13. LOCATION COORDINATES:		**14.** STATE PLANE COORDINATES (Lambert, NAD 27):	
Latitude: Longitude:		☐ North Zone ☐ South Zone	X: Y:

15. WELL CONSTRUCTION INFORMATION						
CASING SIZE (IN.)	**HOLE SIZE (IN.)**	**CASING WEIGHT**	**DEPTH SET**		**SACKS CEMENT**	**TYPE CEMENT**
			TOP (FT.)	BOTTOM (FT.)		
16. ELEVATION OF DATUM:		**17.** DATUM:	☐ KB ☐ GL ☐ MSL		**18.** TOTAL DEPTH (ft.):	

PROPOSED INJECTION INTERVAL INFORMATION					
19. DEPTH OF PROPOSED INJECTION ZONE:				**20.** INJECTION FORMATION NAME:	
Top:		Bottom:		**21.** INJECTION THROUGH:	☐ Perforations ☐ Open Hole ☐ Screen
22. PROPOSED PERFORATED/OPEN HOLE INTERVAL(S):					

PROPOSED INJECTION STREAM INFORMATION			
23. PROJECTED AVERAGE MONTHLY INJECTION VOLUME (tons):		24. PROJECTED TOTAL INJECTION VOLUME (tons):	
25. FACILITY SIC CODES:			

26. SITE PERMITS (§607.B.9)		
PERMIT TYPE	**APPLICATION NUMBER**	**CURRENT STATUS**
27. LIST RELEVANT LOUISIANA OFFICE OF CONSERVATION ORDERS:		

JURISDICTIONAL ACKNOWLEDGEMENTS	
28. IS THE PROPOSED WELL OR PLUME BOUNDARY (LOCATED ON INDIAN LANDS UNDER THE JURISDICTION OF PROTECTION OF THE FEDERAL GOVERNMENT?	☐ YES ☐ NO
29. IS THE PROPOSED WELL LOCATED ON STATE WATER BOTTOMS OR OTHER LANDS OWNED BY OR UNDER THE JURISDICTION OF THE STATES	☐ YES ☐ NO

CERTIFICATION BY OPERATOR

The signature below must be obtained from a duly appointed employee of the operating company.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment (LSA-RS 30:17).

1. NAME (PRINT)	2. TITLE (PRINT)
3. SIGNATURE	4. DATE

APPENDIX IV: Form UIC-17

INJECTION WELL WORK PERMIT

Office of Conservation
Injection and Mining Division

UIC-17

MAILING ADDRESS
OFFICE OF CONSERVATION
Injection and Mining Division
617 N. Third Street, 9th Floor
Baton Rouge, LA 70802

Operator's Name and Address:		**Work Permit No.**		
		Serial No.		
		Operator Code:		
		Phone:		
Well Name and Number:		**Fax:**		
Field:	**Parish:**	**Sec.**	**Twp.**	**Rng.**

DESCRIPTION OF WORK

Field Contact to Schedule Well Test :	**Phone:**	
Permit Requested By:	**Date:**	
Signature:	**Email Address:**	
Permit Authorized By: **Stephen H. Lee, Director**	**Date:**	**Expiration Date:**

INSTRUCTIONS

A single application will suffice for one or combinations of the operations below provided that if more than one operation is requested on one form, such work must be performed consecutively. Once signed by an IMD Representative, this form will be sent to the operator and serve as the approved permit.

1. Plug and Abandon (Provide Well Schematic)	7. Back Wash, Acidize or Other Well Stimulation (Class I **and VI** Wells Only)
2. Deepen	8. Pull Casing
3. Perforate	9. Replace Wellhead
4. Squeeze	10. Run a Liner
5. Plugback	11. Other (Any work requiring use of Workover Rig)
6. Pull Tubing/Packer	To Change Zone of Disposal/Completion submit Form UIC-32

Email all Injection Well Work Permit Applications to Injection-Mining@LA.gov, **OR** mail the application to the address provided in the upper right corner.

In accordance with RS 30:21, effective August 1, 2015, all Work Permit applications will be assessed a non-refundable $125 fee, due upon submittal of this form.

To perform any of the above work types without first obtaining a work permit is a violation of the law (LAC43:XIX.105.), which carries with it possible civil and criminal penalties.

FORM UIC-17

APPENDIX V: Form UIC-WH-1

FORM UIC-WH1
for INJECTION WELLS

WELL HISTORY & WORK RESUME REPORT

MAILING ADDRESS
OFFICE OF CONSERVATION
INJECTION & MINING DIVISION
P.O. BOX 94275
BATON ROUGE, LA 70804-9275

PHYSICAL ADDRESS
OFFICE OF CONSERVATION- 9th FL
INJECTION & MINING DIVISION
617 N. THIRD ST.
BATON ROUGE, LA 70802

SERIAL NUMBER | **APPLICATION/PERMIT NUMBER**

PERMITTED INJECTION ZONE (FT) *(FOR CAVERNS: TOP IS TOP OF SALT & BOTTOM IS ORIGINAL TD)*
TOP: BOTTOM:

PERFORATED/OPEN HOLE INTERVAL (FT) *(FOR CAVERNS: DEEPEST CMT'D CSG & BOTTOM OF CAVERN)*
TOP: BOTTOM:

FIELD | **FIELD CODE**

PARISH | **PARISH CODE**

SEC	TWN	RNG

GENERAL INFORMATION

WORK TYPE
(CHECK THE APPROPRIATE BOX)

- ☐ NEW DRILL WELL
- ☐ WELL CONVERSION
- ☐ REDRILL
- ☐ CHANGE OF ZONE
- ☐ SIDETRACK
- ☐ CAVERN MIT/SONAR
- ☐ TEMPORARILY ABANDON
- ☐ OTHER WORK PERMIT

WELL TYPE
(CHECK THE APPROPRIATE BOX)

- ☐ CLASS I NONHAZARDOUS
- ☐ CLASS I HAZARDOUS
- ☐ CLASS II EOR
- ☐ CLASS II SWD
- ☐ CLASS II SWD-COMMERCIAL
- ☐ CLASS II HYDROCARBON STORAGE
- ☐ CLASS III SOLUTION MINING
- ☐ CLASS VI CARBON SEQUESTRATION
- ☐ OTHER:

WELL NAME | **WELL NUMBER**

OPERATOR | **OPERATOR CODE**

ADDRESS | **CITY** | **STATE** | **ZIP CODE**

SPUD DATE (MM/DD/YYYY)	**TOTAL DEPTH** (FT)	**PBTD** (FT) *(FOR CAVERNS: TD OF MOST RECENT SONAR)*
GROUND ELEVATION (FT)	**CASING HEAD FLANGE ELEVATION** (FT)	**DISTANCE FROM RKB TO CHF** (FT)

TUBING/HANGING STRINGS AND PACKER

Enter this information for each work permit regardless of whether or not it has changed. If this is left blank it means no tubing/hanging string(s) or packer is in the well.

TUBING/HANGING STRING SIZE (OD-INCHES)	TUBING/HANGING STRING DEPTH (FEET)	PACKER DEPTH (FEET)

WELL COMPLETION INFORMATION

ONLY COMPLETE THIS SECTION IF:

1-THIS IS A NEW DRILL; 2-THE COMPLETION INFORMATION FOR THIS WELL HAS CHANGED; OR 3-A CORRECTION IS BEING SUBMITTED WITH SUPPORTING DOCUMENTATION SUCH AS DRILLING REPORTS OR CEMENTING RECORDS.

CASING AND LINER RECORD

Complete this section with casing information and with any relevant information documented in the Description of Work Section.
For New Drills, all depths must be reported relative to ground level. For all other situations, report Datum as appropriate KB, CHF, GL, etc.

CASING/LINER SIZE (OD-INCHES)	HOLE SIZE (INCHES)	CASING/LINER WEIGHT (LB/FT)	CASING/LINER SETTING DEPTHS TOP (FEET)	BOTTOM (FEET)	DATUM	CASING TEST PRESSURE (PSI)	CASING TEST DURATION (HOURS)	CASING TEST DATE (MM/DD/YYYY)	NAME OF TEST WITNESS- STATE IF CONSERVATION AGENT OR OFFSET OPERATOR

CASING AND LINER CEMENT RECORD

Complete this section with the cement information and with any relevant information documented in the Description of Work Section. If the cement information for the casing or liner is unknown, enter UNK in the Total Cement Used column; if the casing or liner was not cemented, enter 0 (zero) in the column.

CASING/LINER SIZE (OD-INCHES)	HOLE SIZE (INCHES)	CASING/LINER SETTING DEPTHS (FEET) TOP	BOTTOM	TOTAL CEMENT USED (SACKS)	LEAD AMOUNT (SACKS)	LEAD YIELD (CU FT/SACK)	LEAD TYPE (CLASS)	TAIL AMOUNT (SACKS)	TAIL YIELD (CU FT/SACK)	TAIL TYPE (CLASS)

PLUG BACK RECORD

Acceptable plug types are 100-foot cement plugs (CP), Cast Iron Bridge Plugs topped with at least 10 feet of cement (CIBP) or a Cement Retainer topped with at least 20 feet of cement (CR). Include the top of cement in the Upper Plug Depth. Convert Cubic Feet of Cement to Sacks of Cement. Use the shallowest Upper Plug depth in the PBTD field.

DATE WORK PERMORMED (MM/DD/YYYY)	PLUG TYPE (CP, CIBP, or CR)	UPPER PLUG DEPTH (FEET)	LOWER PLUG DEPTH (FEET)	TOTAL CEMENT USED (SACKS)	CEMENT YIELD (CU FT/SACK)	TEST PRESSURE (PSI)	TEST DURATION (HOURS)	TEST DATE (MM/DD/YYYY)

I, the undersigned, state: that I am employed by the company indicated below; that I am authorized to make this report; that this report was prepared under my supervision and direction; and that all facts stated herein are true, correct and complete to the best of my knowledge. I am aware there are significant penalties for submitting false information, including the possibility of a fine, imprisonment or both (LSA-R.S. 30:17).

PRINT NAME & TITLE _____ PRINT COMPANY NAME _____

SIGNATURE _____ DATE _____

EMAIL ADDRESS _____ TELEPHONE NUMBER _____

WELL LOGGING AND TESTING DATA

Complete this section with the testing and logging information associated with THIS application.

WAS A MIPT PERFORMED?	WITNESSED BY A CONSERVATION AGENT?	TEST PRESSURE (PSI)	TEST DURATION (HRS)	TEST DATE
☐ YES ☐ NO	☐ YES ☐ NO			

MEASUREMENT OF THE BOTTOM HOLE PRESSURE OR THE STATIC FLUID LEVEL.	MEASURED BOTTOM HOLE PRESSURE AND DEPTH	DATE MEASURED	WITNESSED BY A CONSERVATION AGENT?
	PSI @ FT.		☐ YES ☐ NO
	STATIC FLUID LEVEL (FT.)	DATE MEASURED	METHOD USED / WITNESSED BY A CONSERVATION AGENT?
			☐ YES ☐ NO

WAS WELL DIRECTIONALLY DRILLED?	WAS A DIRECTIONAL SURVEY MADE?	WERE 3 COPIES FILED WITH THE OFFICE OF CONSERVATION?	IF YES, DATE SUBMITTED
☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	

TYPE OF ELECTRICAL OR OTHER LOGS RUN UNDER THIS APPLICATION ONLY (COPIES OF ALL LOGS MUST BE FILED WITH THE INJECTION & MINING DIVISION.) — DATE SUBMITTED

MIT AND SONAR DATA

Salt Cavern Wells ONLY

WAS A MIT PERFORMED?	TEST DATE	DATE SUBMITTED	WAS A CASING INSPECTION PERFORMED?	DATE OF LOG	DATE SUBMITTED
☐ YES ☐ NO			☐ YES ☐ NO		

WAS SONAR PERFORMED?	WAS THE ROOF SURVEYED?	DATE OF THE SONAR	DATE SUBMITTED	CAVERN VOLUME (BBLS)	PER LATEST SONAR DATED
☐ YES ☐ NO	☐ YES ☐ NO				

TYPE OF ELECTRICAL OR OTHER LOGS RUN UNDER THIS APPLICATION ONLY (COPIES OF ALL LOGS MUST BE FILED WITH THE INJECTION & MINING DIVISION.) — DATE SUBMITTED

WORK RÉSUMÉ

List below all work performed (the drilling, completion, or any other work) under THIS Injection & Mining Division permit.

DATE WORK PERFORMED (MM/DD/YYYY)	SERVICE COMPANY	DESCRIPTION OF WORK

FORMATIONS

List below all-important Paleofaunal or Geological Formation tops, Cap Rock and Salt Overhang bottoms.

FORMATION	DEPTH	FORMATION	DEPTH