

APRIL 2025



# L A P I S

ABOUT PROJECT LIBRA

## CONTENTS

- 1 **ABOUT LAPIS AND  
PROJECT LIBRA**
- 2 **ABOUT CCS**
- 3 **COMMUNITY  
QUESTIONS**

We will update these materials periodically, adding information based on community feedback.

Please reach out if you have questions:  
[info@lapiscarbonolutions.com](mailto:info@lapiscarbonolutions.com)

# WHO IS LAPIS CARBON SOLUTIONS?



## WHAT WE DO

Lapis Carbon Solutions is a full-service Carbon Capture and Storage (CCS) developer and operator. Headquartered in Dallas, Texas, we provide customized solutions for energy and emissions-intensive industry partners to safely and permanently store CO2 underground.

### CAPTURE

---

CO2 capture solutions customized to each industry partner.

### TRANSPORT

---

Options to safely move compressed CO2 to storage sites.

### OPERATE

---

Injection and monitoring in accordance with EPA and/or Louisiana Department of Energy and Natural Resources Class VI and industry standards.

### STORAGE

---

Post-injection site care, closure, and monitoring for safe and permanent storage consistent with EPA and/or LDENR regulations.

# WHAT IS PROJECT LIBRA?

**SERVICE**  
TRANSPORTATION AND STORAGE

**ESTIMATED VOLUME**  
1-4 MILLION METRIC TONS OF CO2 PER YEAR

**PARTNERS**  
LAPIS (OPERATOR)  
EXXON (NON-OPERATOR)

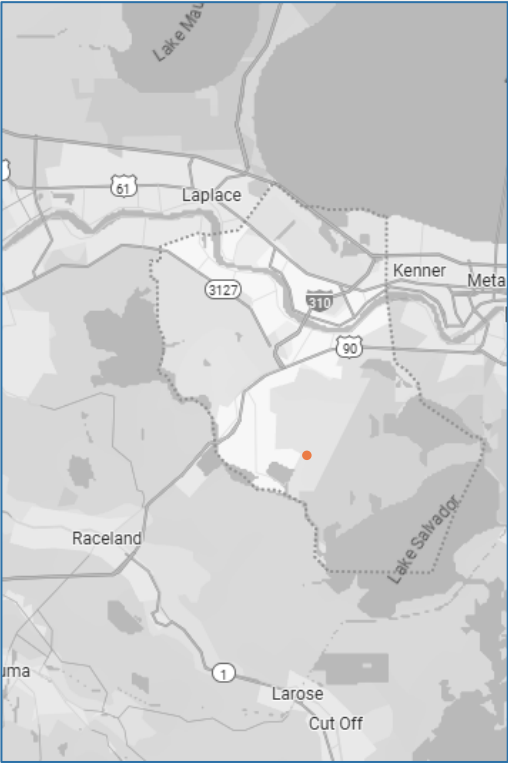
**CLASS VI STATUS**  
SUBMITTED

**PROJECT TYPE**  
SINGLE PRIVATE LANDOWNER, MULTIPLE EMITTER REGIONAL HUB

Project Libra is a 14,000-acre CO2 storage site located in St. Charles Parish, about 20 miles from New Orleans.

We currently estimate that the site has capacity to hold 80 million metric tons of CO2 and has the potential to become a regional hub for decarbonization.

The project helps Louisiana grow its economy and stay competitive in a global market that demands lower-carbon products.



# WHAT IS PROJECT LIBRA'S STATUS?

WE ARE IN THE **EARLY STAGES** OF DEVELOPING A 14,000-ACRE STORAGE SITE IN ST. CHARLES PARISH.

Our world-class technical team selected this site based on extensive analysis of the area and subsurface qualities.

Lapis is in the process of permitting the site with multiple agencies.

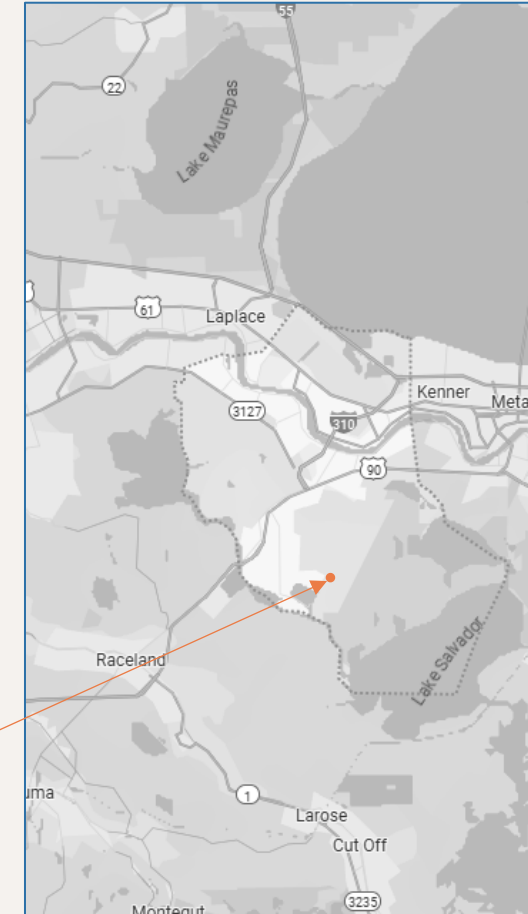
It takes years to obtain a Class VI permit—the type of permit required to inject CO2 underground for safe, permanent storage.

We submitted our Class VI permit application in late 2024. As we continue to confirm the site's feasibility and obtain technical data, we are engaging with many stakeholders.

## APPROXIMATE SITE LOCATION

~6 miles from Lake Salvador

~2.7 miles from the nearest building



# HOW ARE WE ENGAGING IN ST. CHARLES PARISH?

## CCS & PROJECT EDUCATION

In August, we sponsored our first CCS education session at the Des Allemands firehouse. We'll continue to host and attend events to give the public opportunities to learn more about CCS.

## COMMUNITY EVENTS

We are introducing our company to the community by attending events like the United Way's "Battle for the Paddle" jambalaya and gumbo cookoff.

## COMMUNITY PARTNERSHIPS

We are proud to serve as a Corporate partner to RJ Vial Elementary School, providing support for students and teachers.



# WHAT PERMITS ARE IN PROCESS?

CCS is a highly regulated industry requiring state and federal permits that take several years to obtain.

GOVERNING ENTITY	PERMIT TYPE	STATUS AND TRACKING	TIMING
Louisiana Dept. of Energy and Natural Resources – Office of Conservation, Injection & Mining	<b>Class VI Injection Permit</b> Typically must receive Class V permit(s) before obtaining Class VI permit.  Coastal Use permits (below table) are required to construct the infrastructure needed to build a Class VI well (road, pad, etc.).	Submitted – <a href="#">view LDENR Class VI application tracker here.</a>	Estimated end of 2026
	<b>Class V Permit(s)</b> Monitoring wells (to monitor CO2 once injected), water wells (to monitor water quality), stratigraphic well (to collect geological information).	Received Class V permit for stratigraphic test well – <a href="#">view here.</a>	Received March 27, 2025

GOVERNING ENTITY	PERMIT TYPE	STATUS AND TRACKING	TIMING
Louisiana Dept. of Energy and Natural Resources – Office of Coastal Mgmt.	<b>Coastal Use Permit</b>	Submitted – <a href="#">view here.</a>	2025
U.S. Army Corps of Engineers <i>(Commenting agencies: NOAA Fisheries, U.S. EPA, U.S. Dept. of Interior, U.S. Fish and Wildlife Service)</i>	<b>Section 404 (Clean Water Act) Permit;</b> required for construction work near proposed injection site.	Submitted – <a href="#">view here.</a>	2025

[VIEW A MORE DETAILED LIST OF PERMITS](#) 



# PROJECT LIBRA FOOTPRINT

## ▶ MONITORING WELLS

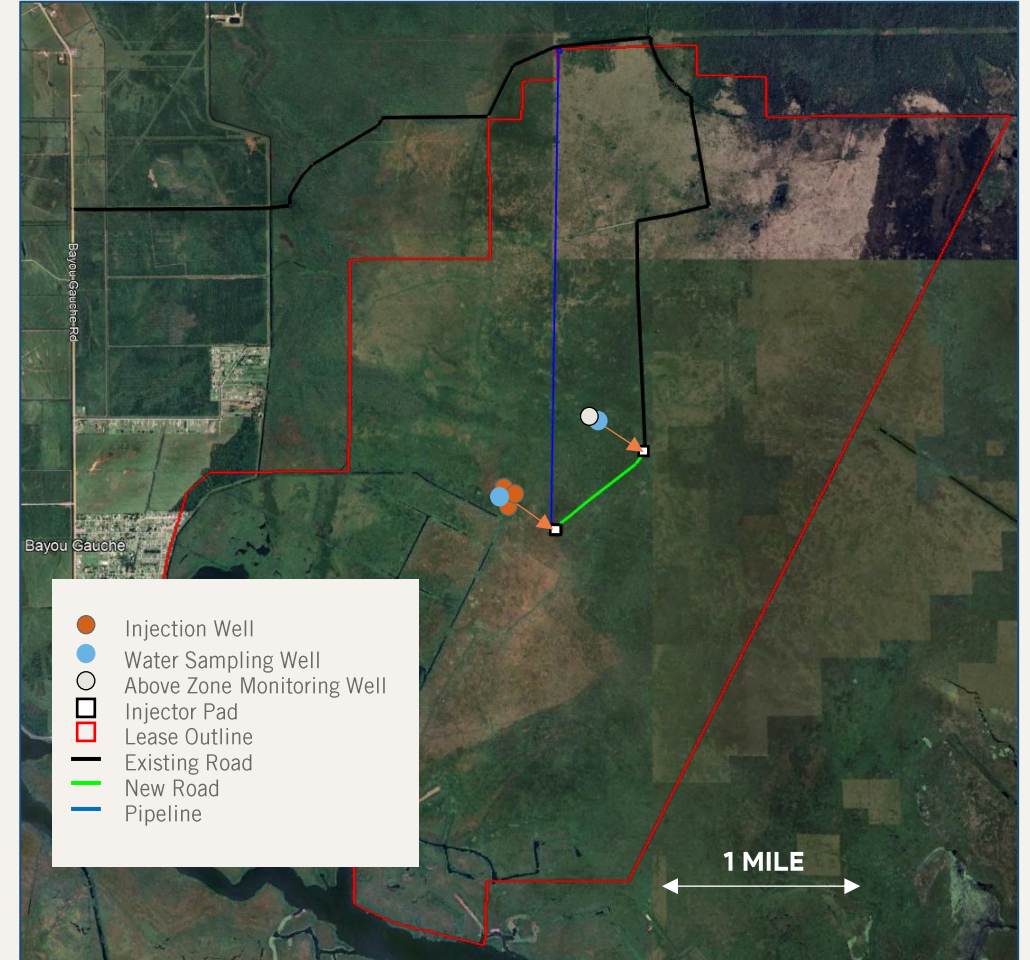
We will install multiple monitoring wells near the injection site to monitor reservoir pressure 24/7. We will also install multiple water wells to monitor water quality.

## ▶ EXISTING OIL AND GAS INFRASTRUCTURE

We screened the area for oil and gas wells before we moved forward with the project. While there is no active production in our potential permitted area, there is old infrastructure associated with oil and gas, which will be properly remediated.

## ▶ REMEDIATING FORMER OIL AND GAS WELLS

We will follow established procedures to safely and permanently plug and abandon wells formerly used for oil and gas. This process requires us to use corrosion-resistant cement around all well casings—including confining zones—to prevent potential CO2 migration.





# PROTECTIVE TOP SEALS AND INJECTION ZONES



## SHALES: SEAL

Shales protect Underground Sources of Drinking Water (USDW) from CO2 migration. These rocks are impermeable—CO2 cannot move through them. For Libra, multiple layers of thick shale act as seals that prevent CO2 movement. The thickest of these layers is between 300-400 feet.



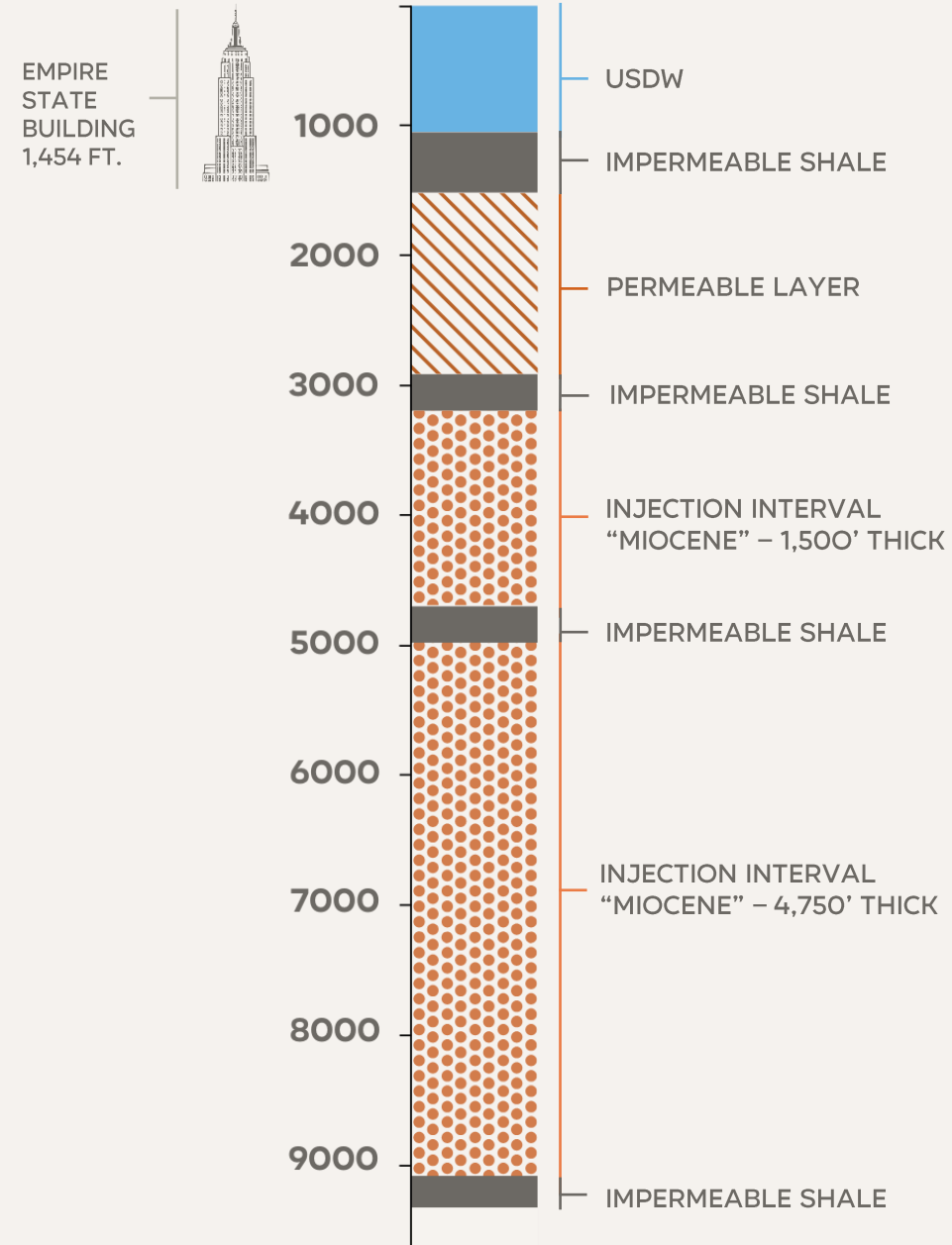
## SANDSTONES: INJECTION ZONE

Sandstones store CO2 and contain tiny holes between their sand grains, naturally filled with water (brine). During injection CO2 is pushed into these spaces. Libra's subsurface has exceptionally high-quality sandstone. This quality means that pressure dissipates quickly as compared to lower-quality sandstone.



## CO2 STORAGE ZONE

CO2 is stored at a depth that's similar to stacking more than three Empire State Buildings below the ground. For Libra, we're targeting two injection intervals that are 3,500-9,500 feet below the surface and about 2,300 feet below the USDW.





# LAPIS

ABOUT CCS

# IS CCS A GOOD IDEA FOR LOUISIANA?

CCS WILL CREATE JOBS, ATTRACT INVESTMENT, AND KEEP LOUISIANA COMPETITIVE.

▶ The [Louisiana Department of Energy and Natural Resources and Louisiana Economic Development](#) sum it up:

Increased investment means more jobs, more growth, and more community investment both short- and long-term.

CCS strengthens existing industries and keeps Louisiana at the forefront of innovation.

Louisiana has an established pipeline network, generational industry expertise, and natural geological formations that provide safe, permanent CO2 storage.

# WHAT IS CCS?

Carbon Capture and Storage (CCS) is the process of separating, then permanently and safely storing, CO2.

1

## CAPTURE

Separate CO2 from other gases produced at large industrial process facilities.

2

## TRANSPORT

Compress and transport CO2 to a suitable site for geological storage.

3

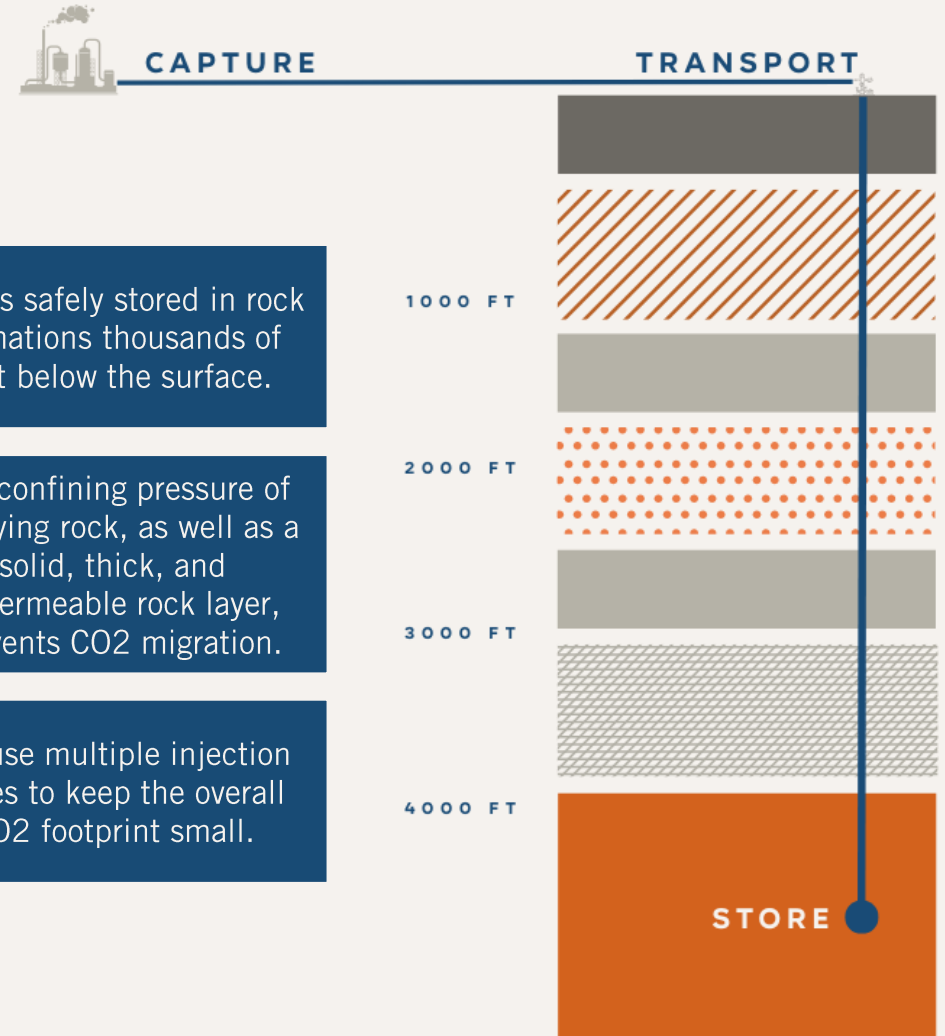
## OPERATE

Inject and rigorously monitor in accordance with Class VI and industry standards.

4

## SAFE, PERMANENT STORAGE

CO2 is stored deep underground in formations thousands of feet below the surface. The site is monitored 24/7 throughout operations and for more than a decade post-operations per EPA and/or LDENR standards.



# CCS: A TESTED TECHNOLOGY

## CAPTURE

- Capture technology **BEGAN IN THE 1930S**.
- At least **160 MILLION METRIC TONS** of CO<sub>2</sub> are captured every year for use in industries such as food, beverage, and fertilizers.

## TRANSPORT

- There are **5,000+ MILES** of CO<sub>2</sub> pipelines in the U.S.
- In the last 50 years, pipelines have transported **OVER 500 MILLION** metric tons of CO<sub>2</sub>.
- During the **ENTIRE PERIOD** of CO<sub>2</sub> pipeline operation there have been **NO RELATED FATALITIES**.

## STORE

- In the U.S., over **850 MILLION METRIC TONS** of CO<sub>2</sub> have been safely injected since the 1970s for a process known as enhanced oil recovery.
- **OVER 20 MILLION** metric tons of CO<sub>2</sub> have been injected into dedicated geological storage sites for climate purposes since 1996.

# IS CCS SAFE?

CCS is a safe, proven way to prevent CO2 from entering the atmosphere.

## CCS HAS EXISTED SAFELY FOR YEARS.

CCS is not a new technology and is heavily regulated by the State of Louisiana based on EPA rules and regulations.

CO2 injection for enhanced oil recovery has existed safely across the U.S. and in coastal Louisiana for decades.

## OPERATORS ARE REQUIRED TO DEVELOP ROBUST, 24/7 MONITORING PROCESSES.

Our Class VI application details the many monitoring mechanisms we will use to keep people safe. This includes multiple monitoring wells, water wells, and seismic monitoring devices.


## CO2 PIPELINES HAVE AN EXEMPLARY SAFETY RECORD.

About 5,000 miles of CO2 pipelines already exist across the U.S.

These pipelines have an average incident rate of 0.001 per mile per year.

Since the U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA) began overseeing CO2 pipeline safety in 1988, only one incident reached the threshold of a serious incident.

No fatalities associated with CO2 pipelines have ever been reported.

[READ MORE ABOUT CCS SAFETY](#)   
[READ MORE ABOUT CO2 PIPELINE SAFETY](#)   
[READ MORE ABOUT MONITORING PROCESSES](#) 



# WHAT IS A CLASS VI PERMIT?

Class VI is the type of permit needed to inject CO2 underground.

## CLASS VI WELLS ARE SUBJECT TO A RIGOROUS PERMITTING PROCESS.

The time frame from application to injection typically takes years and a number of additional permits from various state and federal agencies.

Class VI wells—the type of well needed to inject CO2 underground for safe, permanent storage—are designed to rigorous standards, more so than oil and gas wells.



## THE LOUISIANA DEPARTMENT OF ENERGY AND NATURAL RESOURCES (LDENR) MANAGES CLASS VI PERMITS.

The state has a tracker where you can see all applications and their status [here](#).

Once the Lapis Class VI permit has undergone further review, LDENR will hold a public hearing. This will likely occur in 2026.

## KEY PERMITS NEEDED TO START INJECTION:

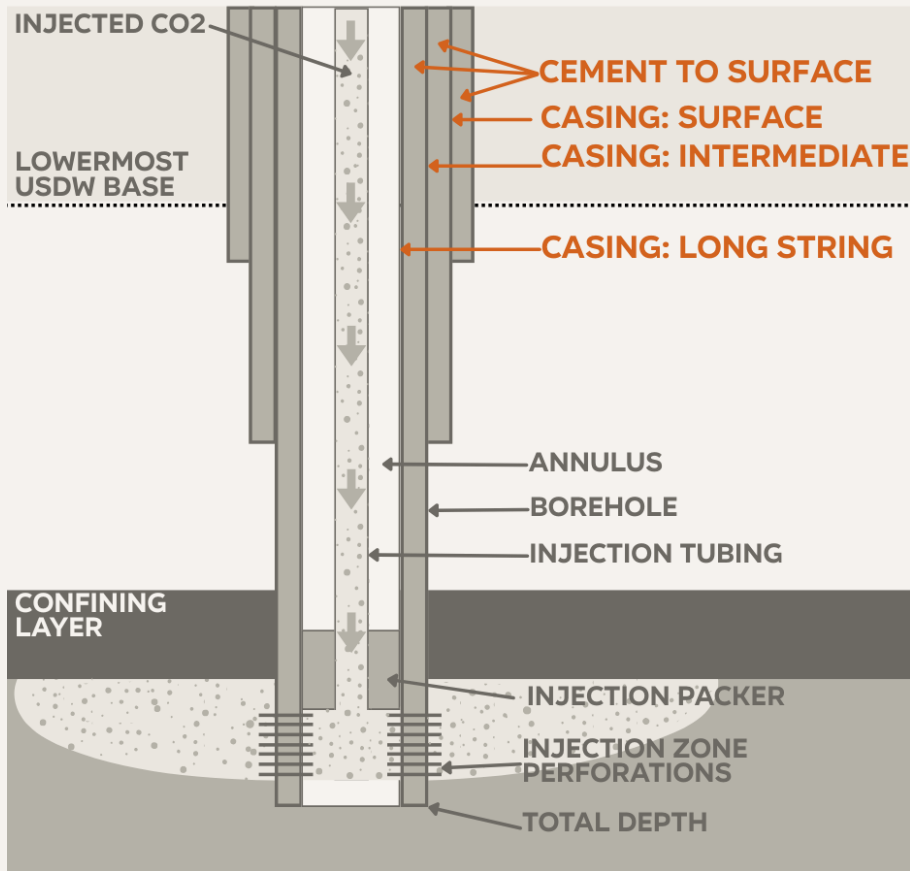
1. Coastal use permit and section 404 (Clean Water Act) permit to construct the infrastructure needed for a Class VI well.
2. Class V permit(s) to conduct geotechnical tests and drill monitoring wells.
3. Class VI permit to inject.

[VIEW A MORE DETAILED LIST OF PERMITS](#)   
[LEARN MORE ABOUT LOUISIANA'S CCS REGULATORY PROCESS](#) 

# WELL SPECIFICATIONS: CO<sub>2</sub> INJECTION VS. OIL AND GAS

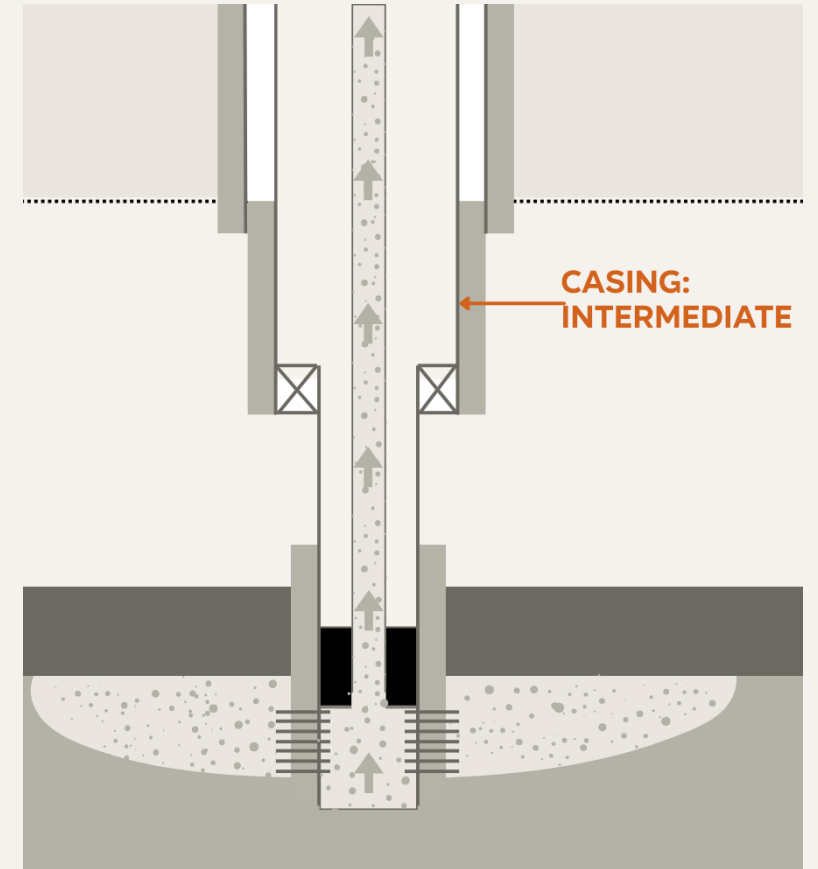
CCS wells are designed to exceptionally high standards—more so than a typical oil and gas well.

## CCS CO<sub>2</sub> INJECTION WELL



**4-8X COST OF A REGULAR OIL AND GAS WELL**

## TYPICAL OIL AND GAS WELL



- All casing strings extend to surface
- All casing strings are cemented to surface

- Use of corrosion resistant alloy over injection interval
- Use of highly corrosive resistant cement over entirety of well bore surface vs. Portland cement and regular steel casing in an oil and gas well



# LAPIS

COMMUNITY QUESTIONS

# WHERE IS THE CO2 COMING FROM? IS THERE A PIPELINE?

## ANY ADDITIONAL PIPELINES OR INFRASTRUCTURE MUST GO THROUGH A SEPARATE PERMITTING PROCESS.

Pipelines cannot be built without going through a separate permitting process. This process would include permitting at the federal and state level, dependent on the pipeline's location.

If any additional infrastructure is proposed, the public will weigh in through a separate permitting process.

## THE ONLY PIPELINE LAPIS IS CURRENTLY PERMITTING IS FROM THE INJECTION SITE TO THE EDGE OF THE PRIVATE PROPERTY.

We are working to secure industrial emissions for this project. Lapis will not have clarity on pipelines and routing until such contracts are finalized.

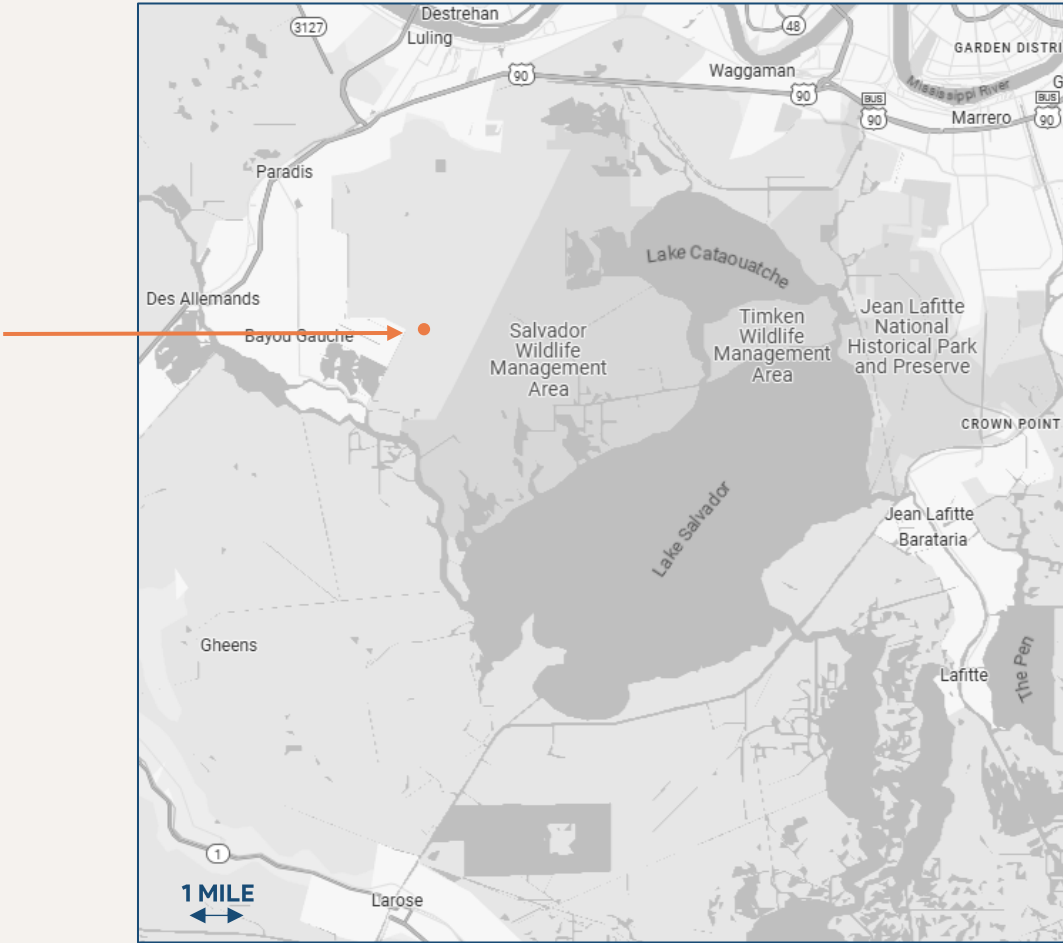
The only pipeline currently being permitted through our coastal use permit application is a ~3.56-mile pipeline located entirely within the private property project site that will run from the injection site to a tie-in point.

[READ MORE ABOUT CO2 PIPELINE SAFETY](#) 

# ARE YOU STORING CO2 UNDER LAKE SALVADOR?

NO, PROJECT LIBRA IS ABOUT SIX MILES FROM LAKE SALVADOR.

- The project is located completely on private property.
- Project Libra is designed to maximize use of existing infrastructure and minimize potential disruption.



# WHAT HAPPENED IN SATARTIA, MS? WAS LAPIS INVOLVED?

The Satartia, Mississippi rupture is the only serious incident recorded since 1988 by PHMSA.

## WHAT HAPPENED:

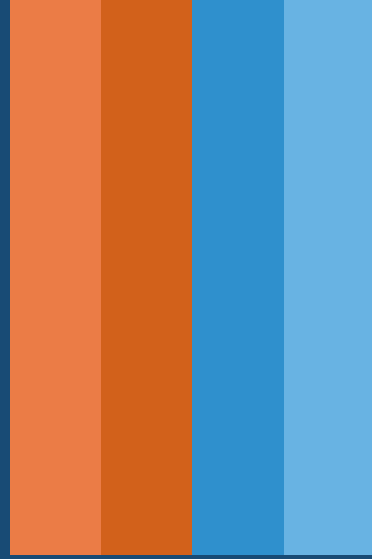
In Satartia, Mississippi, a pipeline ruptured after days of heavy rainfall that in turn caused landslides and shifting soil.

The area's low-lying geography caused CO2 to dissipate slowly, impacting health and vehicle functioning.

## WE HAVE NO LINK TO THE SATARTIA PIPELINE RUPTURE.

Like the rest of the industry, we've learned from what happened in Satartia. Our subsurface and engineering experts have a deep understanding of how best to select, manage, and monitor sites for safe, long-term storage.





# LAPIS

CARBON SOLUTIONS

© 2025 LAPIS CARBON SOLUTIONS

