EARTHJUSTICE

Air Products Blue Energy Project

Army Corps Public Notice
Clean Water Act Application
Comments & Request for Hearing DUE July 30!

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or click here

Louisiana Public Notice
Coastal Use Permit Application
Comments & Request for Hearing DUE August 1!

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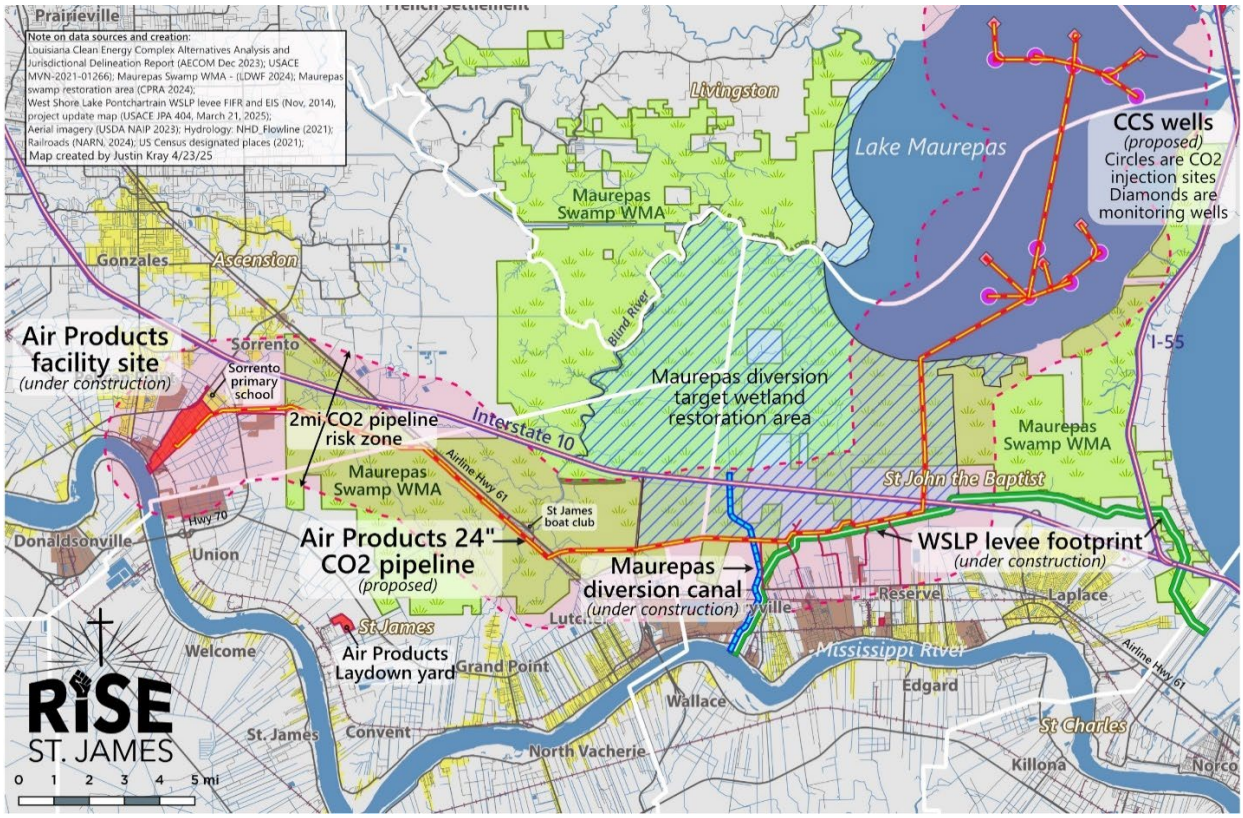
or click here

Project Overview

Air Products Blue Energy LLC, a subsidiary of Pennsylvania-based Air Products & Chemicals, Inc., is seeking permits for a massive fossil fuels project that will impact areas of Ascension, St. James, St. John the Baptist, Tangipahoa, and Livingston parishes as shown in the map below. Air Products plans to construct a new facility along the Mississippi River that would produce up to 178 cubic feet of hydrogen per day near an elementary school and residences in the Burnside-Darrow-Sorrento area of Ascension Parish. The hydrogen is called "blue hydrogen," a term used for hydrogen produced from methane gas that employs carbon capture and storage. Here, Air Products plans to capture carbon dioxide waste gas generated at its hydrogen plant and transport it 38 miles through a new pipeline for injection deep beneath Lake Maurepas, in a process known as carbon capture and storage." Air Products hopes to sell some of the so-called blue hydrogen at a premium to Gulf Coast facilities through its existing pipeline network. The rest of the blue hydrogen would be used to manufacture up to 2.8 tons per year of ammonia at a chemical plant that would also be built at the site. The ammonia would be stored onsite, compressed, and loaded onto large ocean-going carriers for global shipment (likely to Asian countries), moving down the Mississippi River and through southeastern Louisiana communities before traveling to Asian markets.

The new carbon dioxide (CO_2) pipeline would run very close to Sorrento Primary School and neighboring subdivisions, through the Maurepas Swamp (including the protected

Wildlife Management Area), near communities in St. John Parish, and then to a sprawling carbon sequestration system with a network of additional pipelines and cables that would connect to 19 platforms spread throughout picturesque Lake Maurepas.

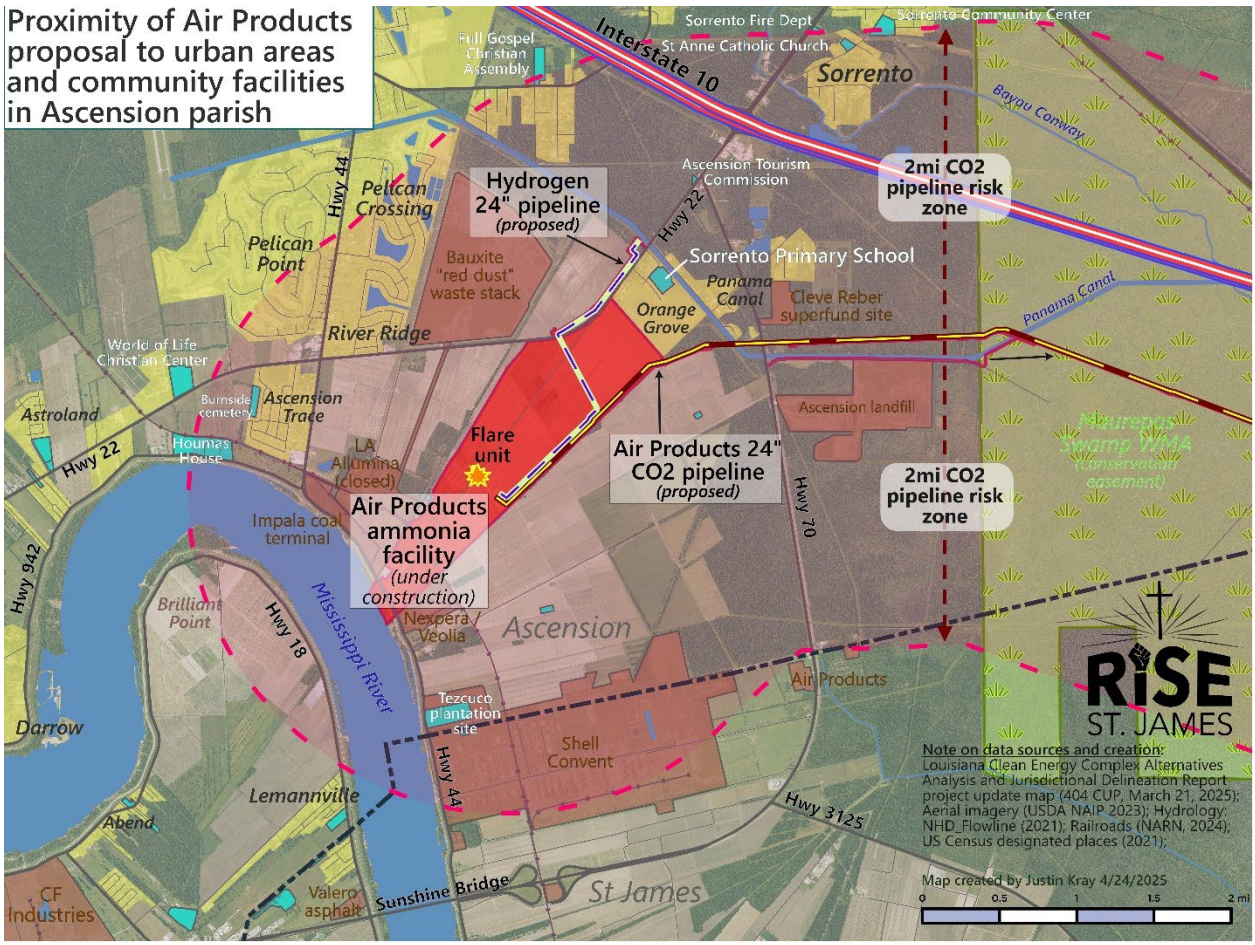


Full Project Map (Created by Justin Kray)

Although Air Products recently announced plans to sell off major components of its proposed project and said it has halted new spending, the company is aggressively pursuing an Army Corps Clean Water Act permit and Louisiana Coastal Use Permit. Air Products is presumably pushing to secure these permits so that it can attract buyers to take over the construction and operation of various facility components such as the ammonia plant, marine terminal, carbon dioxide pipeline, and carbon sequestration facility—keeping only the blue hydrogen manufacturing facility.

Hydrogen / Ammonia Facility

The blue hydrogen and ammonia facility is planned for construction on a 700-acre site between the Mississippi River and Sorrento Primary School, which is the former site of the Orange Grove Plantation (discussed below). Sorrento Primary School and Orange Grove subdivision are just ¼ mile from the site and there are several residential subdivisions within one mile of the site, including: Sugar Mill, Ascension Trace, River Ridge, and Pelican Crossing as shown in the map below.



Ascension Parish Map – Plant Site & Surrounding Areas (Created by Justin Kray)

The facility would impact quality of life and potentially decrease the value of nearby residential properties due to the noise, light, and odors from the facility that would operate 24/7. Two 160-foot boilers and seven industrial flares, ranging in height from 147 to 220 feet, would be visible for miles around the plant site. Flaring events at the facility would produce large flames, along with noise, vibrations, and sometime plumes of smoke. Odors, especially ammonia, may also be noticeable.

Facility construction would likely increase traffic congestion. Air Products says 2000 construction workers will work on the project that will take several years to complete. Though the area already experiences traffic problems, Air Products has failed to provide a report on how its construction activities will exacerbate these problems.

The facility would be built in an area that already has some of the worst air pollution in the state. The cancer risk from exposure to air toxics is already in the 99th percentile in the state for the 3,700 people who live within 2 miles of Air Products' plant site and the

respiratory hazard from exposure to air toxics is the 91st percentile. Air Products' facility would add a lot more air pollution to the area.

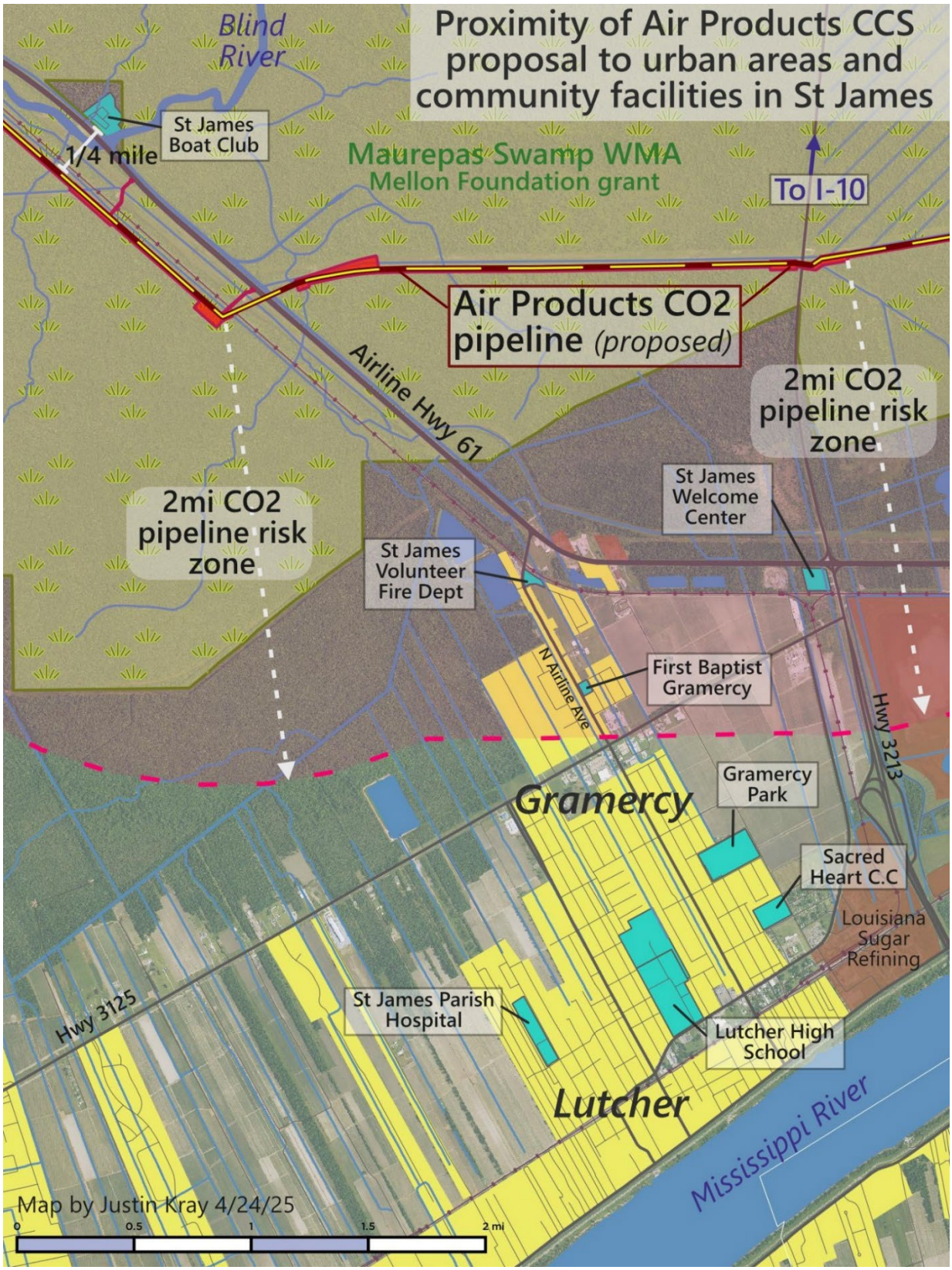
Ammonia accidents are a serious concern, especially given the proximity of Air Products' proposed plant to Sorrento Primary School and several residential subdivisions. Ammonia is toxic, flammable, and potentially explosive. An ammonia gas leak in December 2022 at the CF Industries plant in Ascension Parish led to the evacuation of all students and staff at Donaldsonville Primary School approximately one mile away and the closure of the two primary entrance highways to the city. Air Products has failed to provide information to the public that shows the worst-case scenario should there be an ammonia release at the proposed facility.

Hydrogen production creates safety hazards given the highly explosive nature of gas. A catastrophic event at an Air Products' facility illustrates the hazards associated with hydrogen. In 2019, a major uncontrolled release of high-pressure hydrogen occurred at the Air Products facility in Santa Clara, California causing a fire and explosion that "shook buildings and residents at least five miles away." Air Products has failed to provide information to the public that shows the worst-case scenario should there be a serious hydrogen accident at its proposed facility.

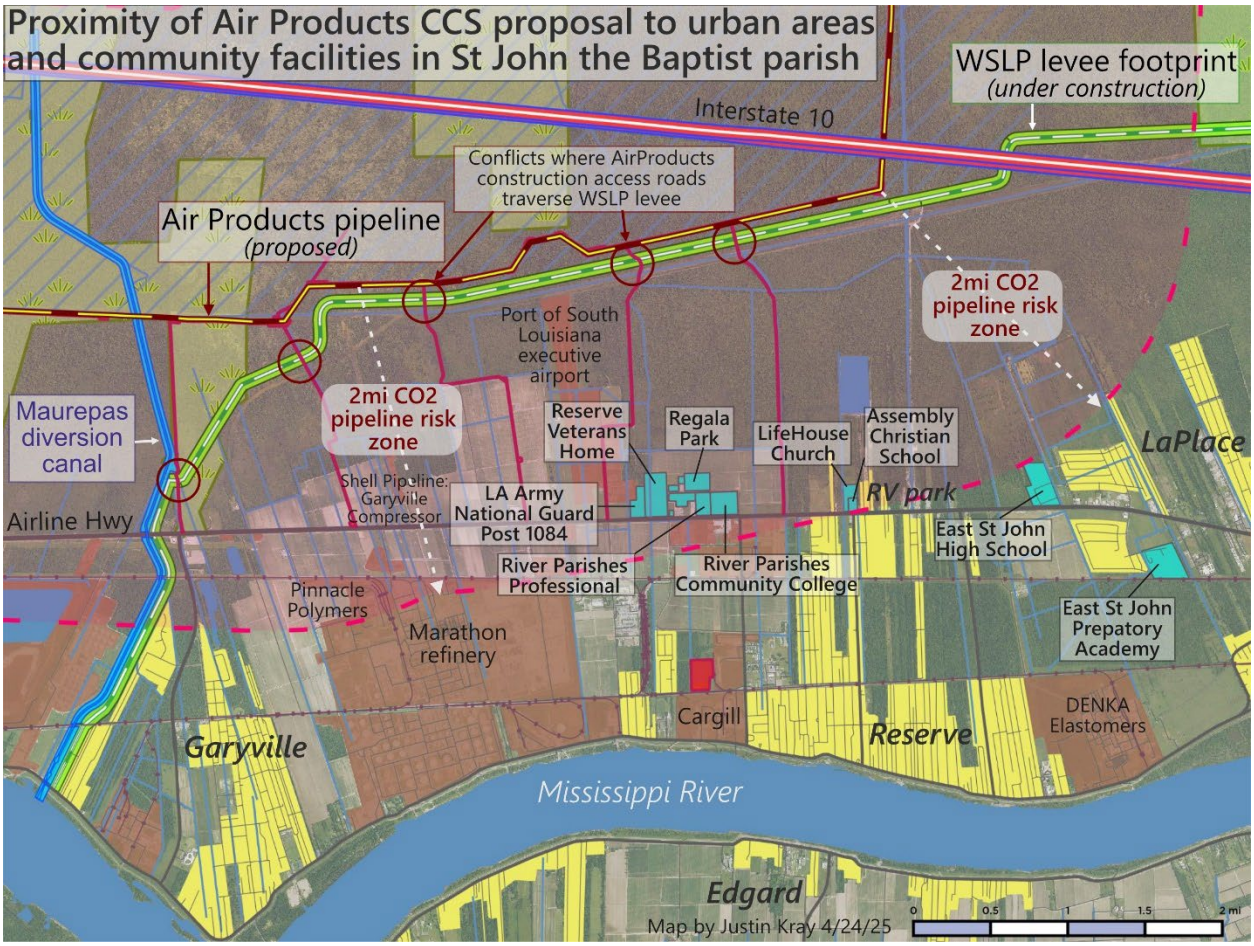
Sorrento Primary School would be sandwiched between a hydrogen pipeline and a carbon dioxide pipeline. As shown in the Ascension Parish map above, a pipeline transporting compressed hydrogen would run within less than a ¼ mile from Sorrento Primary School, and even closer to residences. Additionally, a high-pressure 24-inch carbon dioxide pipeline would run within a ½ mile of Sorrento Primary School and Orange Grove subdivision next to the school. Most of the children who attend Sorrento Primary School are Black or Hispanic, and most of the full student population is economically disadvantaged.

Carbon Dioxide Pipeline

After running ½ mile along the school and subdivision, the carbon dioxide pipeline would then run east through the Maurepas Swamp Wildlife Management Area (adjacent to Airline Highway) cross beneath the Blind River, a state Natural and Scenic River, and pass within ¼ mile of the St. James Boat Club, which hosts many large events as shown in the St. James Parish map below. The pipeline would continue east running north of Gramercy, Garyville, and Reserve, coming within 2 miles of residential areas, churches, a veterans' home, and a local airport as shown in the St. John Parish map below. The pipeline would then turn north to Lake Maurepas where it would run another 10 miles through the lake to the carbon dioxide waste injection system for storage deep beneath the lake in geological formations. *See* Lake Maurepas map and discussion of lake impacts below.



St. James Parish Map – Carbon Dioxide Pipeline (Created by Justin Kray)



St. John Parish Map – Carbon Dioxide Pipeline (Created by Justin Kray)

Carbon dioxide pipelines pose unique public safety risks because they can rupture and open like a zipper, releasing a large amount of carbon dioxide which is heavier than air and can create a suffocation hazard by displacing oxygen. Other health effects associated with breathing in high concentrations of carbon dioxide include headaches, dizziness, and increased heart rate. When released at high concentrations, carbon dioxide displaces oxygen and can cause asphyxiation (inability to breathe) and prevent car combustion engines from working properly.

A carbon dioxide pipeline rupture near Sorrento Primary School could result in a rapidly expanding cloud of concentrated carbon dioxide that could harm students, faculty, and staff if it reaches the school. Evacuation would be difficult because of the suffocation risk from carbon dioxide and the potential for carbon dioxide to interrupt emergency response by preventing combustion engines from starting. Air Products has not provided any

information to the public on a worst-case scenario should its proposed carbon dioxide pipeline rupture near the school, the St. James Boat Club, or any other place.

A carbon dioxide pipeline ruptured near Satartia, Mississippi in 2020, sending a plume of carbon dioxide into the community. Within minutes, dozens of residents collapsed in their homes and vehicles. Forty-five people required hospital treatment after the pipeline catastrophe, and 200 people were forced to evacuate their homes. Unconscious people were reported as far away as 1.2 miles from the rupture site. Individuals near the accident also reported having issues with their car engines stalling. The incident resulted in road closures two miles away.

On April 3, 2024, **an Exxon/Denbury pipeline leaked 107,000 gallons of carbon dioxide gas**, spreading a "dense cloud of carbon dioxide" in Sulphur, Louisiana. First responders were not equipped to deal with the leak and had to wait on Denbury's repair specialist who did not arrive until about two and a half hours after the leak was first reported. Meanwhile, residents within ¼ mile were advised to shelter in place without much information about the risks.

The pipeline could also interfere with a flood protection levee. The US Army Corps is currently building the West Shore Lake Pontchartrain levee whose purpose is to protect residential areas in St. John the Baptist Parish from storm surge. Air Products proposes to construct the carbon dioxide pipeline immediately adjacent to the new levee, permanently removing trees that could serve to stabilize the levee, as well as creating access roads across the levee.

Maurepas Swamp

The proposed carbon dioxide pipeline route cuts through vitally important swamp habitat, including the Maurepas Swamp Wildlife Management Area, which is one of the largest contiguous areas of forested coastal wetlands in Louisiana. Pipeline construction and right of way would permanently destroy over 300 acres of wetlands (predominantly cypress-tupelo forest) within the Maurepas Swamp WMA.

The impacts associated with the pipeline could negate intended benefits of a major state project to reintroduce water from Mississippi River into the Maurepas Swamp aimed to improve the health and productivity of the cypress-tupelo forest by diverting freshwater, nutrients, and fine sediments into the swamp. The pipeline project would destroy the forested coastal wetlands the state is spending millions of dollars to protect.

The proposed carbon dioxide pipeline would impact important swamp habitat that hosts at least 50 species of birds including bald eagles, black skimmers, cerulean warblers, and brown pelicans, many of which breed in the swamp. The pipeline could also impact habitat for a number of threatened and endangered species (including proposed threatened and proposed endangered) such as the tricolored bat, the red-cockaded woodpecker, the alligator snapping turtle, the gopher tortoise, and the monarch butterfly.

The proposed carbon dioxide pipeline would cut through parts of the Maurepas Swamp Wildlife Management Area set aside for conservation purposes. The entities who donated

this land to the State of Louisiana did so for preservation and use by the public, not for industrial development and carbon management. The State committed to preserving this area for all Louisianans, not to benefit single corporations.

Lake Maurepas

Lake Maurepas is a 93-square mile shallow, brackish, tidal estuarine waterbody averaging 9-10 feet deep and is primarily surrounded by the cypress-tupelo forest of the Maurepas Swamp. The lake is cherished for its beauty. It is a vital resource for recreational activities like fishing, boating, kayak tours, wildlife observation, and photography, among other things. The lake sustains commercial fishing, seafood retailers, restaurants, bars, marine businesses, ecotourism, and even the Tickfaw 200, the state's largest power boat charity run. Many people have built homes and camps in the area to enjoy easy access to the lake by boat.

The permits Air Products seeks would allow for the construction of a massive carbon sequestration facility that would spread throughout Lake Maurepas. As illustrated in the Lake Maurepas map below, the proposed facility would include following infrastructure and construction methods:

- Nineteen platforms supported with concrete pile foundations would be constructed throughout the lake, including two 100 x 75 feet control platforms that would tower 19 feet above the lake surface, 10 injection well platforms and 6 monitoring well platforms, each 20 x 8.5 feet, and 8 feet above the water surface, and a main valve platform 45 x 45 feet on the south shore.
- A drill barge would be used at the injection well platforms.
- Injection and monitoring well platforms would each have a 265 x 70-foot rock pad on the lakebed requiring the excavation of 29,000 cubic yards of lake bottom and dumping of 77,000 cubic yards of limestone to form the rock pads.
- Prefabricated decks and equipment would be brought to the platform sites and installed, "using any necessary barges or vessels for delivery and installation." Following installation of the platforms and primary facilities, associated equipment, piping, and electrical systems would be installed.
- Lay barge with a 300-foot workspace equipped with high-pressure jets to excavate over 180,000 cubic yards of sediment to carve 6-foot-deep trenches into which miles of carbon dioxide pipeline and distribution lines, gas pipeline, and fiber optic cables would be buried beneath the lake.
- A second barge also with a 300-foot workspace would be used for mechanical trenching where obstructions such as stumps and roots exist.

The proposed carbon sequestration facility would spoil the beauty of Lake Maurepas and greatly interfere with its current uses. The proposed facility would restrict recreational boating, creating significant obstructions and hazards. It could harm commercial fishermen and businesses that thrive off the current uses of the lake.

Air Products claims that the wells would be in remote areas of the lake away from primary channels, but boaters and others use all areas of the lake. Construction activities could take well over a year or longer given the project delays already experienced, and the permanent surface and subsurface infrastructure such as the well platforms would create significant navigational obstructions and safety hazards.

It is not clear how much of the lake could be permanently off-limits to the public. Air Products' lease with the state allows it to enclose its carbon dioxide injection well sites and other portions of the facility "as may be required by applicable Sequestration Protocols." While Louisiana statute (La. R.S. 30:127.G) requires the lessee of state lands to allow public access to public waterways, the statute also gives the state the authority to restrict access to public waterways if it is determined that "a danger to the public welfare exists."

The facility would reduce the appeal of living along the lake or in the many subdivisions established along the rivers, which provide easy access to the lake. Property values in these communities could plumet if the lake is no longer a haven for boaters.

Air Products admits that the platforms, wellheads, and other lake infrastructure would be visible to lake users but claims "these features would have limited visibility to the public due to their remote locations." **But, platforms and wellheads would not be in remote areas of the lake and would be visible for miles, spoiling views—including from Highway 51 and I-55.**

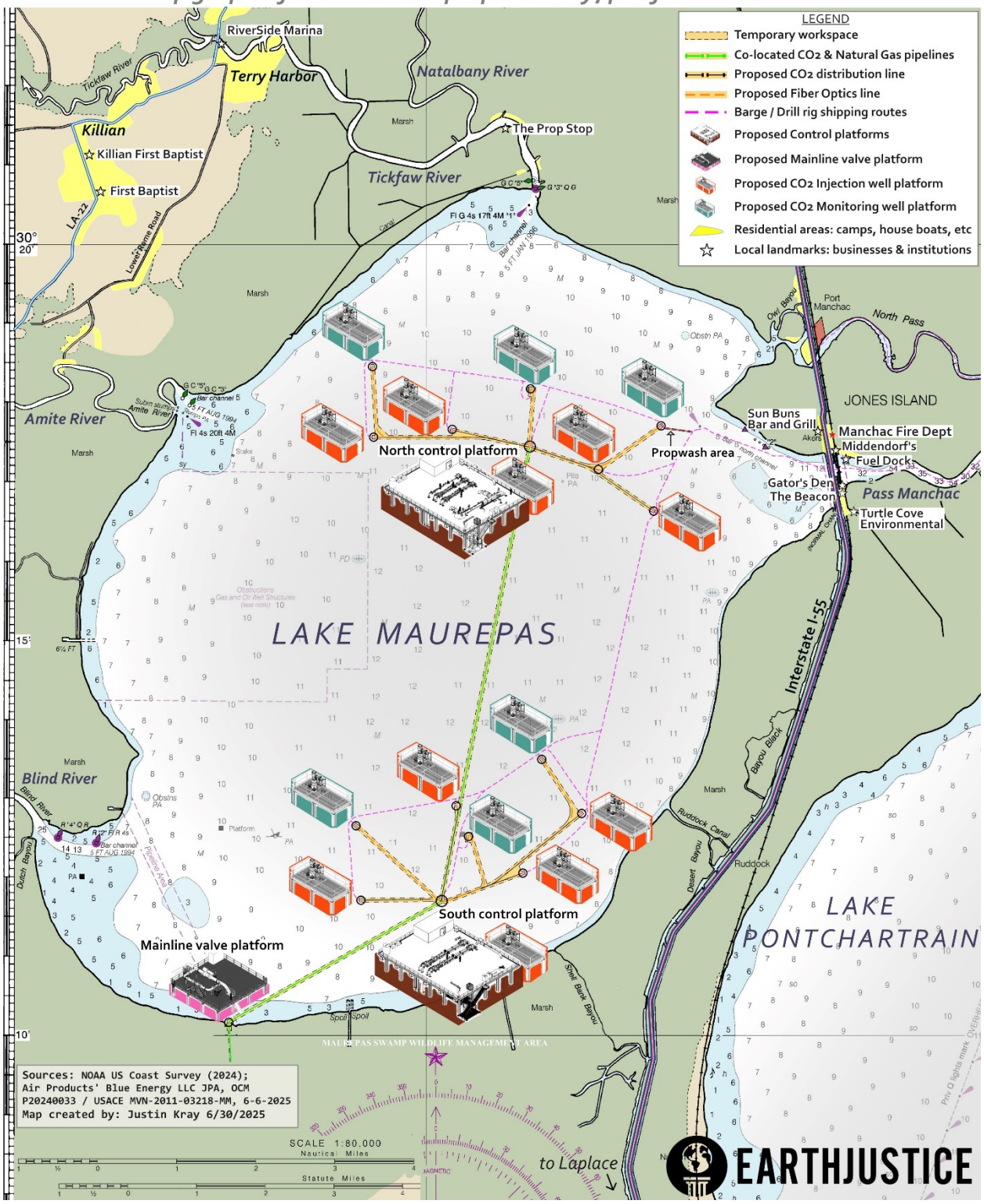
Construction would stir up and potentially resuspend heavy metals and other contaminants in the sediment, which could impact water quality and harm crabs, fish, and other aquatic life, such as the threatened West Indian Manatee observed in the lake. The excavated sediment would be dispersed into the water before settling back to the lake floor. And while a turbidity curtain may be utilized to help confine the sediment to the trenched areas, fine sediments could be transported far from the excavation area before eventually settling back to the lake bottom.

Fine sediments absorb contaminants including heavy metals. When these fine sediments are resuspended by construction projects and related digging, the heavy metals can be released into the water, potentially affecting aquatic organisms—especially those that live on or near the lake floor such as crabs. The resuspension of heavy metals into the water leads to bioaccumulation, which is the buildup of chemicals including heavy metals in the tissues of organisms. Heavy metals that exist there now like mercury, arsenic, and cadmium, and can accumulate in fish tissues, and when consumed by humans can lead to various health problems. For this reason, the sediment should not be disturbed.

A pipeline rupture in the lake could lead to the release of large volumes of high-pressure carbon dioxide in the lake, and depending on the magnitude of the rupture, could be detrimental to aquatic organisms and harm water quality. Again, Air Products has provided no information on what could happen should there be a major carbon dioxide release or slow leak into the lake over time.

Air Products' Proposed Carbon Dioxide Sequestration Facility

Map graphic for illustration purposes only; platforms not to scale



Lake Maurepas Map – Carbon Dioxide Sequestration Facility (Created by Justin Kray)

Orange Grove Plantation

Air Products' plant site was originally settled by the Houma and Bayou Goula tribes and later became a large sugar plantation known as Orange Grove where hundreds of people (if not more) were enslaved from the early 1800s through the Civil War. In 1860 alone, records show that John Burnside—then owner of Orange Grove—enslaved over 750 people at sugar estate that included Orange Grove. Burnside was one of the largest holders of enslaved people in U.S. history. Now, Air Products plans to redevelop the site, converting it from a place that held people in bondage in horrific conditions (as detailed in historian Katy Shannon's report) to another use that will put elementary school children and nearby residents in the shadow of a highly polluting plant under threat from risks of catastrophic failures.

An archeological survey conducted over 10 years ago identified a cemetery at Orange Grove, but concluded that "[i]t is almost certain the persons interred in the cemetery were the owners of Orange Grove Plantation and their managerial employees and relatives." It was not until a news article revealed that the Orange Grove Cemetery was within Air Products' plant site footprint that the company reconfigured its site boundary to avoid the cemetery. A question remains as to where the enslaved people who died at Orange Grove would have been buried and whether construction activities could destroy unmarked burials.

An older archeological survey found areas with cultural resources on the facility site that may qualify for the National Registry of Historic Places and should be avoided. The cultural resources include structural remnants such as cabins for the enslaved, the "principal house," a store, and sugar mill – along with hundreds of historic artifacts associated with the Orange Grove Plantation. Air Products has not provided any information to the public about how it intends to avoid and protect these areas from construction activities.

RISE St. James has asked the Army Corps to require Air Products to cease its construction activities until an archeological investigation of the full site has been conducted using current survey standards and the agency has completed its required review under the National Historic Preservation Act. RISE St. James has asked to be a consulting party during the Corps' review so that it can keep the public informed, especially area residents and potential descendants of those enslaved at the Orange Grove Plantation.