



September 9, 2022

Submitted via internet comments and electronic mail

Joshua Latino Louisiana Department of Natural Resources Office of Coastal Management 617 North 3rd Street Baton Rouge, LA 70804-4487 joshua.latino@la.gov

RE: CP2 Express Pipeline Application for a Coastal Use Permit, CUP #P20211132

Dear Mr. Latino:

Healthy Gulf, ¹ Earthjustice² (as attorneys for Healthy Gulf), and additional signatories, Sierra Club, Texas Campaign for the Environment, Earthworks, Micah 6:8 Mission, Turtle Island Restoration Network, and Louisiana Bucket Brigade, oppose the application for a Coastal Use Permit (the "Permit") by Venture Global, Inc. through its subsidiary, Venture Global CP Express, LLC (together, "Applicant," "VG" or "Venture Global"). Venture Global seeks approval from the Louisiana Department of Natural Resources' ("LDNR") Office of Coastal Management ("OCM") to construct approximately 85.4 miles of 48-inch diameter natural gas pipeline (the "CP Express Pipeline" or the "Pipeline"), 6.0 miles of 24-inch diameter lateral pipeline, and associated aboveground facilities through coastal Louisiana to connect its proposed CP2 LNG Export Terminal (the "Terminal") to the existing pipeline grid in east Texas. Venture Global and these comments refer to the Pipeline and the Terminal, together, as the "Project."

The Pipeline would provide "4 billion cubic feet per day of natural gas to the Terminal Site,"—*each day* the equivalent of *a year driving 47,473* gasoline-powered cars³—an amount that Venture Global states (but does not show) is "required." The Pipeline would connect to the Transcontinental Gas Pipeline in Texas where Venture Global states there are "existing pipelines with sufficient capacity" to meet that demand, though it did not consider alternative tie-in

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¹ Healthy Gulf's purpose is to collaborate with and serve communities who love the Gulf of Mexico by providing research, communications and coalition-building tools needed to reverse the long-pattern of over exploitation of the Gulf's natural resources.

² Earthjustice is a public-interest environmental law firm with offices nationwide, including attorneys and staff based in Louisiana and Texas.

³ See EPA's Greenhosue Gas Equivalencies Calculator, available at https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

⁴ See Joint Permit Application Narrative, p. 14.

locations on that or other pipelines. The Project is one of many proposals seeking Louisiana permits to construct massive, long-term fossil fuel infrastructure in the United States to export fossil fuels abroad. This Project, along with other liquified fossil "natural" gas ("LNG") export terminal proposals in the U.S., refers to a goal of meeting short-term, immediate demand in Europe—a time frame this massive Project could not meet even if approved promptly. In addition, its approval would divert resources away from development of renewable energy resources, saddling the economy with high U.S. gas prices and inflation, and entrenching the significant and adverse environmental impacts from LNG that destroy wetlands and habitat and intensify climate change as well as its impacts on the Louisiana Coastal Zone. Although Venture Global refers to the Pipeline and Terminal as one "Project," it has presented them as separate proposals, segmenting this agency's permit applications, and leaving the agency and public without sufficient information for full review or participation.⁵

LDNR must deny Venture Global the Permit under its regulatory and constitutional public trustee duties given the proposed Project's tremendous real and potential adverse environmental impacts and the Application's many failures to provide sufficient information to assess or balance those impacts and other shortcomings. LDNR must consider the impacts of and alternatives to the proposed Project, as well as its cumulative impact with the past, present, and reasonably foreseeable impacts from the other pipelines, LNG terminals, oil export terminals and industry in the Cameron Parish and Louisiana Gulf Coast area. But Venture Global fails to provide the necessary information to perform that analysis, including information 1) on the impacts of the Pipeline and the Project as a whole; 2) on alternative sites for the Proposed Pipeline, its termini, its compressor station, the Terminal and the Project as a whole; 3) on alternative projects and methods, including a smaller pipeline, renewably or electric powered compressor station, and increased horizontal drilling, 4) on any need for a 48" pipeline or a 20 million tonne per annum Terminal versus a smaller alternative, 5) to quantify or adequately assess the Pipeline's or Project's costs and benefits, 6) on the Pipeline or the Project's real, potential, and cumulative adverse environmental impacts on the Coastal Zone and its people particularly in an area with some of Louisiana's most important coastal resources, like chenier habitats, and already saturated with oil and gas development and suffering the impacts of the climate change that that development exacerbates. Further, the Applicant has failed to show that the Project is in the public interest, or that it will provide any benefits to the state, let alone benefits that outweigh its significant environmental harms. LDNR cannot lawfully grant the Permit on this Application.

Moreover, LDNR should deny Venture Global's Permit. There should be no new fossil fuel facilities in these chenier wetlands, on this impaired waterway, or in this storm-soaked flood zone. As LDNR itself explained: "Almost one-third of Louisiana's people live in the coastal area. For ecological, economic, and recreational reasons, this vast ecosystem is priceless. If lost, it cannot be replaced." There must be a point when LDNR's Office of Coastal Management

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⁵ A CUP application for the Terminal is currently on "hold," apparently awaiting additional information from VG.

⁶ LDNR, OCM, *A Coastal User's Guide, the Louisiana Coastal Resources Program* (updated 2015), Introduction, *available at* chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/https://data.dnr.la.gov/LCP/LCPHANDBOOK/FinalUsers Guide.pdf (last visited 9/3/2022).

says, "Enough." Enough of this coast has been built upon; enough of this coast is already lost to ventures that remove the storm protections we have while exacerbating climate change—increasing the threat from hurricanes and storm surge flooding while placing their structures and pollutants in the path of those storms and floods. Now should be that time.

We request written notice of LDNR's decision and reserve the right to rely on all public comments submitted.

I. Public Hearing and Opportunity to Comment on Completed Permit

LDNR should hold a public hearing on Venture Global's Permit application. LDNR should grant a requested public hearing if "the issues raised are substantial, and there is a valid public interest to be served by holding a public hearing." LDNR should also consider factors such as "significant public opposition to a proposed use," or whether it is a "controversial [case] involving significant economic, social, or environmental issues."

Venture Global's coastal-use permit application raises "substantial" issues and a hearing would serve "a valid public interest." The issues related to the Pipeline portion of the Project alone are substantial. For example, the sheer volume of material Venture Global would dredge in important waterbodies and wetlands in the Coastal Zone, as well as the inconsistent measures and patent omissions of wetland impacts in the Application warrant public hearing. Venture Global's Project also would channel enormous volumes of fossil gas for export, raising the risk of leaks and explosions, adversely impacting U.S. fossil gas prices and inflation, and resulting in large-scale greenhouse gas emissions that threaten the survival of South Louisiana communities due to impacts like land-loss and worsening storms. Further, Venture Global claims local and ad valorem tax benefits without disclosing whether it has sought or expects to receive tax abatements or credits that would undermine any such benefits. The voices of the public and the people that will be directly affected by the Project should be heard for this Permit. LDNR must take into account public input regarding Venture Global's proposal before making the crucial decision of whether to issue or deny the permit. ¹⁰

Further, since LDNR has put its review process on hold to await additional information, public hearing would allow the public to comment with full access to the same Application that DNR is reviewing. On August 25, 2022, LDNR informed Venture Global that it had "determined that we are unable to continue the processing of the application until we receive the following information requested additional information" and requested more accessible uploads of supporting "plats" information, noting "[t]his information is being requested pursuant to LAC, Title 43, Part I, Chapter 7, §701 F, G, H, 709, 711, and 717." LDNR also noted: "Further information may be required based, on your answers to the above questions or to questions which may arise during processing." When asked to confirm that LDNR would extend or renotice the comment period accordingly to allow the public the access to the same Application and supporting information that LDNR is requiring for its review, the agency indicated it would

⁷ LAC 43:I.723(C)(6)(b)–(c).

⁸ *Id*

⁹ *Id.* Examples of substantial issues and valid public interests are described throughout these comments.

not provide that opportunity for public access.¹¹ As a result, the public lacks full access to the information needed for full participation in LDNR's decision-making process. Among other things, this reaffirms the valid public interest in a public hearing.

II. Factual Background

The CP Express Pipeline is proposed as an approximately 85.4 miles, 48-inch diameter fossil gas pipeline, with an additional 6.0 miles of 24-inch diameter lateral pipeline, and associated aboveground facilities that would connect the proposed CP2 LNG Terminal to the existing pipeline grid in east Texas and southwest Louisiana. Construction would require approximately 49,162 cubic yards (cys) of concrete, 40,732 cys of gravel, and 33,561 cys of sand to be hauled in and placed onsite. ¹² It would also involve dredging approximately 160,415 cys of material that will be excavated and hauled offsite, and approximately 1,779,008 cys of material will be excavated and placed onsite. LDNR's Public Notice states that approximately "925 acres of wetlands, waterbottom, and uplands may be impacted as a result of the proposed activities," but that number is absent from Venture Global's Application and is inconsistent with the information provided for the Pipeline. ¹³ We request LDNR clarify the scale of impacts.

The Pipeline is an integral part of Venture Global's CP2 LNG Project, *i.e.* its single "plan to construct and operate natural gas liquefaction, storage, and export facilities at a liquefied natural gas (LNG) terminal ... on the east side of the Calcasieu Ship Channel in Cameron Parish, Louisiana, along with associated pipeline facilities ... connecting the Terminal ... to the existing natural gas pipeline grid in east Texas and southwest Louisiana. The Terminal ..., which will provide 20 million tonnes per annum of nameplate LNG export capacity. ... The Terminal Facilities and Pipeline System are collectively referred to as the CP2 LNG and CP Express Project (Project)." Indeed, Venture Global consistently refers to the Pipeline as just one part of its "Project" throughout its Joint Permit Application (the "Application") and included Joint Application Narrative, which it updated in May 2022 (the "JPA Narrative"). Nevertheless, Venture Global segmented its request for Coastal Zone use authorization and the Application is only for the Pipeline portion: "This [Application] applies to that portion of the Pipeline System within the Louisiana Coastal Zone only; a separate JPA is being submitted by CP2 LNG to cover the Terminal Facilities." ¹⁴

The CP2 LNG Project is one of four Venture Global LNG export projects operating, constructing, or proposed in Louisiana. Two of the others, Calcasieu Pass LNG and Plaquemines LNG, are already permitted and Calcasieu Pass LNG has begun operating. The proposed CP2 Terminal would sit next to the company's Calcasieu Pass LNG Terminal – but would *not* use the pipeline that services Calcasieu Pass LNG, the TransCameron Pipeline. In fact, it is not clear whether the proposed Pipeline would even co-locate with TransCameron Pipeline. The latter is not depicted on Venture Global's map of alternative pipeline routes.

Although the Calcasieu Pass LNG facility has only just begun operations, Venture Global

¹³ See id., JPA Narrative, passim.

¹¹ See Exhibit 1, email string, dated September 1 - 2, 2022.

¹² Public Notice, p. 1.

¹⁴ Application cover letter, dated, 12/3/21.

has already allowed accidents, failures, and permit violations on site, including:

- Leaking an estimated 180,099 pounds of natural gas—approximately 90 tons of methane—from its LNG storage tank "into the atmosphere and offsite" over the course of four days in January 2022. 15 Venture Global conceded that "[t]he unauthorized discharge of natural gas was preventable" and concluded that the causes arose from "a combination of a failure in the management of change process, lack of adherence to procedures, and lack of training;"16
- Leaking an estimated 831 pounds of natural gas from a flange on a gas line in February 2022;17
- Unintentionally releasing, according to its own report, an estimated 3,360 pounds of nitrogen oxides from its turbines in February 2022. 18 Venture Global later asserted that its monitoring equipment was malfunctioning but did not provide any further information on the cause or remedy for the malfunction;
- Failing to submit for seven months a work plan to evaluate pollutants in groundwater at the Calcasieu Pass location at "a concentration that exceeds the applicable groundwater screening standard under the Louisiana Risk Evaluation/Corrective Action Program."19 Notably, since receiving conditional approval to move forward with the plan, Venture Global has failed to complete the investigation and, instead, sought multiple extensions.²⁰ LDEQ's "Final Extension" letter gave Venture Global until June 17, 2022, to initiate investigation and expressed LDEO's intent to attend to provide oversight.²¹ Nevertheless, Venture Global did not commence the investigation until June 28, 2022, and the LDEQ Inspector who attended indicated that they "could not gain access to the site for the first sampling event as no one could be contacted for escort into the facility."22 In addition, the Inspector's notes indicated that certain samples "were not collected in containers and sealed as required for viable samples," and that it was "unknown if [Quality

¹⁵ Unauthorized Discharge Written Notification Report (Jan 24, 2022), EDMS Doc ID 13136388 at 3, https://edms.deq.louisiana.gov/app/doc/view?doc=13136388, attached at Exhibit 2, together with the LDEQ documents described at footnotes 15-26.

¹⁶ *Id.* at 3-4.

¹⁷ Incident Report (Feb. 19, 2022), EDMS Doc ID 13245482 at 2,

https://edms.deg.louisiana.gov/app/doc/view?doc=13245482, see Ex. 2.

¹⁸ Incident Report (Feb. 4, 2022), EDMS Doc ID 13175077 at 1, https://edms.deg.louisiana.gov/app/doc/view?doc=13175077, see Ex. 2.

¹⁹ See Potential Unauth. Discharge Written Notification Report (Jan. 27, 2021), EDMS Doc ID 12687300 at 1,

https://edms.deg.louisiana.gov/app/doc/view?doc=12687300, see Ex. 2; Response to Notice of Deficiency (Dec. 6, 2021), EDMS Doc ID 13042494 at 1 (detailing work plan timeline), https://edms.deq.louisiana.gov/app/doc/view?doc=13042494, see Ex. 2.

²⁰ See Receipt of Request for 60 Day Extension (Mar. 14 2022), EDMS Doc ID 13191437 https://edms.deq.louisiana.gov/app/doc/view?doc=13191437 see Ex. 2; Receipt of Request for 60 Day Extension (May 4, 2022), EDMS Doc ID 13280994,

https://edms.deq.louisiana.gov/app/doc/view?doc=13280994, see Ex. 2.

²¹ Receipt of Request for 60 Day Extension (May 4, 2022), EDMS Doc ID 13280994, https://edms.deg.louisiana.gov/app/doc/view?doc=13280994, see Ex. 2.

²² Field Interview Form (June 28, 2022), EDMS Doc ID 13395620, https://edms.deq.louisiana.gov/app/doc/view?doc=13395620, see Ex. 2.

Assurance/Quality Control] samples were collected."²³ In short, more than 19 months after detecting polluted groundwater, nothing in the public record indicates that VG completed a competent investigation into contaminated groundwater.

Venture Global's Calcasieu Pass facility also reported accidents and unlawful discharges related to Hurricane Laura in 2020 – a foreseeable event in an area particularly vulnerable to hurricanes – including allowing "Hurricane Laura's storm surge and wind displace[] and rupture[] the [frac] tank, resulting in the escape of its contents [an estimated 6,600 gallons of hydrotest water] into the environment."²⁴ Similarly, in April 23, 2021, a storm overturned portable toilets on the premises of the Calcasieu Pass facility.²⁵ As a result, "feces and urine were all over the ground... [Employees] [a]lso advised they had to walk through the incident... The portable toilets were picked up with a fork-lift and nothing was being done for cleanup..."²⁶ Apparently, Venture Global is unable to secure even minor equipment to meet foreseeable weather conditions.

In assessing Venture Global's Permit application, LDNR must comply with three interrelated sets of legal obligations: its obligation as a public trustee for environmental protection under Article IX of the Louisiana constitution; its obligation to comply with the State and Local Coastal Resources Management Act, La. Rev. Stat. §§ 49:214.21–.42 (the "Coastal Resources Management Act"), and its implementation of coastal use guidelines regulations, LAC 43:I, Chapter 7 (the "Coastal Use Guidelines").

III. Legal Background

A. Public Trust Duty, Article IX of the Louisiana Constitution

Louisiana's public trust doctrine derives from Article IX, § 1 of the state constitution. It provides:

The natural resources of the state, including air and water, and the healthful, scenic, historic, and esthetic quality of the environment shall be protected, conserved, and replenished insofar as possible and consistent with the health, safety, and welfare of the people. The legislature shall enact laws to implement this policy.²⁷

The Louisiana Supreme Court explained that Article IX, § 1 mandates agencies to "determine that adverse environmental impacts have been minimized or avoided as much as possible consistently with the public welfare," "before granting approval of proposed action affecting the environment." LDNR is not in a neutral role; its "role as the representative of the

²⁴ NPDES Wastewater Permit Excursion-Compliance Report Form (Oct. 29, 2020), EDMS Doc ID 12428586 at 5, https://edms.deq.louisiana.gov/app/doc/view?doc=12428586, see https://edms.deq.louisiana.gov/app/doc/view?doc=12428586, see <a href="https://example.com/

 $^{^{23}}Id$.

²⁵ Incident Report (Apr. 23, 2021), EDMS Doc ID 12721834 at 1, https://edms.deq.louisiana.gov/app/doc/view?doc=12721834, see Ex. 2.

²⁶ *Id*. at 1.

²⁷ La. Const. art. IX, § 1.

²⁸ Save Ourselves v. La. Envtl. Control Comm'n, 452 So.2d 1152, 1157 (La. 1984) (emphasis added).

public interest does not permit it to act as an umpire passively calling balls and strikes for adversaries appearing before [the Secretary]; the rights of the public must receive active and affirmative protection at the hands of [LDNR]."29 LDNR must do more than simply apply its own regulations.³⁰

The First Circuit has refined the Supreme Court's Article IX review requirement into a 5part set of "IT questions." The agency is required to address whether:

- (1) The potential and real adverse environmental effects of the proposed facility have been avoided to the maximum extent possible;
- (2) A cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former;
- (3) There are alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing non-environmental benefits;
- (4) There are alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits;
- (5) There are mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits.³¹

These questions, derived from the Louisiana Supreme Court's seminal ruling in Save Ourselves, Inc. v. Louisiana Environmental Control Commission, 452 So.2d 1152, 1158 (La. 1984), "[include] features similar to those of the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. 4321 et seg., and state environmental quality acts patterned after NEPA."³² As a result, the Supreme Court has explained that "federal and state cases interpreting those statutes may provide guidance in applying the Louisiana statutes."33 Both NEPA34 and state

²⁹ *Id.* at 1157 (emphasis added).

³⁰ Id. at 1160 (stating, "From our review it appears that the agency may have erred by assuming that its duty was to adhere only to its own regulations rather than to the constitutional and statutory mandates."). ³¹ In re Am. Waste and Pollution Control Co., 633 So.2d 188, 194 (La. App. 1 Cir. 1993). Some agencies refer to this 5-part inquiry as the "IT Requirements" or "IT Questions" after the name of the permittee in Save Ourselves. In other decisions, the First Circuit has collapsed this 5-factor test into three factors, simply merging parts (3)–(5) without any alteration to their substance. See, e.g., in re Oil & Gas Explo., Dev., & Prod., 2010-1640, p.4 (La. App. 1 Cir. 2011); 70 So.3d 101, 104.

³² Save Ourselves, 452 So.2d at 1158.

³³ *Id*.

³⁴ 40 C.F.R. § 1508.7 (2019) (requiring consideration of cumulative impacts); see 42 U.S.C. § 4332(C)(2) (requiring both discussion of the "environmental impact of the proposed action," as well as "any adverse environmental effects which cannot be avoided should the proposal be implemented" (emphasis added)); Hanly v. Kleindienst, 471 F.2d 823, 831 (2d Cir. 1972) ("[I]t must be recognized that even a slight increase in adverse conditions that form an existing environmental milieu may sometimes threaten harm that is significant. One more factory polluting air and water in an area zoned for industrial use may represent the straw that breaks the back of the environmental camel. Hence the absolute, as well as

constitutional provisions analogous to Article IX,³⁵ require the agency to analyze cumulative impacts of the proposal, along with other past, present, and reasonably foreseeable environmental harms. NEPA further requires examining "connected actions," such as those that "[a]re interdependent parts of a larger action and depend on the larger action for their justification."

To complete its duty as a public trustee, LDNR must provide written, detailed, rational explanation for its decision:

LDNR is duty-bound to demonstrate that it has properly exercised the discretion vested in it by making basic findings supported by evidence and ultimate findings that flow rationally from the basic findings; and it must articulate a rational connection between the facts found and the order, or in this case, the permit issued.³⁷

B. The Coastal Resources Management Act and Coastal Use Guidelines

The Coastal Resources Management Act ("CRMA") mandates that persons wishing to commence "any use or activity within the coastal zone which has a direct and significant impact on coastal waters," must first obtain a coastal use permit (also referred to as a "CUP") from LDNR or the applicable local government. DNR issues coastal use permits for any use of "state concern," which includes crude-oil pipelines and export terminals, like the Project. 40

LDNR's implementing regulations for the CRMA, the Coastal Use Guidelines ("Guidelines"), impose detailed criteria against which to judge whether the adverse impacts of projects on coastal resources warrants denying a permit or substantially modifying the project to reduce its harm. ⁴¹ The Guidelines first mandate LDNR to collect an array of relevant information about the activity, ranging from environmental characteristics of the area impacted, to the economic need for the use. ⁴²

The Guidelines then require LDNR to assess whether the applicant's planned activity would avoid a series of presumptively forbidden adverse impacts to coastal resources to the "maximum extent practicable." These include more than 20 potential impacts that could result

⁴¹ LAC 43:I, Chapter 7.

comparative, effects of a major federal action must be considered."); see also 40 C.F.R. § 1502.15 (2020) ("The environmental impact statement shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration, including the reasonably foreseeable environmental trends and planned actions in the area(s).").

³⁵ See Robinson Twp., Washington Cty. v. Com., 623 Pa. 564, 659; 83 A.3d 901, 959 (Pa. 2013); Sullivan v. Resisting Envtl. Destruction on Indigenous Lands (REDOIL), 311 P.3d 625, 634 (Alaska 2013); In re Water Use Permit Applications, 94 Hawai'i 97, 143; 9 P.3d 409, 455 (Haw. 2000) (citing Save Ourselves). ³⁶ 40 C.F.R. § 1508.25 (2019); accord id. § 1501.9(e) (2020) (stating same).

³⁷ In re Oil & Gas Explo., 2010-1640, at 4; 70 So.3d at 104 (emphasis in original).

³⁸ La. R.S. § 49:214.23(13).

³⁹ La. R.S. §§ 49:214.30(A).

⁴⁰ See id.

⁴² LAC 43:I.701(F).

⁴³ See LAC 43:I.701–19.

from any type of use, like "destruction or adverse alterations of streams, wetland, tidal passes, inshore waters and waterbottoms, beaches, dunes, barrier islands, and other natural biologically valuable areas or protective coastal features."44 They also include adverse impacts specific to a certain type of use like a pipeline. 45 In attempting to avoid the delineated adverse impacts to the "maximum extent practicable," the Guidelines impose a high bar. To comply, either the applicant must fully avoid the adverse impact in question, or LDNR must answer a strict, four-part test, to:

- 1) Find that "there are no feasible and practical alternative locations, methods, and practices for the use that are in compliance with the modified standard"; and
- 2) Find that "benefits resulting from the proposed use would clearly outweigh the adverse impacts resulting from noncompliance with the modified standard . . . "; 46 and
- 3) Modify the application with any feasible conditions to bring the activity into full compliance with the Coastal Use Guidelines, or that would at least "minimize or offset those adverse impacts," and
- 4) Find that "a. significant public benefits will result from the use; or b. the use would serve important regional, state, or national interests, including the national interest in resources and the siting of facilities in the coastal zone identified in the coastal resources program; or c. the use is coastal water dependent."47

If LDNR relies on the "maximum extent practicable" standard in lieu of Guideline conformance, it must impose conditions that "shall assure that the use is carried out utilizing those locations, methods, and practices which maximize conformance to the modified standard; are technically, economically, environmentally, socially, and legally feasible and practical; and minimize or offset those adverse impacts listed in § 701.G and in the Subsection at issue."48

LDNR further published a 2020 Guide to Developing Alternatives and Justification Analyses for Proposed Uses within the Louisiana Coastal Zone (the "Alternatives Guide") for applicants that indicates what the agency has deemed sufficient information for its analysis of projects. ⁴⁹ For example, an "Alternatives Analysis should provide documentation that clearly demonstrates that reasonable efforts were made to find less damaging sites and should provide an explanation for why each less damaging site was not feasible."⁵⁰ Although Venture Global

⁴⁵ See LAC 43:I.705. Pipelines are part of the Coastal Use Guideline's broader source category of "linear" facilit[ies]." See id. 43:I.700.

⁴⁴ See LAC 43:I.701(G).

⁴⁶ LAC 43:I.701.H.1: see also Pardue v. Stephens, 558 So.2d 1149, 1164 (La. Ct. App. 1 Cir. 1989) (explaining that the activity is prohibited based on violating a Guidelines standard, unless LDNR shows it would nonetheless meet the "maximum extent practicable" test set out in the Coastal Use Guidelines). ⁴⁷ LAC 43:I.701.H.1.

⁴⁸ LAC 43:I.701.H.2.

⁴⁹ See LDNR, "Guide to Developing Alternatives and Justification Analyses for Proposed Uses within the Louisiana Coastal Zone" at 54–62 (2020),

http://www.dnr.louisiana.gov/assets/LDNR/permits/NAJ/Combined Document rev1 Mar2020.pdf. 50 Id. at 3.

references this or a similar guide in its JPA Narrative, it appears to have relied on an outdated 2013 version and the link it provides does not function.⁵¹

While there is overlap between the CUP Guidelines and the requisite public trustee analysis, OCM must ensure that it meets all facets of the public trustee analysis. For example, the CUP Guidelines require OCM to consider the "availability of feasible alternative sites or methods of implementing the use." But under the Louisiana Constitution, OCM must determine whether there are alternative sites or alternative projects "which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits." The alternatives analysis, thus, is not about feasible alternatives or methods, but about the alternative sites and methods that offer more protection to the environment without unduly curtailing non-environmental benefits. Indeed, the requirement to determine whether the potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible is extremely broad. And all potential and real adverse environmental effects of the proposed project must be weighed against any purported benefits. This includes effects that remain after mitigative or regulatory measures. As the Supreme Court explained in *Save Ourselves*, an "agency may ... err[] by assuming that its duty was to adhere only to its own regulations rather than to the constitutional and statutory mandates." ⁵⁴

LDNR is required to seek public comment on permit applications and issue a written decision. ⁵⁵ Its final decision must represent "a full and fair consideration of all information before the permitting body, and shall represent an appropriate balancing of social, environmental, and economic factors." ⁵⁶

IV. LDNR Cannot Grant the Permit Because the Application is Not Complete.

Granting the proposed Permit would be premature because LDNR lacks key information for its review—like the federal reviews the Application relies on and consideration of the whole Project's impacts—and so cannot meet its public trust, statutory, and regulatory duties at this time. Similarly, the lack of key information deprives the public of the opportunity to participate in the public decision-making process that they are entitled to do.⁵⁷ Notably, Venture Global offers no explanation for segmenting this agency's review of the Project and acknowledges that

⁵³ 633 So. 2d at 194.

⁵¹ See JPA Narrative, p. 2, fn. 3 (citing "LDNR OCM Needs, Alternatives, and Justification (NAJ) Guidelines).

⁵² LAC 43:I.701.F.5.

⁵⁴ 452 So. 2d at 1160.

⁵⁵ LAC 43:I.723.C.

⁵⁶ LAC 43:I.723.C; *Pardue v. Stephens*, 558 So.2d 1149, 1164 (La. Ct. App. 1 Cir. 1989) (rejecting activity in conflict with Guidelines where there was no evidence that written decision followed the multi-part, "maximum extent practicable" test laid out in the Coastal Use Guidelines).

⁵⁷ Cf. Louisiana Environmental Action Network, Inc. v. Brown, 2019-0607 (La. App. 1 Cir. 1/9/20), 294 So.3d 1066 (2020) (finding agency's "improper acceptance of incomplete permit application resulted in its issuance of a public notice referencing a faulty application [such that interested party] was unable to assess the potential risk of [the] expected wastewater discharge and was unable to comment on [agency's] issuance of the draft permit as inappropriate before the close of the public comment period").

federal agencies are reviewing the Project's impacts as a whole.

A. LDNR Cannot Proceed on the Application without reviewing the Federal Environmental Impact Statement ("EIS").

LDNR lacks critical information and must not approve the Permit before reviewing the expected EIS. An EIS will provide relevant information, for example on the direct, indirect, and cumulative impacts of the Pipeline and the Project on the Coastal Zone, including on their expected greenhouse gas ("GHG") emissions which, in turn, impact the intensity of storms and flooding in the Project area. Such information is necessary to satisfy LDNR's obligations under Guideline 701 and other guidelines, as well as for its public trustee analysis. LDNR and the public should not have to review this CUP application without the benefit of complete information provided for the EIS. It would be arbitrary and capricious to forego that information and to grant the Permit at this time.

Further, Venture Global's express reliance in the Application upon the future findings and determinations of the Federal Energy Regulatory Commission's ("FERC"), as well as related federal reports—most or all of which do not yet exist—means LDNR cannot approve the Permit at this time.

For example, Venture Global does not provide information necessary to apply Guideline 701(G) regarding avoidance of "adverse alteration or destruction of archaeological, historical, or other cultural resources." Instead, Venture Global punts to FERC's future assessment under the National Historic Preservation Act ("NHPA"), stating:

FERC, as lead federal agency for the Project, is responsible for documenting compliance with the NHPA, including consultation with tribes. Following completion of consultations with the [State Historic Preservation Office], CP2 LNG and CP Express will provide, under separate cover, copies of correspondence regarding compliance with Section 106 of the NHPA.⁵⁹

Similarly, Venture Global expressly relies on a future, post-draft EIS federal report for the Project's impacts on endangered and threatened species rather than providing key information that LDNR (and the public) would need to determine compliance with the Coastal Use Guidelines. Specifically, Venture Global states:

CP2 LNG and CP Express conducted an initial review of each listed species identified by [U.S. Fish and Wildlife Service ("FWS")]. Documentation of this review was sent to FWS to request technical assistance, verify the list of species, and obtain feedback on field survey protocols for those species that may require survey. CP2 LNG and CP Express will continue to coordinate with FWS and [National Marine Fisheries Service] to finalize a list of species that must be considered for consultation in connection with the Project. CP2 LNG and CP Express expect that FERC, as lead federal agency for the Project, will initiate

⁵⁸ See LAC 43.I.701(G)(14).

⁵⁹ JPA Narrative, p. 35.

consultation with FWS and NMFS regarding species listed under the Endangered Species Act, following issuance of the draft EIS.

In fact, Venture Global presents no data on impacts to any fish or other wildlife from the Pipeline or the Project, though it acknowledges its Marine Facility will destroy Essential Fish Habitat.⁶⁰ But such information is necessary, for example, for LDNR to apply Guideline 701(G) regarding "adverse alteration or destruction of unique or valuable habitats, critical habitat for endangered species, important wildlife or fishery breeding or nursery areas, designated wildlife management or sanctuary areas, or forestlands," among other things.⁶¹

Indeed, LDNR requires this FERC final decision information not only because Venture Global relies on it for its CUP Application, but also to properly apply its own Guidelines, including, for example, Guideline 701(F)(7) and (19) regarding "economic need" and "long term benefits or adverse impacts," respectively.⁶² But Venture Global fails even to answer the question "Why is the proposed project needed?" and punts to future FERC action instead:

[Venture Global] ... anticipate[s] that FERC will authorize the siting, construction, and operation of the proposed project facilities. As such, FERC will establish the purpose and need for development of the CP Express Pipeline as part of its review and final action for the overall Project.⁶³

Notably, foregoing CUP review and re-noticing the Application after issuance of, at least, a draft EIS is further appropriate because that EIS process has been delayed by Venture Global's own failure to provide information to the federal agency. FERC recently pushed back its schedule for issuing its draft EIS "based upon CP2 LNG's and CP Express' failure to file complete and timely information necessary for staff to prepare a draft EIS." Indeed, the Application's own timeline, which "anticipate[d] that FERC's authorization to site, construct, and operate the Project will be issued in the first quarter of 2023" further indicates Venture Global expected at least a draft EIS to be complete by now, *i.e.* in time for LDNR's CUP decision. C5

B. LDNR Must Review the Project as a Whole before It Can Lawfully Approve the Permit.

By segmenting its Application for the proposed Pipeline from its CUP application for the proposed Terminal, Venture Global fails to provide the information that the agency needs to grant the Permit. LDNR and the public must have an opportunity to review the Project as a whole before the agency can approve the Pipeline because its purpose, impacts, and potential alternatives, mitigating measures, and purported benefits, among other things, are inextricably

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⁶⁰ See JPA Narrative, p. 29.

⁶¹ See LAC 43.I.701(G)(16).

⁶² See LAC 43.I.701(F)(7), (9); see infra § X.

⁶³ Application, p. 4, Step 8(e) (emphasis added).

⁶⁴ *Id.* FERC records show Venture Global failed to provide information for the biological assessment and for cumulative impacts of the Project.

⁶⁵ See JPA Narrative, p. 18.

linked to the Terminal such that segmented review would be arbitrary and capricious. ⁶⁶

For example, LDNR cannot lawfully weigh the benefits of the whole Project (which the Application cites) while omitting the impacts of and alternatives to the whole.⁶⁷ Notably, as proposed, there is no benefit from the Pipeline without the Terminal. And, similarly, there is no social or economic benefit from the Terminal without the Pipeline. Indeed, Venture Global fails to consider any benefit of the Pipeline by itself. Instead, it only references the "Project" when it purports to describe benefits

In another example, segmenting the Project arbitrarily limits the alternatives review for the Pipeline. The Application considers only three alternatives to the proposed Pipeline route, all of which end at the proposed Terminal site. It arbitrarily presumes the proposed Terminal is a site, project, and method that meets the constitutional standard for the public trustee's review and appears to omit alternative Pipeline routes to any alternative Terminal site. As a result, LDNR is reviewing four alternative pipelines routes for one Terminal site, when it must instead review alternative Pipeline routes for each of the four alternative Terminal sites, *i.e.* at least 16 routes (if four alternative pipeline routes and four terminal sites were enough for this Project review⁶⁸). Alternative pipeline routes to an alternative terminal site could mean fewer adverse impacts than the proposed Pipeline – from the Pipeline itself and in aggregate with the Terminal.

Similarly, by considering and offering public comment on the Pipeline alone, LDNR would arbitrarily limit its alternatives review for the Terminal. All the Pipeline routes—proposed and alternative—in the Application end at the proposed Terminal. Approving the Pipeline first assumes, without support or analysis, that the Terminal site endpoint is the most protective site. Notably, Venture Global may not leverage an approved Pipeline route to assert that the Terminal is the only feasible facility site to receive the expected natural gas, unlawfully avoiding a full alternative site review for the Terminal. Further, approving the Pipeline route before full consideration of the Terminal is contrary to LDNR's own Alternatives Guidelines, which provide: "The route of *potential* pipelines also should be considered when selecting a ... facility site." This makes sense given the proposed Terminal site's tremendous adverse environmental impacts, which include chopping off acres of Monkey Island and so removing storm protections for inland communities and wetlands, decimating island wildlife and fish habitat, releasing pollutants by dredging, and risking additional sedimentation and changed currents in the Calcasieu Shipping Channel and Calcasieu Pass.

In short, LDNR's (and the public's) separate and, apparently, sequential review of Coastal Use Permits for the two pieces of the one Project arbitrarily and capriciously abbreviates the necessary reviews of alternative facility and pipeline sites, potential alternative projects, as well as mitigation, and skews any assessment of economic benefits.

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⁶⁶ See Save Ourselves, 452 So. 2d 1152, 1157 (La. 1984) (explaining the Constitution requires an agency to perform its analysis of costs, benefits, alternative projects and sites, and mitigating measures, "before granting approval of proposed action affecting the environment.")

⁶⁷ See JPA Narrative, p. 4, 6.

⁶⁸ See infra, § XI.A.

⁶⁹ OCM Alternative Guidelines, p. 44 (emphasis added).

V. LDNR Must Deny the Permit for Insufficient Information on and Failure to Avoid Adverse Impacts to Wetlands and Habitats.

LDNR cannot lawfully grant the Permit because Venture Global fails to adequately evaluate harm to the unique and sensitive wetlands of the Louisiana Coastal Zone. Article IX⁷⁰ and the Coastal Use Guidelines⁷¹ require LDNR to undertake a full analysis of the potential for the Project to harm wetlands and unique coastal ecosystems and to attempt to minimize those harms to the maximum extent practicable. Article IX also requires LDNR to fully evaluate and limit adverse impacts to the state's fisheries and their habitat, to the maximum extent possible.⁷²

These coastal wetlands are vital to the region's ecology and serve a protective role for coastal communities. Wetlands provide a critical role in carbon storage and a growing body of literature advocates for preservation and conservation (not just restoration) of existing wetlands as an important and necessary way to slow the effects of climate change and increasing greenhouse emissions. However, coastal wetlands are also highly fragile and susceptible to the impacts of storms. In 1957, Hurricane Audrey slammed into southwest Louisiana as a Category 4, bringing a storm surge 40 kilometers (24.9 mi) inland, killing off vital wetland vegetation, and eroding chenier plain beaches by 60-90 meters. Hurricane Rita hit the region in 2005 and "increased the water area in the chenier plain by 295 km²" while killing off entire marshes. A study from last year calculated impacts from tropical storms, and found that "...counties with

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⁷⁰ See in re Am. Waste, 633 So.2d at 194; Avenal v. State, 2003-3521 (La. 10/19/04, 23); 886 So.2d 1085, 1101 ("We find that the implementation of the Caernarvon coastal diversion project fits precisely within the public trust doctrine. The public resource at issue is our very coastline, the loss of which is occurring at an alarming rate.").

⁷¹ See, e.g., LAC 43:1.701(G), 705. For example, the Guidelines require avoidance of the "destruction or adverse alterations of streams, wetland, tidal passes, inshore waters and waterbottoms, beaches, dunes, barrier islands, and other natural biologically valuable areas or protective coastal features," *id.* 701(G)(5), and "of unique or valuable habitats, critical habitat for endangered species, important wildlife or fishery breeding or nursery areas, designated wildlife management or sanctuary areas, or forestlands," id at 701(G)(16). They also require avoidance of detrimental changes in "sediment transport processes" and "detrimental discharges of suspended solids into coastal waters, including turbidity resulting from dredging." *Id.* 701(G)(9), (11). For pipelines specifically, the Coastal Use Guidelines also instruct LDNR "to avoid adverse impacts on areas of high biological productivity or irreplaceable resource areas" and that "the use of dredging or filling shall be avoided in wetland and estuarine areas to the maximum extent practicable." *Id.* 705(A), (B). Further, if such a pipeline is built, the area "shall be restored at least to their natural condition immediately upon completion of construction." *Id.* 705(H).

⁷² See, e.g., in re Oil & Gas Explo., 2010-1640, at 5, 14; 70 So.3d at 105, 110–11 (reversing LDEQ produced water discharge permit on public trustee duty grounds, for failing to adequately ensure marine life in territorial seas would be harmed when evidence showed risk of such harm).

⁷³ Sun and Carson (2020). *Coastal wetlands reduce property damage during tropical cyclones*. PNAS March 17, 2020 117 (11) 5719-5725. https://www.pnas.org/content/117/11/5719.

⁷⁴ A. M. Nahlik & M. S. Fennessy, Carbon storage in US wetlands, 7 Nat Commun 13835 (2016), *available at* https://www.nature.com/articles/ncomms13835.pdf.

⁷⁵ Morton, R. A., & Barras, J. A. (2011). Hurricane impacts on coastal wetlands: A half-century record of storm-generated features from southern Louisiana. *Journal of Coastal Research*, 27(6A), 27-43. pp. 36-37

⁷⁶ *Id.* at 38.

more wetland coverage experienced significantly less property damage."⁷⁷ In fact, those authors found that recent wetland losses accounted for an additional \$430 million in property damage from Hurricane Irma. The 2020 hurricane season, with the combined effects of Hurricanes Laura and Delta, revealed how vulnerable southwest Louisiana is to storm impacts. Yet the Applicant seeks to destroy more of our rapidly disappearing wetlands to install an unnecessary Project.

The Calcasieu-Sabine Basin has lost at least 517 km² already between 1932 and 2016,⁷⁸ the equivalent of over half of the city of New Orleans (including New Orleans East and the West Bank). The impact by the Project to Louisiana's valuable wetlands should not be taken lightly.

A. Missing, Unsupported, and Inaccurate Information on Wetland Impacts.

Venture Global fails to adequately or accurately quantify the proposed Pipeline's impacts on wetlands. First, Venture Global's JPA Narrative fails to quantify acres of the Pipeline's *extended temporary* wetlands impacts, simply omitting such information from its Table of the proposed Pipeline's wetlands impacts. ⁷⁹ It quantifies such extended temporary wetlands impacts for the Terminal. ⁸⁰ Venture Global also lacks extended temporary impacts for its waterbody crossings for both the Pipeline and Terminal. As discussed further below, such information is necessary to determine required compensatory mitigation, among other things.

Moreover, Venture Global uses an arbitrary definition for what it claims are "extended temporary" wetland impacts, which it describes, without support, as "reduction of wetlands value and function ... associated with the long-term construction use (4 to 5 years)."⁸¹ It does not support, for example, why 3 years of extended construction use would not also qualify as "extended temporary" or 2 years, or even 1 year or some number of months. Indeed, since Venture Global also describes, again without support, "temporary and short-term [impacts] ... [as those] occurring where the construction duration is one year or less,"⁸² its arbitrary definitions create a gap, where it apparently does not account for construction in wetlands for 1 – 4 years as impacts at all. Similarly, Venture Global does support or explain why "extended temporary" impacts do not include wetlands that it may cease constructing in before 4 years, but that continue to be impacted by the construction, as well as the presence of a pipeline and the risks that entails.

Second, Venture Global similarly provides no narrative, support or evidence for its

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⁷⁷ National Geographic, *How powerful hurricanes hasten the disappearance of Louisiana's wetlands*, Sep. 11, 2020, https://www.nationalgeographic.com/science/article/how-hurricane-laura-hastens-louisiana-wetland-loss.

⁷⁸ USGS Coastal Louisiana Land Area Change 1932-2016: Calcasieu-Sabine Basin (-517 km² observed; -578 +/- 100 km² modeled), https://pubs.usgs.gov/sim/3381/sim3381_pamphlet.pdf; Brady R. Couvillion et al., *Land area change in Coastal Louisiana (1932 to 2016)* 26 at p. 13 (2017), *available at* https://pubs.usgs.gov/sim/3381/sim3381_pamphlet.pdf.

⁷⁹ See JPA Narrative, p. 31-32, section 6.1.2, Table 6-3.

⁸⁰ See id., p. 30, Table 6-1.

⁸¹ Preliminary Draft Compensatory Mitigation Plan and Beneficial Use of Dredge Material, dated April 2022, p. 2.

⁸² *See id.* at 2-3.

assertion in Table 6-3 that the Pipeline would impact zero (0) acres of wetlands *permanently*. ⁸³ Notably, Venture Global's narrative also fails to describe the duration of time it would consider to make an impact on wetlands permanent versus temporary, or even extended temporary. The impact of dredging on wetland ecosystems and the people who depend on those ecosystems can be 5 years, 10 years and even decades long, if full restoration ever occurs. ⁸⁴

Third, Venture Global fails to provide sufficient information for LDNR to approve the Permit because it does not include sufficient information on the mandated offset of impacts by mitigation bank credits, as discussed further in subsection V.C below.

LDNR must require Venture Global to fully account for the real and potential loss of coastal wetlands, cheniers, water bottoms and other significant habitat from the Pipeline as well as the Project as a whole.

B. Failure to Consider Chenier Plains and Habitat

Venture Global fails to address the high storm protection and habitat conservation value of the chenier plain the Pipeline and Project would destroy. LDNR has explained the rarity and importance of the cheniers that the proposed Pipeline and Terminal would destroy:

The cheniers of southwest Louisiana and the natural ridges of southeast Louisiana are unique geological features that are critical components of the ecology of these areas. They support a diversity of wildlife and, because of their location along important migration pathways, are especially significant for migrating birds, as well as providing natural protection against storm surge and flooding.⁸⁵

This rich landscape makes it valuable for many species of migratory birds and ducks and is filled with highly productive estuaries that attract much of Louisiana's famous aquatic species such as blue crabs, shrimp, and oysters.⁸⁶

Chenier plains are also disappearing at an alarming rate, magnifying the proposed

News (Jan. 24, 2012) ("Once you degrade a wetland, it doesn't recover its normal assemblage of plants or its rich stores of organic soil carbon, which both affect natural cycles of water and nutrients, for many years,' said David Moreno-Mateos, a University of California, Berkeley, postdoctoral fellow. 'Even after 100 years, the restored wetland is still different from what was there before, and it may never recover."'), https://news.berkeley.edu/2012/01/24/study-shows-restored-wetlands-rarely-equal-condition-of-original-wetlands/.

⁸³ See JPA Narrative, p. 32, referring to the approximately 84 miles of pipeline, not the access road or above ground facilities.

⁸⁵ LDNR, Cheniers and Natural Ridges, p.1 *available at* chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.dnr.louisiana.gov/assets/docs/coastal/227-009-001NG-Chenier-Rpt-DNR.pdf

⁸⁶ See, e.g., CWPPRA Managing Agencies website, Report, Louisiana Coastal Wetland Functions and Values. https://lacoast.gov/reports/rtc/1997/4.htm, attached at Exhibit 3 ("Neo-tropical migrants will lose vital resting areas as acreage of barrier islands ..., cheniers and natural levee forests ... decline.").

Project's impacts. 87 And the Terminal site and Pipeline route would destroy miles of wetlands and cheniers, directly contradicting public and private efforts to protect these natural resources. For example, all or nearly all of the project falls within the "Louisiana Chenier Plain Initiative" Area"88 the Gulf Coast Joint Venture, "a partnership among Federal and State Agencies, nonprofit organizations, and private landowners dedicated to the conservation of priority bird habitat along the U.S. Gulf of Mexico coast. 89 And the Louisiana Coastal Protection and Restoration Authority ("LA CPRA"), the agency charged with the state's Coastal Master Plan, is heavily investing in restoration and protection projects in southwest Louisiana to combat ongoing and projected land loss in the region (Figure 1).90

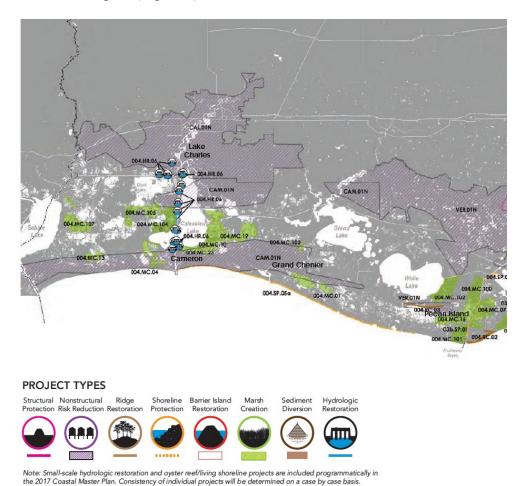


Figure 1. 2017 Louisiana Coastal Master Plan map of restoration, structural protection, and nonstructural risk

⁸⁷ See Dahl, T.E. 2011. Status and trends of wetlands in the conterminous United States 2004 to 2009. U.S. Department of the Interior; Fish and Wildlife Service, Washington, D.C. 108 pp. available at: https://www.fws.gov/wetlands/documents/Status-and-Trends-of-Wetlands-in-the-Conterminous-United-States-2004-to-2009.pdf.

⁸⁸ See http://www.gcjv.org/About Us.php. The Gulf Coast Joint Venture: Chenier Plain Initiative Area Fact Sheet is attached at Exhibit 4.

⁸⁹ http://www.gcjv.org/About Us.php.

⁹⁰ LA CPRA, Louisiana's comprehensive Master Plan for a sustainable coast 184 at p. 108-113 (2017), available at https://coastal.la.gov/our-plan/2017-coastal-master-plan/.

reduction projects to be implemented in chenier plains of southwest Louisiana. 91

Venture Global's Terminal and Pipeline would destroy those cheniers, *see* **Fig. 2**. According to the LDNR SONRIS data layer outlining cheniers, 7.95 miles of the Pipeline cut through cheniers and nearly the whole Terminal footprint, as well. There are 15,541.9 acres of cheniers within three miles of the Pipeline route (this acreage excludes those cheniers on the west bank of Calcasieu Pass). There are 7,326.4 acres of cheniers within one mile of the Project pipeline.

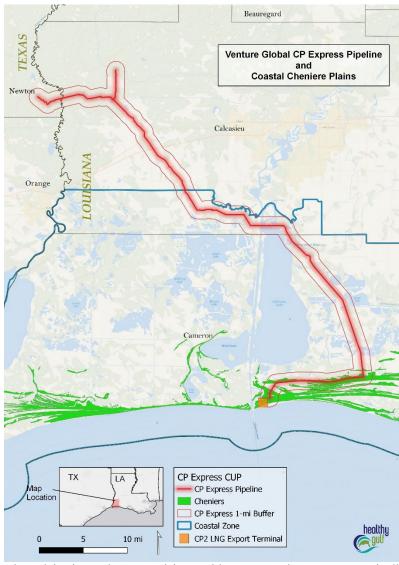


Figure 2. Location of cheniere plains in southwest Louisiana, with respect to the CP Express Pipeline and a one-mile buffer of the pipeline. Cheniers (or chenier plains) are a type of coastal geological formation comprised of sand and shells. Chenieres are relatively rare, and indicate a low wave energy on the shoreline that made the deposition possible. Data sources: LDNR SONRIS, ESRI, Healthy Gulf.

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⁹¹ LA CPRA, Louisiana's comprehensive Master Plan for a sustainable coast 184 at p. 108 (2017), available at https://coastal.la.gov/our-plan/2017-coastal-master-plan/.

Venture Global fails to recognize that it would build its Terminal in and its Pipeline through these sensitive and rare cheniers and fails to avoid the related adverse impacts. But LDNR must consider the cheniers and avoid the related direct, indirect, and cumulative impacts, as well as the interference with conservation programs.⁹²

Issuing this Permit would be irresponsible, even if only for the impact on wetlands. We urge LDNR and OCM to deny the Permit. At the very least, LDNR must complete an assessment of the Project's cumulative impact on wetlands, including through the Project's contribution to climate change, as a part of their evaluation.

C. Failure to Show the Pipeline and Project Meet Mitigation Requirements.

Venture Global presents an inadequate mitigation plan to offset unavoidable losses from the Pipeline and the Project, both for its unfinished state—which Venture Global acknowledges— and for its substantive shortcomings. Louisiana law requires compensatory mitigation to offset any net loss of coastal resources ecological value anticipated to occur because of the proposed activities despite efforts to avoid, minimize, and restore authorized impacts. ⁹³ Coastal resource losses must be accurately evaluated and completely offset by appropriate compensatory mitigation. ⁹⁴ It is undisputable that the Pipeline and the Project would include unavoidable wetland losses. Venture Global has not provided sufficiently complete or consistent information for LDNR to meet these requirements.

First, Venture Global relies on an incomplete draft plan for mitigation. Its initial Application omitted any plan, stating it would "provide the Compensatory Mitigation Plan under separate cover **at a later date**, following coordination with the USACE, LDNR/OCM, and other federal and state stakeholders." It has now presented to LDNR a "Preliminary Draft" Compensatory Mitigation Plan and Beneficial Use of Dredge Material, dated April 2022 (the "Draft Plan"), though nothing indicates it has U.S. Army Corps of Engineers ("USACE") or other "federal and state stakeholder" input or approval. Accordingly, LDNR needs more information or a more finalized mitigation plan before it can approve the Pipeline or the Project. Further, the public cannot meaningfully comment on the project's impacts and mitigation at this time.

⁹⁴ LAC 43:I.724(C)(4)(a); *Id.* at (E) and (J)(3).

⁹² See, e.g., LAC 43.I.701(F)(14) & (15) (requiring LDNR to consider "proximity to, and extent of impacts on, special areas, particular areas, or other areas of particular concern of the state program or local programs" and "likelihood of, and extent of impacts of, resulting secondary impacts and cumulative impacts"); *id.* at 701(G)(10), (15) & (16) (requiring DNR to avoid "adverse effects of cumulative impacts; ... fostering of detrimental secondary impacts in undisturbed or biologically highly productive wetland areas; ... adverse alteration or destruction of unique or valuable habitats, critical habitat for endangered species, important wildlife or fishery breeding or nursery areas, designated wildlife management or sanctuary areas, or forestlands").

⁹³ LAC 43:I.724.B.1.c.

⁹⁵ JPA Narrative, at 34 (emphasis added).

⁹⁶ Notably, that preliminary draft plan was not included in the Public Notice materials, diminishing public access and participation, and supporting the need for public hearing.

Second, the Draft Plan does not provide for appropriate mitigation as the law requires, including by applying arbitrary standards for wetland impacts and omitting compensatory mitigation for losses of wetlands along the pipeline route of the Pipeline. The federal regulations, Venture Global cites to for its Draft Plan, define "[c]ompensatory mitigation [to] mean[] the restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved." Yet rather than compensating for all "unavoidable adverse impacts," the Draft Plan would only perform compensatory mitigation for such impacts in areas where Venture Global has constructed for at least 4 years (its so-called "extended temporary" impacts) or has otherwise converted wetlands to non-wetlands. 98

The Draft Plan would accomplish this unlawful result by using an arbitrary standard for so-called "extended temporary" impacts, ⁹⁹ then purporting to limit compensatory mitigation so as not to include any wetlands impacted by construction use for less than 4 years or by other activities. Venture Global does not adequately support its "extended temporary" impacts definition, and this is not a term in common use in wetlands mitigation regulation and policy. ¹⁰⁰ Venture Global also offers no evidence there would be no adverse impacts remaining from construction lasting less than 4 years and from other activities in wetlands. Indeed, the adverse impacts would be significant, including for storm protections and habitat, as described throughout these Comments.

As a result, the Draft Plan proposes to provide zero compensatory mitigation for impacts from installing the pipeline portion of the Pipeline—or for any of the Project's impacts if it does not construct in the area for at least four years. Notably, neither state nor federal regulations provide for "extended temporary" impacts. The regulations provide for compensatory mitigation to offset unavoidable adverse impacts ¹⁰¹ with compensation quantification methods providing for

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⁹⁷ 33 C.F.R. § 332.2.

⁹⁸ See JPA Narrative, at 29-33, tables 6-1 through 6-4; Draft Plan, at 17 ("Compensatory mitigation for the Project is required to offset the acreage and/or functional loss of wetlands and waters permanently impacted or temporarily impacted over an extended period of construction use (4 to 5 years)").

⁹⁹ "[E]xtended temporary reduction of wetlands value and function ... associated with the long-term construction use (4 to 5 years)." See Draft Plan, p. 2. The Draft Plan also offers an unsupported, narrow definition for "permanent" impacts: "Permanently impacted wetlands as referenced in this document are those that are replaced by non-wetland conditions; permanent conversion of one wetland type to another is not included in this categorization and is quantified separately." Draft Plan at 2, fn. 6.

¹⁰⁰ See supra, § V.A.

Louisiana regulations require compensatory mitigation to "offset any net loss of coastal resources ecological value that is anticipated to occur despite efforts to avoid, minimize, and restore permitted/authorized impacts." LAC 43:I.700 and 724(A), (B)(1)(c). The Secretary shall evaluate the anticipated impacts, including direct, secondary, and cumulative impacts to quantify unavoidable net losses requiring compensatory mitigation. LAC 43:1.724(A)-(C). Federal regulations provide that "[t]he fundamental objective of compensatory mitigation is to offset environmental losses," 33 C.F.R. 332.3(a)(1), and "unavoidable adverse impacts" resulting from permitted activities in wetlands. 33 C.F.R. 332.2.

"permanent" and "temporary" losses in its mitigation evaluation processes. 102 It appears that Venture Global recognizes that it must provide compensatory mitigation for the impacts that it describes as "extended temporary" impacts—tacitly acknowledging that its so-called "extended temporary" impacts are, in fact, "permanent" and aiming to avoid compensatory mitigation for other impacts.

Shorter term construction can result in 4-5 year or longer impacts to wetlands, from construction on the wider construction area and, more assuredly, from the long-term maintenance of the pipeline's right of way. There will, indeed, be permanent impacts to wetlands along the whole route of the Pipeline. The entire pipeline right-of-way must be evaluated considering existing corridors' lasting impacts to Louisiana's coastal wetlands. At a minimum, mitigation should be required to offset the permanent impacts to marsh and estuarine wetlands – including the Chenier Plain of Cameron Parish – resulting from maintenance of the Pipeline's permanent right-of-way.

The Draft Plan also fails to provide appropriate compensatory mitigation for the wetlands that it acknowledges would be lost. Compensatory mitigation must be "of the same habitat type as the proposed impact or produce ecological values which would be similar to those lost as a result of the proposed impact" and must have a positive impact on the coastal zone. 103 The Draft Plan, however, fails to propose mitigation for anticipated losses to estuarine intertidal emergent ("E2EM") wetlands from pipeline construction; it prematurely proposes marsh creation/restoration mitigation in the Cameron Prairie National Wildlife Refuge ("CPNWR") without showing a likelihood of success; and fails to show proposals benefit the Coastal Zone.

For example, it proposes a combination of mitigation banking and marsh creation/restoration at a beneficial use of dredged material ("BUDM") site, 104 but there are insufficient mitigation banks/credits to offset losses to coastal resources in Louisiana 105 and existing mitigation bank options are inadequate. 106 Also, it proposes to offset "permanent" impacts to palustrine wetlands by purchasing mitigation credits and impacts to estuarine wetlands through marsh creation/restoration. 107 And it gives no consideration to destruction of cheniers. Other examples of non-equivalents, lack of information, or lack of positive impacts to

¹⁰² See, e.g., U.S. Army Corps of Engineers. 2016. Louisiana Wetland Rapid Assessment Method For use within the Boundaries of the New Orleans District, FINAL INTERIM Version 1.0. See also Wetland Value Assessment Methodology Coastal Marsh Community Models (WVA) and Habitat Assessment Models for Fresh Swamp and Bottomland Hardwoods within the Louisiana Coastal Zone (Model). ¹⁰³ LAC 43:I.724(J)(4).

¹⁰⁴ Draft Plan, at 3.

¹⁰⁵ See, e.g., LDNR OCM 2010, White Paper, at 12, 15 (identifying inadequate marsh mitigation banks); David Hammer, "Key program for coastal restoration is spending millions on forests instead", Nov. 12, 2020 available at https://www.wwltv.com/article/news/investigations/david-hammer/key-program-forcoastal-restoration-is-spending-millions-on-forests-instead/289-9730a373-6670-4017-85da-148a9df870d6.

¹⁰⁶ See LDNR website, OCM Approved Mitigation Banks, Updated 08/2022, available at http://www.dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=95, with Table at chromeextension://efaidnbmnnnibpcaipcglclefindmkai/http://www.dnr.louisiana.gov/assets/OCM/Mitigation/Miti gation_Bank_Summary_Spread_Sheet_8.2.2022.pdf at attached at Exhibit 5. 107 *Id*.

the Coastal Zone that the Draft Plan proposes include:

- Venture Global claims that "coastal prairie credits are considered suitable mitigation for the PSS [palustrine scrub-shrub] at the compressor station, based on site wetland characteristics and regional precedent." However, this "regional precedent" is just wishful thinking on the part of the company. The only reason to state that there is a regional precedent for substituting in one wetland type as mitigation for another, is that the mitigation banks in this region have run low before on high-value wetland types like fresh marsh. In fact, many mitigation banks in Louisiana do not contain fresh marsh at all, because it is difficult to build. There is no "regional precedent" for this mitigation plan, and the permit must be denied.
- Venture Global claims that the South Fork Coastal Mitigation Bank ("SFCMB"), operated by Delta Land Services, would provide fresh marsh and coastal prairie credits to compensate for impacts to palustrine emergent ("PEM") and palustrine scrub-shrub ("PSS") wetland losses. ¹⁰⁹ The bank's coastal prairie credits are limited to mitigating impacts to farmed wetlands, wetland pasture, non-tidal emergent and scrub-shrub wetlands and possibly low quality bottomland hardwood wetlands. ¹¹⁰ Further, the mitigation bank is located on the Cameron-Calcasieu Parish borders, east of Calcasieu Lake and the Grand Lake Ridge, outside the coastal zone conservation boundary, and part of the bank occurs outside the designated Coastal Zone. It is located on prior converted farmland at least 30 miles northeast of the terminal site and at least 15 miles southwest of the compressor station. ¹¹¹
- Venture Global claims that permanent impacts on 15.3 acres of estuarine emergent ("EEM") wetlands for the Terminal and on 0.4 acre of EEM for the Pipeline system would be mitigated by proposed marsh creation/restoration at the East Cove Unit of the CPNWR located two miles north of the Terminal. This is intended to constitute BUDM as well. The Draft Plan provides that the marsh creation area will be "in the vicinity" of the site used for BUDM and marsh creation/restoration for the Calcasieu Pass Project. But the mitigation marsh creation/restoration for the Calcasieu Pass Project in the CPNWR has not shown success thus far. The mitigation monitoring survey reports

¹⁰⁸ Draft Plan, at 3, section 4.1.

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¹¹⁰ https://ribits.ops.usace.army.mil/ords/f?p=107:10:11594209383711::NO::P10 BANK ID:4344:

https://www.deltaland-services.com/interactive-map/. See generally, South Fork Coastal Mitigation Bank Prospectus, May 4, 2016, available at

<u>https://ribits.ops.usace.army.mil/ords/f?p=107:278:...:P278_BANK_ID:4344#</u>. There are no inspection records included in the SFCMB's RIBITS ledger and electronic files despite monitoring requirements including in the MBI.

¹¹² *Draft Plan*, at 3-4.

¹¹³ *Id*.

¹¹⁴ Id

¹¹⁵ Year One, Construction Revegetation Monitoring and Elevation Survey Results, OCM Permit No. 20150857, January 2022, (the "Calcasieu Pass Project Report") *available at*

low vegetative colonization for the first-year post-construction of the marsh creation mitigation areas in the CPNWR. The marsh creation project consists of a west and east cell where vegetation sampling/survey results reveal that the west cell has experienced only 11% cover one-year post-construction, with no vegetation observed in the east cell. 117

Notably, the lack of success at the Calcasieu Pass Project not only undermines the Draft Plan, but also highlights the spiral of impacts that LDNR must consider before it could permit the Pipeline or the Project as a whole. The Calcasieu Pass Project Report opines that the 2020 landfall of Hurricanes Laura and Delta resulting in prolonged inundation and increased salinities impacted the physical and chemical attributes of the surrounding marsh and may have impacted vegetation establishment and seed distribution and growth in the marsh creation sites. *Id.* at 4, "Observations and Conclusions." It explains that "[l]ack of seed bank, changing soil chemistry from dredged material, and impacts from 2020 hurricanes may likely be contributing factors to low vegetative colonization" yet notes that 80% vegetative coverage is required following year three. This illustrates the growing threat of extreme weather events on wetland creation projects, and the lasting impacts development has on coastal resources not adequately and/or timely mitigated.

VI. LDNR Must Deny the Permit for Insufficient Information on the Project's Potential Environmental Impacts.

Venture Global's Project would pose tremendous environmental costs to the state from loss of habitat, coastal wetlands, gas leaks or explosions, and greenhouse gas emissions. As explained throughout these comments, Venture Global ignores or fails to provide sufficient information for LDNR to fully consider both the actual impacts and the reasonably foreseeable harms the Project could cause. But the risks are real and significant, and LDNR cannot make Article IX's or the Coastal Use Guidelines' required cost-benefit determinations without full consideration of these harms.

For example, Venture Global fails to evaluate its risk of gas leaks, spills and explosions spills and the potential impacts to the Project area, and beyond. The failure to evaluate is unacceptable, and the risk of leaks, explosions, and other threats at all is unacceptable. Article IX¹¹⁹ and the Coastal Use Guidelines¹²⁰ require LDNR to undertake a full analysis of the

 $\underline{https://sonlite.dnr.state.la.us/sundown/cart_prod/cart_crm_view_cmnt?pcup_num=P20150857\&pauthoriz\\ ation=N\&psort=2\;.$

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¹¹⁶ See id.

¹¹⁷ *Id.* at 4, "Results and Discussion."

¹¹⁸ *Id* at ii

¹¹⁹ See in re Am. Waste, 633 So.2d at 194; Save Ourselves, 452 So.2d at 1157 (holding agency failed to provide sufficient reasons responding to petitioners' concerns about potential threat to New Orleans' water supply from, among other things, flooding from hazardous waste landfill near Mississippi River). ¹²⁰ See, e.g., LAC 43:I.701(G), .705, .711 (Coastal Use Guidelines for all uses, linear facilities, and surface alterations). For instance, the Guidelines forbid uses that would increase increases in the potential for flood, hurricane and other storm damage, or increases in the likelihood that damage will occur from such

potential for the Project to increase the risk of leaks, spills, explosions, and other harmful accidents and to minimize those disastrous risks to our coast to the maximum extent practicable.

A. Threats from Accidents, Leaks and Explosions.

Gas pipelines and export operations are not safe for people or the environment. Newspapers recently reported a pipeline leaked 8.2 million cubic feet of gas in northwest Louisiana in July 2022. ¹²¹ Also in July 2022, a natural gas pipeline outside of Houston, Texas exploded, sparking grassfire, fumigating the area for at least 3 miles, and causing flames visible from 30 miles away, *see* Figure 3. ¹²²



Figure 3, Photos of gas pipeline fire after explosion outside of Houston. 123

And indeed, Venture Global, in its relatively short time constructing and operating in Louisiana, has already demonstrated a failure to protect the environmental consistent with the law and its permits ¹²⁴—failures LDNR must account for when it considers the risks and potential

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hazards." *Id.* 701(G)(20). They also require that all "[s]urface alteration sites and facilities shall be designed, constructed, and operated using the best practical techniques to prevent the release of pollutants or toxic substances into the environment and minimize other adverse impacts." *Id.* 711(M). In addition, oil spills are predictable events that lead to loss of wetlands and other coastal habitat, which the Guidelines forbid. *See id.* 701–23.

¹²¹ See Exhibit 6, M. Smith & M. Schleifstein, Major Gas Leak Reported from Northwest Louisiana Pipeline, (Aug. 5, 2022), also available at https://www.nola.com/news/environment/article_81fec2ae-150a-11ed-bdd2-4b9e90705854.html.

¹²² See Pipeline explosion Texas today: Flames from blast could be seen 30 miles away; residents evacuated at https://abc7news.com/pipeline-explosion-in-texas-fort-bend-county-today/12028971/, in video and in print at https://example.com/pipeline-explosion-in-texas-fort-bend-county-today/12028971/, in video and in print at https://example.com/pipeline-explosion-in-texas-fort-bend-county-today/12028971/, in video and in print at https://example.com/pipeline-explosion-in-texas-fort-bend-county-today/

¹²³ *Id.* (photographs).

¹²⁴ See supra, § II (Background).

environmental costs.¹²⁵ Further, there has been general, widespread failure of fossil gas companies in the past to comply with the Coastal Resources Management Act, and of state and federal agencies to enforce the revegetation of temporary impacts and pipeline corridors and access roads.¹²⁶ Venture Global fails to quantify the risk of accidents, leaks, and explosions. And it provides no information to assess the risk of gas leaks and explosions—not at its Terminal nor across its lengthy Pipeline. It also does not explain how it would minimize these risk—risks that Louisiana simply cannot afford.

Further, LDNR must consider the explosion risks associated with terrorism and cybersecurity threats. The Washington Post reported on April 13, 2022 that "U.S. officials announced ... the discovery of an alarmingly sophisticated and effective system for attacking industrial facilities *that includes the ability to cause explosions in the energy industry*." The officials issuing the joint warning notice included the National Security Agency, the Energy Department, the Cybersecurity and Infrastructure Security Agency, and the Federal Bureau of Investigation. The Post's article reported that the malware "was likely to be Russian, that its top target was probably liquefied natural gas production facilities" because "its most detailed attack methods appeared intended to target equipment that would be in such facilities," and that it "contains capabilities related to disruption, sabotage, and potentially physical destruction." ¹²⁹

Explosions or other physical destruction of the facility would have catastrophic impacts on the human environment. A Nobel Prize winning group, Physicians for Social Responsibility, recently explained some of the public safety risks: "LNG explodes when spilled into water and, if spilled on the ground, can turn into rapidly expanding, odorless clouds that can flash-freeze human flesh and asphyxiate by displacing oxygen. If ignited at the source, LNG vapors can become flaming "pool fires" that burn hotter than other fuels and cannot be extinguished. LNG fires burn hot enough to cause second-degree burns on exposed skin up to a mile away. LNG facilities pose significant risks to nearby population centers and have been identified as potential terrorist targets."¹³⁰ Notably, the April 13, 2022, joint agency warning notice confirms the last

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¹²⁵ See, e.g., La. R.S. § 49:214.30 ("The secretary shall take into consideration a permit applicant's history of compliance with the provisions of the Louisiana Coastal Resources Program prior to making a determination of whether to approve, approve with modifications or otherwise conditionally approve, or deny the application for a coastal use permit.")

¹²⁶ Bloomberg Law, *Oil Industry Faces Litigation Worth Billions in Louisiana Courts (1)* (Aug. 13, 2020), https://news.bloomberglaw.com/environment-and-energy/oil-industry-faces-litigation-worth-billions-in-louisiana-courts.

¹²⁷ Washington Post, *U.S. warns newly discovered malware could sabotage energy plants* (April 13, 2022), (emphasis added), attached at <u>Exhibit 8</u> and also available at https://www.washingtonpost.com/technology/2022/04/13/pipedream-malware-russia-lng/ (last visited June 2, 2022).

¹²⁸ Attached at Exhibit 9 and also available at https://www.cisa.gov/uscert/ncas/alerts/aa22-103a (last visited June 2, 2022).

¹²⁹ See Exhibit 8.

¹³⁰ Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking and Associated Gas and Oil Infrastructure at 481, 495 (8th ed. April 2022), available at https://www.psr.org/blog/resource/fracking-compendium-8/ (last visited June 2, 2022), at p.481, citing Walter Chukwunonso Ikealumba and Hongwei Wu, "Some Recent Advances in Liquefied Natural Gas

point. It also urged the energy sector and others to install monitoring programs and require multifactor authentication for remote logins, among other steps.

Nothing in the Application addresses these threats. Further, nothing in the Application indicates compliance with Guideline 719's requirement that "[e]ffective environmental protection and emergency or contingency plans shall be developed and complied with for all mineral operations."

B. Threats from Storms and Flooding.

The proposed site makes the Pipeline and most, if not all, of the Project infrastructure vulnerable to storm surges, flooding, and damage that could impact whole communities (Figure 6). Cameron Parish is well acquainted with the power of storms, including from the recordbreaking 2020 hurricane season. Figure 7 shows the tracks of named storms through Cameron Parish in the last three decades alone. These storms have the power to cause immense damage to oil and gas infrastructure, which in turn threatens coastal communities with the effects of spills. ¹³¹ The effects of Hurricanes Laura and Delta on this infrastructure were devastating. Yet the Applicant proposes to add 84 miles of pipeline and a massive liquefaction and LNG export and storage facility to this already vulnerable situation. Residents are still attempting to clean up and regroup from the 2020 hurricanes. Venture Global ignores this history and risks, noting only that will build steel flood walls around parts of the Project to protect "against storm surge and potential wave action." ¹³² It does not indicate what heights of water or levels of wind- and wave-forces it plans those walls to be able to withstand, let alone what levels of waters, winds, and wave-force it expects the site will experience. ¹³³

Similarly, Venture Global fails to provide sufficient information to show compliance with Guideline 711 for surface alterations. Guideline 711 calls for industrial and commercial uses like the Pipeline and the Project as a whole to be in "areas of the coastal zone that are suitable for development." Where, as here, the project is proposed in the Coastal Zone below five feet and outside of fastlands, Guideline 711 requires the use "shall, to the maximum extent practicable, take place only ...on lands which have foundation conditions sufficiently stable to support the use, *and* where flood and storm hazards are minimal or where protection from these hazards can be reasonably well achieved, and where the public safety would not be unreasonably

⁽LNG) Production, Spill, Dispersion, and Safety," *Energy & Fuels* 28, no. 6 (2014): 3556–86, https://doi.org/10.1021/ef500626u; [Name Redacted], "Liquefied Natural Gas (LNG) Import Terminals: Siting, Safety, and Regulation," Congressional Research Report, December 2009.

John Pardue, A burning chemical plant may be just the tip of Hurricane Laura's damage in this area of oil fields and industry, Louisiana Illuminator, September 4, 2020, https://lailluminator.com/2020/09/04/a-burning-chemical-plant-may-be-just-the-tip-of-hurricane-lauras-damage-in-this-area-of-oil-fields-and-industry/; Julie Dermansky, Hurricane Delta compounds oil pollution left by Hurricane Laura in Louisiana's wetlands, DeSmog, October 16, 2020, https://www.desmogblog.com/2020/10/16/hurricane-delta-compounds-oil-pollution-left-hurricane-laura-louisiana-s-wetlands.

¹³² JPA Narrative, p.8, 18. It is notable that Venture Global fails to provide supporting information for its wall.

¹³³ Cf. LAC 43.XIX.507(A)(5) (prohibiting construction of oil and gas exploration and production waste storage containers, among other things, in flood zones unless behind "adequate levees" at least 1 foot above 100-year flood elevation and able to withstand the velocity of the 100-year flood).

endangered," among other things. 134

But storm and flood hazards are not minimal on the coast of Cameron Parish. Instead, Cameron Parish, where the Louisiana portion of the Project is proposed, is particularly vulnerable to the accelerating sea-level rise and storms that a changing climate will bring. *See* Figures 5 and 6. CPRA warns that more than 40 percent of the land area of Cameron Parish—currently one of the largest parishes by land area in the state—could be lost to sea-level rise under a "medium environmental scenario," if no additional protection or restoration work is done. ¹³⁵ CPRA finds that in 50 years, 100-year flood depths could be 15 feet or more across much of the Parish, with all of its populated communities at heightened risk. ¹³⁶

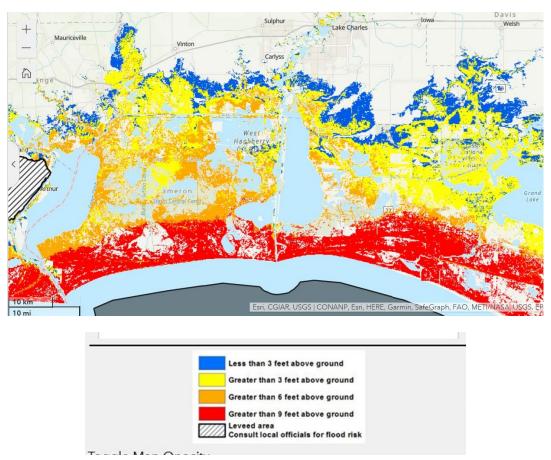


Figure 4. Map of Project region with NOAA data showing the flood risk from a Category 2 hurricane. Blue indicates storm surges < 3 ft. above ground, yellow indicates storm surges 3-6 ft. above ground, orange 6-9 ft., and red over 9 ft. See also: <u>After more storm devastation, coastal Cameron Parish again confronts questions on its future</u>, THE ADVOCATE, June 27, 2021. Source: NOAA National Storm Surge Hazard Maps¹³⁷

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¹³⁴ LAC 43.I.711.A

¹³⁵ CPRA, 2017 Coastal Master Plan, Att. A9, Parish Fact Sheets, at pp. 11–12, http://coastal.la.gov/wp-content/uploads/2017/04/Attachment-A9_FINAL_10.02.2017.pdf. See Figures 7a & 7b, infra.

¹³⁷ NOAA, *National storm surge hazard maps*, https://noaa.maps.arcgis.com/apps/MapSeries/index.html?appid=d9ed7904dbec441a9c4dd7b277935fad.

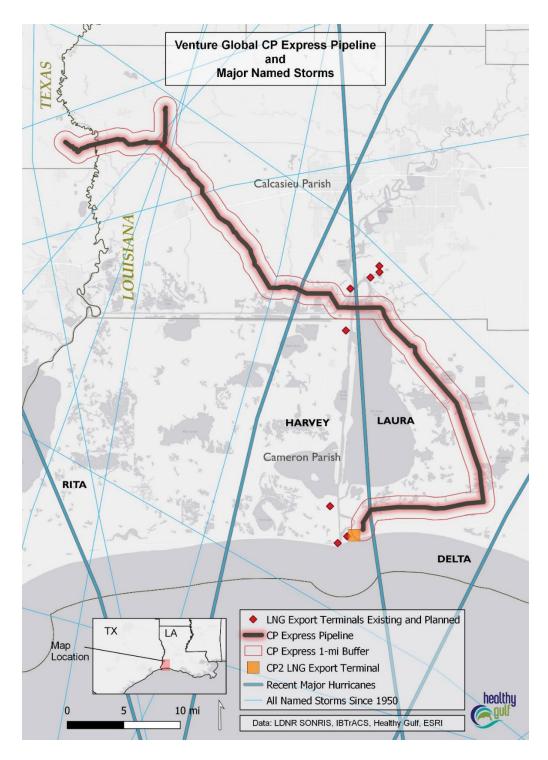


Figure 5. Storm tracks from named tropical storms and hurricanes, 1950 – 2020 with recent large hurricanes (since 2005) noted. Data: NOAA IBTrACS, Healthy Gulf, ESRI.

LDNR needs to adjust its more conservative assumptions before it is too late, particularly given the special vulnerability of Venture Global's coastal site. It must also consider the cumulative impacts of multiple hurricanes hitting the Project area in any one season, including from loss of access to the area. As storms become more frequent and more intense, there is no

adequate justification for any development that puts these already vulnerable communities at even greater risk. LDNR must assess the risk that the Project's infrastructure could fail in the face of worsening storms, accelerating coastal land-loss, and a shifting environment due to climate change over the Project's anticipated lifespan.

C. Threat of Accelerating Climate Change.

Venture Global's Project would generate significant direct GHG from the Terminal and Pipeline, in addition to significant lifecycle emissions from upstream production and transportation, and from downstream transportation and consumption. As a public trustee for Louisiana's environment, LDNR is obligated to fully quantify Venture Global's likely direct, indirect, and cumulative greenhouse gas emissions, and to assess the significance of the potential adverse environmental effects of these emissions to the state. 138 Nowhere does the Application quantify these emissions or address the effects and existential threat the project's greenhouse gas pollution poses to Louisiana, vis a vis climate change—a particular failure given the site's frequent and intense storms and flooding that are likely to get more intense still. 139

Science now confirms a trend of intensifying hurricanes due to GHG emissions. For example, the Intergovernmental Panel on Climate Change's ("IPCC") 2021 report indicates increased impacts from GHG emissions, including increased intensity of storms—both of which are relevant because the Project would increase GHG emissions and would be particularly vulnerable to climate change, so that its own operations would increase the risk of accident and catastrophe from storm and flooding impacts. The 2021 report is the IPCC's sixth report summarizing global scientists' collective understanding of the physical science relating to climate change. 140 Called "AR6" for short, it is part of a cycle of reports produced every 5–7 years—the last one, AR5, came out in 2013–14. 141 The AR6 Report explains, among other things, that research completed since AR5, has led to "considerable progress" and increased scientific confidence in understanding how tropical cyclones react to changes in greenhouse gas concentrations and "aerosol forcing." The IPCC now concludes that higher temperatures have likely caused more extreme weather, such as "heatwaves, heavy precipitation, droughts, and tropical cyclones." ¹⁴³ The report concludes that "[i]t is likely that the global proportion of major

¹³⁸ See Sierra Club v. Fed. Energy Reg. Comm'n, 867 F.3d at 1373–75. The court in Sierra Club rejected the argument that FERC had no need to consider downstream greenhouse gas emissions from an LNG pipeline, ruling that Congress, as Article IX here, gave FERC the broad instruction to balance the public benefits against the adverse effects of the project when deciding whether to grant the LNG pipeline approvals. Id. at 1373 ("Because FERC could deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment, the agency is a 'legally relevant cause' of the direct and indirect environmental effects of pipelines it approves.").

¹³⁹ See In re Am. Waste, 633 So.2d at 194; Save Ourselves, 452 So.2d at 1157. Federal courts have recently issued a series of decisions requiring federal agencies to meaningfully consider climate change in the permitting process *See, e.g.*, *Sierra Club v. FERC*, 867 F.3d 1357, 1373 (D.C. Cir. 2017). ¹⁴⁰ IPCC, "Sixth Assessment Report, AR6 Climate Change 2021: the Physical Sci. Basis" (Aug. 2021),

https://www.ipcc.ch/report/ar6/wg1/, with cited excerpts attached at Exhibit 10.

¹⁴¹ IPCC, "the IPCC and the Sixth Assessment Cycle,"

https://www.ipcc.ch/site/assets/uploads/2020/05/2020-AC6 en.pdf.

¹⁴² IPCC Report at § 8.3.2.5 (p. 1100); 11-ES (p. 1517–18).

¹⁴³ IPCC Report at SPM-8.

(Category 3–5) tropical cyclone occurrence has increased over the last four decades."¹⁴⁴ This includes recent historically active Atlantic hurricane seasons, which it finds "*very likely* . . . cannot be explained without an anthropogenic influence."¹⁴⁵

A 2021 Report from the U.S. National Oceanic and Atmospheric Administration ("NOAA"), updated in October 2021, re-affirms that climate impacts are more intense and more likely from the GHG emissions than was understood in 2019 or considered under the FEIS:

Warming of the surface ocean from anthropogenic (human-induced) climate change is likely fueling more powerful TCs. The destructive power of individual TCs through flooding is amplified by rising sea level, which very likely has a substantial contribution at the global scale from anthropogenic climate change. In addition, TC precipitation rates are projected to increase due to enhanced atmospheric moisture associated with anthropogenic global warming. The proportion of severe TCs (category 4 & 5) has increased, possibly due to anthropogenic climate change. This proportion of intense TCs is projected to increase further, bringing a greater proportion of storms having more damaging wind speeds, higher storm surges, and more extreme rainfall rates. ¹⁴⁶

Another study, published June 2022 and aptly titled *Attribution of 2020 Hurricane Season Extreme Rainfall to Human-Induced Climate Change*, also demonstrates that "human-induced climate change increased" the intensity of storms during the 2020 hurricanes season. ¹⁴⁷ Further, NOAA logged 2020 and 2021 as the highest in U.S. History for costs from weather and climate disasters:

In 2021, the U.S. experienced 20 separate billion-dollar weather and climate disasters, putting 2021 in second place for the most disasters in a calendar year, behind the record 22 separate billion-dollar events in 2020. ... 2021 was also unusually deadly, in that the 20 events of 2021 caused at least 688 direct or indirect fatalities—the most disaster-related fatalities for the contiguous U.S. since 2011 and more than double last year's number of 262. ... Damages from the 2021 disasters totaled approximately \$145 billion. ... The costliest 2021 event [was] Hurricane Ida (\$75 billion). ¹⁴⁸

In other words, LDNR must consider the Pipeline's and Project's inconsistency with the

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¹⁴⁴ IPCC Report at SPM-9, 11-ES (p. 1519-20).

¹⁴⁵ IPCC Report at § 11.7.1.4 (p. 1589).

¹⁴⁶ Attached at Exhibit 11 and available at https://www.climate.gov/news-features/understanding-climate/climate-change-probably-increasing-intensity-tropical-cyclones (last visited June 4, 2022).

¹⁴⁷ Reed, Kevin, et al., Attribution of 2020 Hurricane Season Extreme Rainfall to Human-Induced Climate Change, Nature Communications (April 2022), attached at Exhibit 12, and available at https://www.nature.com/articles/s41467-022-29379-1 (last visited June 7, 2022).

¹⁴⁸ NOAA, Beyond the Data, *2021 U.S. billion-dollar weather and climate disasters in historical context*, attached at Exhibit 13 and available at https://www.climate.gov/news-features/blogs/beyond-data/2021-us-billion-dollar-weather-and-climate-disasters-historical (last visited June 4, 2022) (All cost estimates are adjusted based on the Consumer Price Index, 2021).

Master Plan and potential harm to Cameron Parish both because its GHG emissions will cause increased climate change, storm intensity, and flooding and because the increased climate risk itself increases the potential for accidents and other impacts to and from the Pipeline and Project. Approving all or part of a Project that will only accelerate these trends could serve to greatly harm coastal communities like in Cameron Parish.

D. Impacts to the Impaired Calcasieu River and Calcasieu Lake.

The Application fails to address that the Terminal and its Marine Facilities will add pollutants to the Calcasieu River and Calcasieu Lake, coastal waters already impaired for dioxin, furan compounds, fecal colform, enterococcus, and polychlorinated biphenyls ("PCBs"). 149

VII. LDNR Must Deny the Permit for Insufficient Information on Cumulative Impacts from the Project and other Oil, Gas and Petrochemical Infrastructure.

LDNR must—and Venture Global has failed to provide sufficient information to—examine the cumulative impacts from its Project, including buildout of oil-and-gas and petrochemical infrastructure in southwest Louisiana and the region. In determining whether the proposed use complies with the Coastal Use Guidelines, LDNR must first collect information about the likelihood extent, and resulting secondary impacts and cumulative impacts, from the proposed activity. The Guidelines define "cumulative impacts" as "impacts increasing in significance due to the collective effects of a number of activities." As explained in the legal background section above, Article IX's public trustee duty also requires LDNR to perform a cumulative impacts analysis specifically encompassing the impacts from planned future phases of a multi-phase project. In addition, LDNR must also consider the project in light of past, present, and reasonably foreseeable future sources in the area.

A. Cumulative Impacts of the Project's Pieces.

LDNR must consider the cumulative impacts of the Pipeline's interdependent Terminal, including pipeline, storage, and marine-loading components. For example, in addition to impacts described throughout these comments, the proposed Terminal would emit huge amounts of air pollutants, permitted and (given Venture Global's record) unpermitted. It would also destroy storm protections for the Lake Charles area, would remove an 11.3 acre chunk of Monkey Island, apparently as part of digging out approximately 30 acres in and around Monkey Island (all or most of those acres being Essential Fish Habitat), would increase accident risks from ship traffic in the Calcasieu Ship Channel, and would pose serious risks of accident from explosion and

¹⁴⁹ See Exhibit 14, excerpt from LDEQ's 2022 Water Quality Assessments for Louisiana, also available at https://www.deq.louisiana.gov/assets/docs/Water/Integrated_Report/2022_Integrated_Report/22_IR1_App_A_Assessments_CORRECTED_FINAL_8-19-22.pdf, pages 15-16; see also LAC 33:IX.1123 Table 3. LAC 43:I.701.F.15; see also id. 701.G.10 (prohibiting the "adverse effects of cumulative impacts"). LAC 43:I.700.

¹⁵² O'Reilly v. U.S. Army Corps of Engineers, 477 F.3d 225, 235 (5th Cir. 2007) (holding that Army Corps of Engineers was required to assess cumulative impacts of likely future phases of residential development).

¹⁵³ *Id.* (also holding that Army Corps of Engineers was required to assess cumulative impacts from other similar projects).

leaks—particularly as it would be built in an area subject to hurricanes at the brunt of their landfall power and storm surges and flooding expected to exceed fifteen feet. ¹⁵⁴ The Application omits information on these matters, as well as mapping, schematics, and other information necessary to assess the Terminal's cumulative impacts. In short, the Project embodies a host of impacts and risk from its construction and operations—all of which LDNR must consider through preparation of a cumulative impacts analysis that considers the environmental harms of the whole Project, together with the past, existing, and reasonably foreseeable harms from other sources in the same area.

Further, for its Project, Venture Global has omitted to include its planned carbon capture and sequestration component ("CCS"). ¹⁵⁵ Since 2021, Venture Global has publicly stated its plan to incorporate CCS at the proposed CP2 LNG as well as for its Calcasieu Pass and Plaquemines LNG facilities. ¹⁵⁶ Remarkably, Venture Global rejected CCS for those approved facilities, citing "significant adverse energy and environmental impacts," among other things:

[D]ue to the costs and environmental impacts associated with additional infrastructure to send the carbon to a region where it could be properly stored or used for enhanced oil recovery, CCS is not a feasible or preferable alternative. Based on the magnitude of the estimated capital and annualized costs, Venture Global demonstrated that CCS is not economically feasible. Even if feasibility could be demonstrated, Venture Global noted that *any CCS system would cause significant adverse energy and environmental impacts due to the additional water and energy needs for system operation, with the associated generation of additional GHGs and other criteria pollutants from natural gas firing in combustion units. 157*

Further, as described further below, Venture Global does not address its Project's GHG emissions impacts (upstream, downstream, or direct) and its adverse cumulative impacts of destruction of coastal resources, pollutant emissions, gas leak or explosion and accident risk in a region already imperiled by an onslaught of oil and gas and petrochemical infrastructure.

B. Impacts of the Project's Direct and Cumulative Air Pollution.

LDNR also must consider the Project's massive, proposed air pollutant emissions, which impact the Coastal Zone through air impacts and deposition into coastal waters, as well as affecting people and places outside of the Coastal Zone, threatening public health and contributing to climate change. Venture Global did not account for such impacts in its Application, but included the following tables in its air pollutant permit application to a different

¹⁵⁴ See, e.g, infra, § VI.B, and supra, § VII.E.

¹⁵⁵ CCS is also referred to as carbon capture and storage and, as used here, also includes carbon capture use/utilization and storage.

See Venture Global LNG, "Venture Global Launches Carbon Capture and Sequestration Project" (2021) available at https://venturegloballng.com/press/venture-global-launches-carbon-capture-and-sequestration-project/

¹⁵⁷ Calcasieu Pass LNG Final EIS, p. 4-298, FERC/EIS-0278F, Docket Nos. CP15-550-000, CP15-551-000, CP15-551-001; see also Plaquemines LNG Final FEIS, p. 4-167-68, FERC/EIS – 0286F, Document No 20190503-3020.

agency¹⁵⁸ as:

Table 1-3. Facility-Wide Emissions Summary for All Scenarios, tpy

Pollutant	Phase 1 Scenario 1	Phase 1 Scenario 2	Phase 2 Scenario 3	Phase 2 Scenario 4 ^[1]	
PM ₁₀	168.80	194.91	342.77	368.88	
PM _{2.5}	168.80	194.91	342.77	368.88	
SO ₂	109.16	127.64	235.81	254.29	
NOx	710.93	460.28	1,152.87	908.10	
CO	1,201.91	738.78	1,844.50	1,428.66	
VOC	82.81	96.85	159.97	175.14	
Carbon dioxide equivalent (CO ₂ e)	3,217,036	4,274,682	7,556,201	8,528,260	
Total HAPs ^[2]	16.18	20.59	35.03	39.45	
Total TAPs ^[2]	33.21	190.06	213.54	370.40	

^[1] The facility-wide PTE emissions are based on Phase 2 Scenario 4 (All permanent sources in operation).

Table 2-2. Terminal Facilities - HAP/TAP Emissions and MER Summary

HAP/TAP	Total Emissions (tpy)	Exempt Emissions[1] (tpy)	Non-Exempt Emissions		MER (lb/yr)	Equal to or Greater than MER?
			(tpy)	(lb/yr)		(Yes/No)
1,3-Butadiene	0.020	0.020	-	-	25	No
1,4-Dichlorbenzene	0.20	0.20	-	-	20,000	No
Acetaldehyde	2.08	2.08	-	-	700	No
Acrolein	0.327	0.327)+	-	25	No
Ammonia	330.03	-	330.03	660,060	1,200	Yes
Benzene	1.69	0.96	0.73	1,460	260	Yes
Ethyl benzene	1.85	1.65	0.20	400.00	20,000	No
Formaldehyde	5.35	5.35	0.001	1.20	260	No
n-Hexane	15.43	15.35	0.08	160	13,000	No
Hydrogen Sulfide	0.65	0.65	0.002	4.00	1,000	No
Naphthalene (and compounds)	0.13	0.13	-	-	1,990	No
Polynuclear Aromatic Hydrocarbons	0.109	0.109	-	-	25	No
Propylene Oxide	1.52	1.52	-	-	700	No
Toluene	7.10	6.78	0.32	640	20,000	No
Xylenes (mixed isomers)	3.58	3.30	0.28	560	20,000	No
Barium (and compounds)	0.042	0.042	-	-	37.5	No
Cadmium (and compounds)	0.020	0.020	-	-	25	No
Chromium VI (and compounds)	0.020	0.020	-	-	25	No
Copper (and compounds)	0.012	0.012	+	-	25	No
Nickel (and compounds)	0.020	0.020	-	-	25	No
Zinc (and compounds)	0.22	0.22	-	-	200	No

^[1] Exempt emissions are defined as TAP emissions meeting the exemption criteria as provided in LAC 33:III.5105.B.3.

Venture Global's air permit application further states emissions more than double the toxic and hazardous air pollutants currently permitted from a sister LNG export facility in Cameron Parish, Calcasieu Pass, LNG. Such emissions include 492.09 tons per year of ammonia, along with

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^[2] Refer to Appendix B for detailed calculations, including speciation of individual HAPs/TAPs.

¹⁵⁸ See July 29, 2022, Initial Title V [Major Source] and PSD Permit Application, vol. 1 at 1-6, 2-6, the Louisiana Department of Environmental Quality's Electronic Document Management System, Document # 13411196, available at https://edms.deq.louisiana.gov/app/doc/view?doc=13411196.

heavy metals and other pollutants, to foul the air and water of the Coastal Zone. 159

C. Other LNG Exports, Other Cumulative Impacts.

LDNR also must examine the cumulative environmental impacts of the Project when added to other past, present, and reasonably foreseeable new industrial projects in the same area, in Texas and Mississippi, as well as Louisiana. For example, the Project is in close proximity to three major fossil gas export facilities—the existing Cheniere Sabine Pass fossil gas liquefaction plant, ¹⁶⁰ the under-construction Exxon Golden Pass import/export fossil gas plant, ¹⁶¹ and the operating Venture Global Calcasieu Pass fossil gas liquefaction plant—as well as the proposed Delfin LNG deepwater Port. 162 Approximately fourteen liquified fossil gas export facilities are currently in the permitting process off the coast of Louisiana and Texas (Figure 9). LDNR must assess the combined environmental impacts of these and other facilities in the same area as the Project, particularly in terms of the collective loss of wetlands, habitat, and increasing risk of accidents and spills from these facilities.

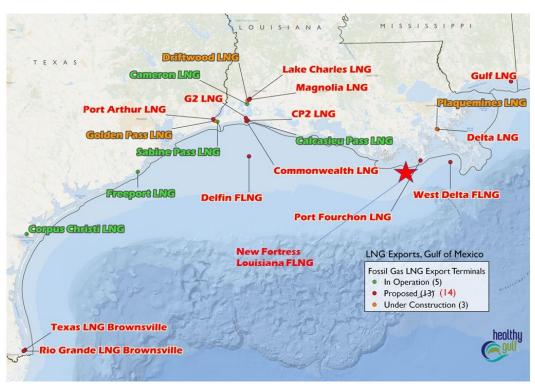


Figure 6. LNG terminals in operation, under construction and proposed in Texas, Louisiana, Mississippi, and offshore. Data: Energy Information Administration, Federal Energy Regulatory Commission, Healthy Gulf.

¹⁵⁹ See id.

¹⁶⁰ S&P Global, Cheniere sees Sabine Pass Train 6 startup by mid-2023, Oct. 21, 2019, https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/102119-cheniere-sees-sabinepass-train-6-startup-by-mid-2023.

Reuters, Golden Pass seeks to boost capacity at LNG export plant in Texas, Jun. 1, 2020, https://www.reuters.com/article/us-exxon-lng-golden-pass/golden-pass-seeks-to-boost-capacity-at-lngexport-plant-in-texas-idUSKBN2383K2.

¹⁶² Coastal Use Permit No. P20210429.

D. Cumulative Greenhouse-Gas Emissions Impacts

The Project would generate significant direct climate emissions from the Terminal and Pipeline, in addition to significant lifecycle emissions from upstream production and transportation, and from downstream transportation and consumption. As a public trustee for Louisiana's environment, LDNR is obligated to fully quantify Venture Global's likely direct, indirect, and cumulative greenhouse gas emissions, and to assess the significance of the potential adverse environmental effects of these emissions to the state. GHG emissions would come from each the Pipeline and the Terminal, yet where does the Application quantify these emissions or address the effects and existential threat the Project's greenhouse gas pollution poses to Louisiana, vis a vis climate change.

LDNR must consider this Project's contribution alongside the outsized emissions from the other permits LDNR issues. A University of Texas, Austin study concludes that the new oil-and-gas infrastructure buildout proposed in recent years in Louisiana and Texas alone could produce 541 million tons CO₂e in direct emissions by the year 2030. This would cause more than an 8 percent spike in total United States' emissions from 2017 levels, or the equivalent of allowing 131 new coal-fired power plants. Many of the state's largest industrial sources of greenhouse gas emissions are located in the coastal zone. 166

The state faces enormous threat from cumulative greenhouse gas emissions, but LDNR's permitting decisions are accelerating the problem. LDNR must require Venture Global, and all other permit applicants, to evaluate and mitigate their direct, indirect, and cumulative greenhouse gas emissions to the maximum extent possible.

E. Inconsistency with the Louisiana Coastal Master Plan.

environmental effects of pipelines it approves.").

LDNR also must explore the harm to the coast from the Pipeline and Project, from direct impacts like removing a large piece of Monkey Island to the indirect impacts like continuing to permit greenhouse-gas intensive projects. LDNR cannot issue a coastal use permit, unless it

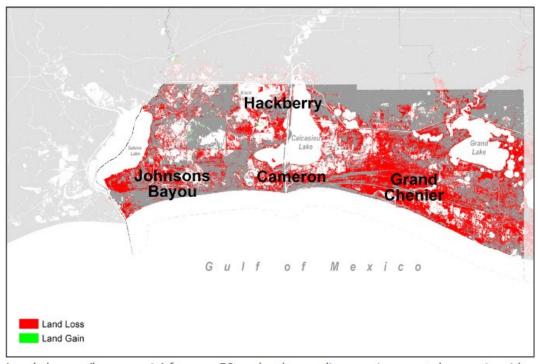
¹⁶⁶ *Id*.

¹⁶³ See Sierra Club v. Fed. Energy Reg. Comm'n, 867 F.3d at 1373–75. The court in Sierra Club rejected the argument that FERC had no need to consider downstream greenhouse gas emissions from an LNG pipeline, ruling that Congress, as Article IX here, gave FERC the broad instruction to balance the public benefits against the adverse effects of the project when deciding whether to grant the LNG pipeline approvals. *Id.* at 1373 ("Because FERC could deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment, the agency is a 'legally relevant cause' of the direct and indirect

¹⁶⁴ See In re Am. Waste, 633 So.2d at 194; Save Ourselves, 452 So.2d at 1157. Federal courts have recently issued a series of decisions requiring federal agencies to meaningfully consider climate change in the permitting process See, e.g., Sierra Club v. FERC, 867 F.3d 1357, 1373 (D.C. Cir. 2017).

¹⁶⁵ Exhibit 15, A. Waxman, et al., "Emissions in the Stream: Estimating the Greenhouse Gas Impacts of an Oil and Gas Boom," 2020 ENVIRO. RESEARCH LETTERS 15:014004, p. 2 (Jan. 14, 2020) [hereinafter: "UT-Austin Study"] (stating of LDEQ's and TCEQ's permitting of GHG-intensive sources, the "boom in oil production in this region and elsewhere is likely to increase GHG emissions both indirectly, if it puts downward pressure on global oil prices, and directly due to emissions from the upstream, midstream, and downstream activities."), https://iopscience.iop.org/article/10.1088/1748-9326/ab5e6f/pdf.

finds that the "activity for which application is being made is consistent with the state's master plan for integrated coastal protection." The mounting climate crisis accelerates the state's long-term coastal crisis, increasing the risks to coastal communities and the environment. As CPRA explained in Louisiana's 2017 Coastal Master Plan, the coast "is disappearing at an alarming rate" and "[t]he major causes of this land loss include the effects of climate change, sea level rise, subsidence, hurricanes, storm surges, disconnection of the Mississippi River from coastal marshes, and human impacts." Moreover, CPRA highlighted that coastal restoration becomes progressively more difficult to accomplish the more climate-change-induced sea-level-rise increases. Pull By literally removing an 11.3 acre chuck of coastal land and protection from Monkey Island for its "Marine facility" and by vastly increasing greenhouse gas emissions, Venture Global's plan is inconsistent with the Master Plan. The agency must explain how the Pipeline and Project could possibly be consistent with the state's Coastal Master Plan.



Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

Figure 7a. CPRA maps of 50-year land loss absent action 172

¹⁶⁸ See Avenal, 886 So.2d at 1101.

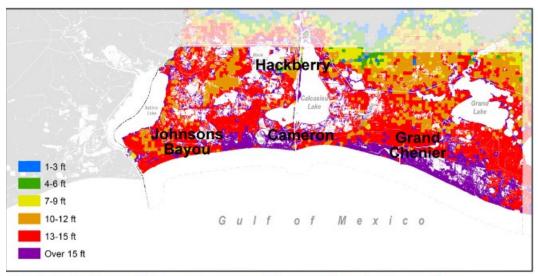
¹⁶⁷ La. R.S. 49:214.30(A)(2).

¹⁶⁹ CPRA, La.'s Comprehensive Master Plan for a Sustainable Coast, at ES-2 (2017), http://coastal.la.gov/wp-content/uploads/2017/04/2017-Coastal-Master-Plan_Web-Book_CFinal-with-Effective-Date-06092017.pdf.

¹⁷⁰ *Id.* at 48; *see* Figures 7a and 7b.

¹⁷¹ See JPA Narrative, p. 29.

¹⁷² LA CPRA, Louisiana's comprehensive Master Plan for a sustainable coast 184 at p. ES-6 (2017), available at https://coastal.la.gov/our-plan/2017-coastal-master-plan/.



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

Figure 7b. CPRA map of potential flooding in Cameron Parish absent action ¹⁷³

Of course, Cameron Parish is already suffering heavily from storms and flooding. Hurricanes Ike and Rita devastated the Parish in the mid-2000s. Following the storms, Cameron Parish had lost a third of its population, declining to around 6,800 in 2010, from about 10,000 people in 2000. ¹⁷⁴ In the historically devastating 2020 hurricane season, Cameron Parish again took punishing blows from Hurricanes Laura and Delta, and it may face further population loss. ¹⁷⁵ Nearby Lake Charles endured these same 2020 hurricanes, a dangerous winter storm in February 2021, and the third heaviest rainstorm in its history in May 2021, which flooded many homes with nearly a foot of rain. ¹⁷⁶ Afterward, Lake Charles Mayor, Nic Hunter, rightly connected these disasters to climate change, calling for a "bold and honest conversation" and admonishing: "I just think it would be ridiculous to say that something is not happening. These 100-year weather events are happening, at least here in southwest Louisiana a heck of a lot more than every 100 years." ¹⁷⁷

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¹⁷³ *Id.* at p. ES-8.

Exhibit 16, Mike Smith, "After More Storm Devastation, Coastal Cameron Parish again Confronts Questions on its Future," the Advocate (June 27, 2021),

https://www.theadvocate.com/lake_charles/article_35578cee-d607-11eb-9f45-bf59d05d6ebc.html.

175 See, e.g., Brinley Hineman, "How Lonely this Place is Going to be': can Cameron Pick itself up after

¹⁷⁵ See, e.g., Brinley Hineman, "'How Lonely this Place is Going to be': can Cameron Pick itself up after 2020 Hurricanes?" Lafayette Daily Advertiser (Oct. 11, 2020),

https://www.theadvertiser.com/story/weather/hurricanes/2020/10/11/cameron-louisiana-delta-recovery-2020-hurricane-season-laura/5956189002/; Smith, *supra*.

¹⁷⁶ Brooke Thorington, "Lake Charles receives Third Highes Amount of Rainfall in History," Louisiana Radio Network (May 18, 2021), https://louisianaradionetwork.com/2021/05/18/18073/.

¹⁷⁷ Exhibit 17, Oliver Milman, "Luckless Lake Charles: Louisiana City Battered by Extreme Weather—Again," the Guardian (May 24, 2021), https://www.theguardian.com/us-news/2021/may/24/lake-charles-louisiana-weather-climate-crisis (noting Louisiana state climatologist, Barry Keim, agrees that climate change is making storms like the ones that hammered southwest Louisiana in the last year increasingly likely); Thorington, https://www.theguardian.com/us-news/2021/may/24/lake-charles-louisiana-weather-climate-crisis (noting Louisiana state climatologist, Barry Keim, agrees that climate change is making storms like the ones that hammered southwest Louisiana in the last year increasingly likely); Thorington, https://www.theguardian.com/us-news/2021/may/24/lake-charles-louisiana (noting Louisiana state climatologist, Barry Keim, agrees that climate change is making storms like the ones that hammered southwest Louisiana in the last year increasingly likely); Thorington, https://www.theguardian.com/us-news/2021/may/24/lake-charles-louisiana (noting Louisiana state climatologist, Barry Keim, agrees that climate change is making storms like the ones that hammered southwest Louisiana in the last year increasingly likely); Thorington, https://www.theguardian.com/us-news/2021/may/24/lake-charles-louisiana (noting Louisiana).

F. Inconsistency With Louisiana's Goal to Reach Net-Zero Greenhouse Gas **Emissions**

LDNR must consider the state's regional climate goals in assessing this project in keeping with its public trustee duty. This includes these emissions' relationship to "regional or national emissions-control goals." ¹⁷⁸ Governor Edwards recognized in a recent Executive Order that scientists from the IPCC have concluded that minimizing the worst impacts of climate change to the world, and Louisiana in particular, requires reducing global greenhouse gas emissions by about 45 percent from 2010 levels by 2030 and reaching net-zero emissions by around 2050. 179 Governor Edwards established a task force to recommend measures for Louisiana to reduce statewide emissions on the IPCC's timetable to avoid the worst consequences of climate change for the state. 180

VIII. LDNR Must Deny the Permit for Insufficient Information on Environmental Justice and Impacts on Communities.

The Applicant fails to provide any information to enable LDNR to undertake an environmental-justice review. In carrying out its public trust duty, LDNR must fully and carefully assess the potential negative social and environmental consequences of its decision. 181 This includes consideration of the project's environmental justice impacts: the disproportionate burden that the project would force upon communities of color or low-income communities, and first peoples who have an ancestral relationship to the land. 182

To meaningfully analyze a project's environmental justice impacts, LDNR must identify the communities most impacted by the project. The geographic scope(s) for identifying environmental justice communities should be based on the specific impacts of this project. 183 For example, this could include the communities that could be impacted by the Project's destruction of flood protection, increased air pollution, or risks from gas leaks or explosions. Once it has identified the impacted communities, LDNR must analyze the cumulative burden from pollution

¹⁷⁹ Exec. Order JBE 2020-18, "Climate Initiatives Task Force" (Aug. 19, 2020),

¹⁷⁸ See Sierra Club v. Fed. Energy Reg. Comm'n, 867 F.3d at 1374.

https://gov.louisiana.gov/assets/ExecutiveOrders/2020/JBE-2020-18-Climate-Initiatives-Task-Force.pdf. ¹⁸⁰ Id. ("[T]o improve our resilience, sustain our coast, and help avoid the worst impacts of climate change, Louisiana must proactively work to reduce the greenhouse gas emissions that are driving up global temperatures, raising sea levels, and increasing risk that threaten our health and safety, quality of life, economic growth, and vital habitats and ecosystems.").

¹⁸¹ Save Ourselves, 452 So.2d at 1157, 1160.

¹⁸² Cf. N. Baton Rouge Envtl. Ass'n v. La. Dep't of Envtl. Quality, 2000-1878, p. 12 (La. App. 1 Cir. 11/14/01); 805 So.2d 255, 263 (upholding LDEO environmental-justice review on its merits); see CEO, Environmental Justice: Guidance Under the National Environmental Policy Act, at pp. 3-5, 7-8 (Dec. 1997), available at http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-EJGuidance.pdf.

¹⁸³ See Standing Rock Sioux Tribe, 255 F. Supp. 3d at 138–40; Cmtys. Against Runway Expansion, Inc. v. FAA, 355 F.3d 678, 685, 689 (D.C. Cir. 2004); EPA, Final Guidance For Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses, §1.2 (April 1998) ("The effects of the proposed action will often vary depending on the distance of the affected community from the action and the type of effect created by the action.").

and other harms that these communities already face and consider how the Project – the Pipeline and the Terminal - might add to that harm. ¹⁸⁴ This includes analyzing unique risk factors and social or economic factors that may enhance the severity of the Project's impacts to the specific environmental justice communities. ¹⁸⁵

For its Application, Venture Global purports to have considered environmental justice issues for its Terminal alternatives review but fails to discuss or document any such data or analysis. ¹⁸⁶ Venture Global does not even purport to have considered environmental justice issues for its proposed Pipeline route. Accordingly, the Application does not provide sufficient information for LDNR to perform its public trustee obligations.

Moreover, public data shows there are environmental justice communities in the vicinity of the Terminal and Pipeline that LDNR must consider. The proposed Pipeline route runs near several towns and communities, including Cameron, LA; Creole, LA; Grand Lake, LA; Lake Charles suburbs (e.g., Deatonville and Big Lake), Vinton, LA; Starks, LA; and Deweyville, TX. And our demographics analysis of EJ areas based on the 2016-2020 ACS Census data showed that the Pipeline runs through at least nine Census Block Group areas (*i.e.* no buffer between the Pipeline and the Census Block) with environmental justice concerns, as shown in Figure 8.

To determine environmental justice concerns, we compared the Census Block Group's statistics to the statistics for the whole population of the Parish it lies in, Calcasieu Parish or Cameron Parish, respectively, using the following variables:

- Non-white population percent
- Native population percent
- Median income amount
- Persons living below the poverty level percent

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¹⁸⁴ See Friends of Buckingham v. State Air Pollution Control Bd., 947 F.3d 68, 87–92 (4th Cir. 2020) (detailing the steps of an environmental justice analysis in case involving Virginia's state environmental justice requirements that are similar to Louisiana's public trustee mandate); Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs, 255 F. Supp. 3d 101, 140 (D.D.C. 2017) (requiring agency "to determine whether a project will have a disproportionately adverse effect on minority and low income populations"); Coliseum Square Ass'n v. Jackson, 465 F.3d 215, 232 (5th Cir. 2006) (reviewing federal agency's environmental justice analysis in housing redevelopment project and considering agency's findings regarding residents' minority status, as well as social, health, and environmental impacts of the project on surrounding communities).

standards] and state air quality standards not tailored to this specific EJ community"); *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 255 F. Supp. 3d at 140 (holding that the Army Corps failed to properly consider the environmental justice impacts of the Dakota Access Pipeline under NEPA where its environmental review was "silent, for instance, on the distinct cultural practices of the Tribe and the social and economic factors that might amplify its experience of the environmental effects of an oil spill."); EPA, Final Guidance For Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses, §2.2-2.3 (April 1998).

¹⁸⁶ See JPA Narrative, p. 11.

We analyzed the 12 Census Block Groups overlapping the one-mile buffer of the Project, *i.e.* an indisputable minimum distance for potential impacts for accidents or explosions, among other things. For the four metrics outlined above, we compared those block groups within one mile of the Project to the Parish amounts. For Non-white population percent, Native population percent and People living in poverty percent, a Census Block group was identified as an environmental justice concern using the "threshold" analysis method. That is, if the block group's percentage of non-white, native or indigenous population is greater than the Parish's, the block group is considered of concern. Similarly, for Median income, if the block group's income was below the Parish's median income amount, the block group was considered an environmental justice concern.

The analysis showed that nine out of 12 block groups (75%) are of EJ concern. At the least, this analysis shows that LDNR must examine environmental justice impacts more closely. Further, the Project itself runs through rural and poorer areas that are still recovering from Hurricanes Laura and Delta, and EPA's EJSCREEN reports for 1-mile and 3-mile buffers of the Project show that the area is above the 70th percentile for Air Toxics Cancer Risk, Air Toxics Respiratory Hazard Index and Wastewater Discharge (see **Appendix ABC**).

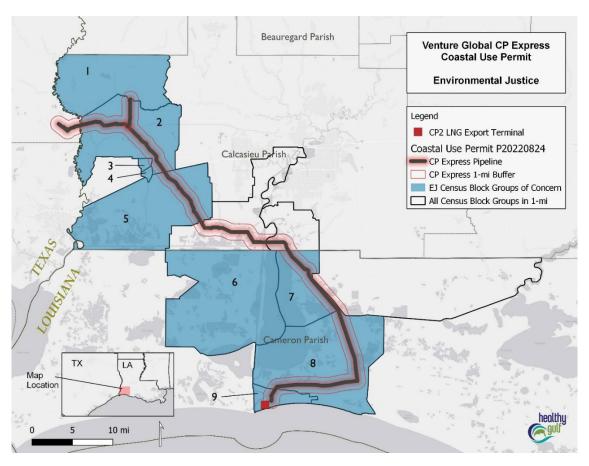


Figure 8. Census Block Groups that overlap the one mile buffer of the pipeline are outlined in black. Each block group qualifies for EJ concern because the block group is greater in percentage or less in amount than the Parish, for the following criteria: Non-white population percent (NW%); Native or Indigenous population percent (I%);

Median income amount (INC); Persons living below the poverty level percent (POV%). 1 = I%; 2 = INC+POV%; 3 = NW%+INC+POV%; 4 = INC+POV%; 5 = POV%; 6 = INC; 7 = NW%+INC+POV%; 8 = NW%; 9 = INC+POV%.

Further still, LDNR must consider the environmental justice implications of siting the Project within three miles of six planned or existing LNG export terminals in Cameron and Calcasieu Parishes, as shown in Figure 9. No other cluster of LNG export terminals like this exists in the United States, indicating the extraordinary disproportionate burden placed on neighboring communities.

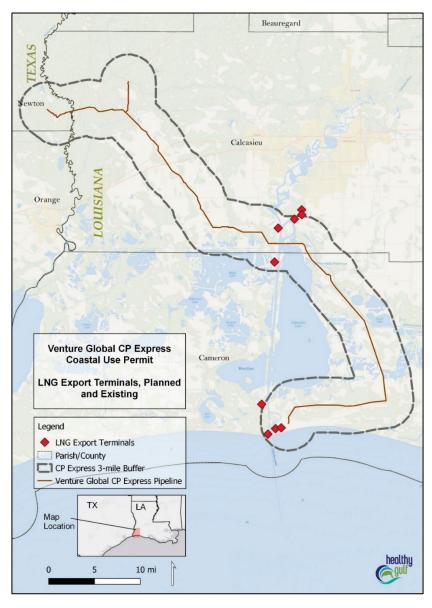


Figure 9. Location of the Project, 3-mile buffer and proximity of LNG export terminals in southwest Louisiana.

In short, the Pipeline route passes through several areas of environmental justice concern that the Application fails to consider. Accordingly, LDNR should deny the Permit, at least until it completes a comprehensive environmental justice analysis—for each the Pipeline and the

Terminal—and the public has had a chance to review and comment on it.

IX. LDNR Must Deny the Permit for Insufficient Information on Potential Harm to Endangered or Threatened Species and Their Habitat.

Venture Global does not provide sufficient information to analyze the potential harm to endangered or threatened species and their habitat, including from long-term disruption of habitat and gas leaks or explosions. In addition to Article IX's general environmental-review requirement, the Coastal Use Guidelines require LDNR to avoid to the maximum extent practicable, "adverse alteration or destruction of unique or valuable habitats, critical habitat for endangered species, important wildlife or fishery breeding or nursery areas, designated wildlife management or sanctuary areas, or forestlands." In this case, Venture Global has failed to analyze the likelihood that the Project could harm endangered and threatened species, especially from changes in the coastal environment and oil spills.

Indeed, in its Application, Venture Global acknowledges that it has not completed a review for endangered species and that some species its initial review identified "may require survey." Venture Global provides no documentation indicating even what threatened or endangered species it may be reviewing, which could include: the eastern black rail, sandhill crane, piping plover, red knot, west Indian manatee, green sea turtle, hawksbill sea turtle, Kemp's ridley sea turtle, ornate box turtle, Ouachita map turtle, leatherback sea turtle, and loggerhead sea turtle, as well as numerous flora. Is It also fails to include any recitation of the scope of the threat its Pipeline and Terminal would bring to such species. Such threats include long-term, significant alteration to the coastal environment and the prospect of harming species and their habitats, well after construction is finished, from impacts like turbidity and sedimentation, saltwater intrusion, erosion, and accelerated loss of coastal wetlands. These areas are already shrinking due to industrial development, storms, and sea level rise. The risk of gas leaks and explosions is predictable, and the consequences for species in the area may be significant. LDNR must fully consider and minimize to the maximum extent practicable the risk that the Project would adversely impact areas that support endangered and threatened species.

X. The Application Fails to Support Purported Benefits or to Quantify Costs and Benefits as It Must for LDNR to Meet its Public Trust Duty.

Venture Global fails to provide sufficient information find any benefits of the Pipeline or Project outweigh its costs and, instead, offers only loose and unsupported assertions of purported benefits. For example, in the mere 1½ pages of its Application that it assigns to the issue, Venture Global does not provide any information to show that the Project would bring economic benefits to Louisiana from shipping LNG produced in other states to customers overseas. It fails

¹⁸⁸ JPA Narrative, at p. 35.

¹⁸⁷ LAC 43:I.701(G)(16).

¹⁸⁹ See, e.g., La. Dept. of Wildlife and Fisheries webpage, Rare Species and Natural Communities by Parish, https://www.wlf.louisiana.gov/page/rare-species-and-natural-communities-by-parish; NOAA Fisheries Service, An Overview of Protected Species in the Gulf of Mexico, available at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.boem.gov/sites/default/files/oil-and-gas-energy-program/GOMR/NMFS-Protected-Species-In-GOM-Feb2012.pdf.

to quantify any benefits, points to no permanent jobs from the Pipeline, and offers no assurances that any jobs it creates will go to people residing in Louisiana. What is certain is that Louisiana's coast will suffer steep real and potential environmental costs (which Venture Global has also failed to quantify), while any gains are speculative and likely to flow out of Louisiana.

Article IX "requires a balancing process in which environmental costs and benefits must be given full and careful consideration along with economic, social and other factors." LDNR must show that, in "a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility," that the benefits exceed the costs." LDNR must quantify any economic benefits and must at least attempt to quantify environmental costs. The Coastal Use Guidelines provide an overlapping test, requiring LDNR to undertake an "appropriate balancing of social, environmental, and economic factors." LDNR must not merely consider possible economic benefits, but also avoid "adverse economic impacts on the locality of the use and affected governmental bodies," to the maximum extent practicable. And, beyond Article IX requirements, when an applicant's activity may conflict with one of the Guideline's standards, LDNR must find that the "the benefits resulting from the proposed use would *clearly outweigh* the adverse impacts resulting from noncompliance with the modified standard." Venture Global fails those tests.

A. Failure to Provide Information to Determine Benefits, Generally.

Venture Global lists three kinds of overlapping "benefits to the public interest" that it purports the Project¹⁹⁶ will bring:

- Stimulation of the local, state, regional, and national economies through job creation;
- Generation of substantial tax revenues and improvement of the United States' balance of trade; and
- Increased economic activity and tax revenues, and increased trade with foreign countries.

and promising "greater detail" in subsection 2.3, Venture Global does not provide the support, detail or data necessary for LDNR to assess such benefits or grant the Permit. For example, how much will the Project stimulate each of the listed economies? Venture Global does not currently list Louisiana as a site for its offices. What jobs would the claimed "approximately 260 full-time

¹⁹⁰ Save Ourselves, 452 So.2d at 1157.

¹⁹¹ *Matter of Am. Waste*, 633 So.2d at 194.

¹⁹² Save Ourselves, 452 So.2d at 1160 (remanding agency decision where "[t]he record is silent on ... whether it made any attempt to quantify environmental costs and weigh them against social and economic benefits of the project).

¹⁹³ LAC 43:I.723.C(8)(a); see also LAC 43:I.701.F (requiring LDNR to collect and assess information on a variety of environmental and economic impacts from the proposed activity).

¹⁹⁴ LAC 43:I.701(G)(2).

¹⁹⁵ LAC 43:I.701(H)(1)

¹⁹⁶ Venture Global's reliance on benefits from the Project as a whole demonstrates the arbitrariness of its bid for LDNR to consider the costs of only the Pipeline portion of its Project at this time. *See supra*, § IV.

employees ... required to operate" the Project hold—janitorial, management, executive? Where will those jobs be located—on site, or at Venture Global's Houston or Virginia offices, or somewhere else? Does Venture Global plan to hire locally and, if so, for what jobs and with what assurances? Similarly, how long would any or all of the temporary construction worker jobs Venture Global claims be available? Are the approximately 2,800 – 3,630 construction workers all to be employed at the same time?

Similarly, an unsupported reference to "substantial"-ness is inadequate to support any tax revenue benefit. What would the "tax revenues" be, numerically? What salaries would Venture Global pay various "workers" and "employees" it claims it will hire? How much income tax would Louisiana or its Parishes expect to receive and on what assurances? How much sales tax or property tax or ad valorem tax does Venture Global estimate Louisiana and its Parish's would receive? Venture Global quantifies nothing.

Moreover, how much of those taxes would be required to pay for the repairs to roads associated with hauling in approximately 123,455 cys of concrete, gravel, and sand, as well as hauling out approximately 160,415 cys of excavated material? What subsidies, tax exemptions, or tax credits does Venture Global expect from the U.S. or Louisiana that would offset any income tax revenues? Has Venture Global applied for or been granted subsidies through Louisiana's Industrial Taxation Exemption Program? If so, how much of the assessed ad valorem taxes would not go local interests after all? Further, Venture Global assertions of stimulating the U.S. economy falls flat in light of the increases to gas prices and inflation that its additional export of LNG would promote 198.

Venture Global is similarly vague and unsupported when it provides two sentences of "detail" for its national security and foreign relations benefit. There are no specifics, just generalized mentions of increased trade and positive relations. And nothing touches on the cumulative loss of any benefit in light of the numerous existing and proposals for new LNG facilities. Any national benefit is diminished by approving too many of LNG export facilities. Indeed, the over-exportation from the LNG build out is resulting in increased U.S. Gas prices and diminished federal reserves. ¹⁹⁹Moreover, Venture Global omits the insecurity additional LNG export would bring by promoting long-term reliance on fossil fuels and so fortifying the capacity of countries to weaponize natural gas and the global reliance on fossil fuels.

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¹⁹⁷ See Public Notice, p. 1.

¹⁹⁸ See Reuters, U.S. Energy Secretary Urges Refiners Not To Increase Fuel Exports
(Aug, 29, 2022), available at https://www.reuters.com/business/energy/us-energy-secretary-urges-refiners-not-increase-fuel-exports-2022-08-27/, attached at Exhibit 18. Notably, U.S. gas prices decreased significantly (16%) when an explosion the Freeport LNG facility in Texas halted exports and decreased again (5%) when, two months later, Freeport announced a longer delay before exports would resume. See CNBC, Natural gas plummets as Freeport Delays Facility Restart Following Explosion (June 14, 2022), available at https://www.cnbc.com/2022/06/14/ natural-gas-plummets-as-freeport-delays-facility-restart-following-explosion.html; Reuters, U.S. Natgas Falls 5% on Delay of Freeport LNG Plant Restart (Aug. 24, 2022), available at https://www.naturalgasintel.com/later-freeport-lng-startup-seen-as-modest-negative-as-natural-gas-futures-pare-losses-early/.

¹⁹⁹ See Reuters, U.S. Energy Secretary Urges Refiners Not To Increase Fuel Exports (Aug, 29, 2022), available at https://www.reuters.com/business/energy/us-energy-secretary-urges-refiners-not-increase-fuel-exports-2022-08-27/, attached at https://example.com/business/energy/us-energy-secretary-urges-refiners-not-increase-fuel-exports-2022-08-27/, attached at https://example.com/business/energy/us-energy-secretary-urges-refiners-not-increase-fuel-exports-2022-08-27/, attached at https://example.com/business/energy-us-energy-secretary-urges-refiners-not-increase-fuel-exports-2022-08-27/, attached at https://example.com/business/energy-us-energ

Further, Venture Global wrongly—and without support—purports there would be environmental benefit from the Pipeline or the Project because it would "displace" other fuels that it assumes are more polluting or with more GHG emissions.²⁰⁰ Venture Global fails to present evidence or data on LNG or other fossil fuels to support its position. Moreover, it fails to carry out its theory by displacement by renewable no- or low-emission fuels, like solar and wind power, and then comparing the asserted benefits. Venture Global's theory also overlooks the fact that approving the Project entrenches fossil fuel consumption and fails to analyze the impacts costs and benefits— of investing the same dollars and efforts to developing renewable energy.

Indeed, approving the Pipeline and Project would have adverse ramifications for the climate, because each new U.S. export facility lowers the price of gas on the international market, encouraging more production, consumption, and greenhouse gas emissions. It is not the case that emissions saved from this Project would simply shift to a different project elsewhere the "perfect substitution" fallacy. A 2019 Resources for the Future study debunked this assumption. 201 It examined the worldwide greenhouse-gas implications of possible, large-scale increases in onshore U.S. oil production for global consumption and found that greenhouse gas emissions would increase not just in the United States, but, crucially, would rise substantially in the world as a whole, compared to scenarios in which U.S. production were to remain flat or decline.²⁰² Between now and 2030, a substantial rise in U.S. oil production could lead to more net, global greenhouse gas emissions, as compared to baseline, than the total annual, energyrelated CO2 emissions of all Central and South American countries put together. ²⁰³

B. Failure to Provide Information to Determine Benefits for a Port.

Venture Global's assessment omits information on benefits that LDNR requires for the Project, including a benefits analysis for Ports. The Project meets LDNR's definition of "a port as an industrial type, water based cargo transfer facility."²⁰⁴ LDNR's guidance on alternatives and justification analyses for new "port development activities" requires the applicant to "demonstrate clearly that the proposed goods and/or services are needed in the region, state and/or nation and that the facility will have an overall public benefit."205 Venture Global fails to make this demonstration.

²⁰¹ Exhibit 19, D. Raimi, "The Greenhouse Gas Impacts of Increased U.S. Oil and Gas Production," Resources for the Future (Feb. 2019) [hereinafter: "RFI Study"],

https://www.rff.org/publications/working-papers/greenhouse-gas-impacts-increased-us-oil-and-gasproduction/. ²⁰² Exhibit 19, RFI Study at pp. 14 & 19.

²⁰⁴ See LDNR, "Guide to Developing Alternatives and Justification Analyses for Proposed Uses within the Louisiana Coastal Zone" at 54 (2020),

http://www.dnr.louisiana.gov/assets/LDNR/permits/NAJ/Combined Document rev1 Mar2020.pdf; see also id. at p. 62

²⁰⁰ JPA Narrative, p.6.

 $[\]frac{10}{10}$ Id. at 19.

²⁰⁵ Id. at 54–62 (2020); see also id. at p. 62 (specifying that even if secondary components of a new port development, like access roads or telephone lines might be permitted separately from the rest of the port, all project components "must be evaluated as part of the whole project," because they depend on one another).

LDNR requires new port development applicants to provide a "[f]orecast [of] the industries and cargo which will use the project for the next ten (10) years."²⁰⁶ The applicant should provide concrete information on likely customers and shipment routes.²⁰⁷ LDNR requires applicants to calculate "net benefits," which includes not only any benefits from doing the Project but also subtracts the opportunity cost—the benefits from maintaining the status quo.²⁰⁸ The applicant also must provide details on the number of permanent jobs it would create. The guidance makes clear that such details "do not include temporary jobs created by construction activities."209 Applicants must support this analysis with verifiable data and follow accepted methods of economic analysis.²¹⁰

Rather than provide the specific market and benefits analysis required, Venture Global offers a wholly unsupported narrative of generalized benefits it asserts will come.²¹¹ Its analysis fails to include required information such as Venture Global's potential customers, permanent jobs, or investment (if any), the Project could bring to Louisiana.

Venture Global has failed to carry its burden to show that its project will have significant economic benefits to the state. LDNR must deny the application, or it must order Venture Global to provide an analysis to justify the need for the Project, and any claimed benefit to the state of the Louisiana that complies with Article IX, the Coastal Use Guidelines, and LDNR's alternatives and justification guidance. Otherwise, LDNR simply cannot weigh the required costbenefit test.

XI. LDNR Cannot Grant the Permit without Additional Information on and Consideration of Alternatives.

Separate from the inadequacies stemming from segmenting CUP consideration for its Pipelines from its Terminal and otherwise failing to provide sufficient information²¹²— but also compounding those deficiencies and compounded by them—Venture Global's presentation of alternative sites and methods is inadequate such that LDNR's reliance on it to grant the Permit would be arbitrary and capricious. "Implicit in the permit application process is the burden placed upon the permit applicant ... to present sufficient evidentiary proof that the permit should

²⁰⁶ LDNR, "Guide to Developing Alternatives and Justification Analyses for Proposed Uses within the Louisiana Coastal Zone" at 61–62 (2020),

http://www.dnr.louisiana.gov/assets/LDNR/permits/NAJ/Combined Document rev1 Mar2020.pdf. ²⁰⁷ *Id.* at 62.

²⁰⁸ LDNR, "Guide to Developing Alternatives and Justification Analyses for Proposed Uses within the Louisiana Coastal Zone" at 63 (2020),

http://www.dnr.louisiana.gov/assets/LDNR/permits/NAJ/Combined Document rev1 Mar2020.pdf. ²⁰⁹ *Id.* at 63.

²¹⁰ LDNR, "Guide to Developing Alternatives and Justification Analyses for Proposed Uses within the Louisiana Coastal Zone" at 63 (2020) ("Sufficient attention should be given to substantiate procedures adopted in quantifying benefits and in providing supporting documents. Overall, benefit estimates should be logical, verifiable, and based on sound judgment and acceptable industry norms.").

http://www.dnr.louisiana.gov/assets/LDNR/permits/NAJ/Combined Document rev1 Mar2020.pdf.

²¹¹ See JPA Narrative, p. 4, 6.

²¹² See supra, passim.

be granted."²¹³ LDNR has explained that when there are wetlands impacts, an applicant "will have to demonstrate that there is a need to impact the wetlands and that there are no feasible alternatives available (such as reducing the scope of your project or changing its configuration). If those hurdles are met, [an applicant] will have to mitigate for any remaining impacts to vegetated wetlands."²¹⁴ Alternatives presented must be "sufficient to enable [an agency] to fulfill its responsibility for insuring 'that the environment would be protected to the maximum extent possible consistent with the health safety and welfare of the people."²¹⁵

Venture Global fails to meet this standard many times over. It fails to provide sufficient alternatives for the Project, including the Pipeline route and its termini, the compressor station, and the Terminal. Such failures include, for example, insufficient number, nature, and geographic scope of alternatives sites. Similarly, for the alternative sites, projects, or methods Venture Global does present, it fails to provide sufficient information to show that its preferences would protect the environment to the maximum extent possible consistent with the health safety and welfare of the people. Indeed, Venture Global omits discussion of how it decided on the presented alternatives and not others. The result is that any decision based on the current alternatives analysis would be arbitrary and capricious.

A. Insufficient Number of Alternative Sites for Each the Pipeline, the Terminal, and the Compressor Station.

Venture Global fails to present a sufficient number of alternative sites for LDNR to meet its obligations under both the Coastal Use Guidelines and its public trust duty. LDNR's guidance requires new facilities with "High" coastal resource impacts, like the Pipeline, the Terminal, and the compressor station, ²¹⁶ to consider no less than five "alternate feasible sites," as its "Table 1" shows: ²¹⁷

Table 1 – Determining the Range of Alternatives that should be considered and the level of detail required in the Justification Analysis when proposing a commercial development. Resource Impacts refers to coastal resource impacts as a percentage of total project impact.

	Resource Impacts (% of total impacts)		
Scope of Development	Low (<10%)	Med (10.01- 30%)	High (>30.01%)
Small (less than 1 acre)	Category 1	Category 2	Category 3
Large (1 acre or more)	Category 2/3*	Category 2/3*	Category 3
* If more than 5 acres of resource impact will occur, higher level of detail is required.			

A minimum of two (Category 1), three (Category 2) or five (Category 3) alternate feasible sites must be considered. Each site should be compared using the same parameters and should, at a minimum, include the items listed below.

But Venture Global considers only three (3) alternatives to the proposed Terminal site, only three

²¹⁷ OCM Alternatives Guidance, p. 5, 21.

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²¹³ In re Browning-Ferris Indus. Petit Bois Landfill, (La. App. 1 Cir. 6/23/95), 657 So.2d 633, 637.

²¹⁴ LDNR, OCM webpage, Frequently Asked Questions, Questions on Wetlands, available at http://www.dnr.louisiana.gov/index.cfm/page/1387#CUP (last visited 9/5/22).

²¹⁵ 657 So.2d at 639 (citing *Save Ourselves*, 452 So.2d at 1160).

²¹⁶ Each the Pipeline, the Terminal, and the compressor station, together or separately, impacts over 5 acres of Coastal Zone Resources and more than 30.01% of the total project impacts.

(3) alternatives to the proposed Pipeline route, and only three (3) alternatives to the compressor station site. It should have considered at least five (5) alternatives for each. VG offers no explanation for its failure to consider additional alternatives.

Further, two of the three alternative pipeline routes VG offers are false alternatives. False or infeasible alternatives are not alternatives at all. Specifically, VG's Alternatives 1 and 2 pipeline routes "cross Sabine National Wildlife Refuge ... [where] rights-of-way for new oil and gas transmission line construction are not permitted." So, in fact, VG presents only one feasible alternative pipeline route – a patently insufficient slate.

Remarkably, the Application indicates such alternative pipeline routes to alternative sites exist, but Venture Global chose not to share them – at least not for its Pipeline Permit Application. For example, Venture Global relies on a pipeline route to Terminal Alternative 3 to reject that alternative site because that "pipeline ... could be proximate to congested residential and commercial areas," though it does so without support, maps, or detail²²⁰ —and with the effect of cutting off alternative review instead of enhancing it.

B. Failure to Provide Sufficient Information on Alternative Pipeline Termini, Routes, or Projects or Support the One It Chose.

The Pipeline route alternatives VG presents are also insufficient for failure to assess alternative termini and projects, or even to support the chosen preferences. For example, VG failed to assess alternative termini for its Pipeline, *i.e.* alternative points of connection to existing natural gas (or Terminal, as discussed above). Instead, VG provided a conclusion:

CP Express evaluated existing natural gas pipeline systems in the region and focused on proximity, pipeline age and condition, and the excess capacity of each system" and so "determined that a new 48-inch-diameter pipeline beginning at an interconnection point with MidCoast Energy near Temco in Jasper, County, Texas will intersect existing pipelines with sufficient capacity to provide the required 4 billion cubic feet per day of natural gas to the Terminal Site.

Venture Global provides no evidence or support for its conclusion that this termini is the only or environmentally best place it could tie into the existing pipeline system to receive "4 billion cubic feet per day of natural gas" or even that that amount is "required." And it fails to consider decreasing the scope of its project.

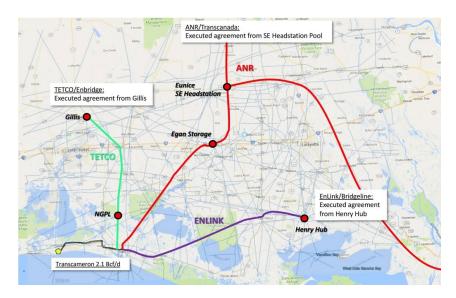
Notably, alternatives do exist. For example, Venture the Transcameron pipeline begins next to the proposed Terminal site and has or will have connections to several alternative existing

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²¹⁸ See id. ("A minimum of ... alternate *feasible* sites must be considered.") (emphasis added); *In re Browning-Ferris Indus. Petit Bois Landfill*, (La. App. 1 Cir. 6/23/95), 657 So.2d 633, 639 ("where only one of the evaluated sites within the optimum radius merits favorable consideration, the search radius should be expanded"); OCM Alternatives Guide, *passim*.

²¹⁹ Application 15-16.
²²⁰ See, e.g., Application p. 14 ("Further, a pipeline to supply natural gas to Alternative Site 3 could be proximate to congested residential and commercial areas.").

pipelines, as seen here in an image from Venture Global's website.²²¹



Similarly, the Pipeline and Hazardous Materials Safety Administration's map shows numerous existing pipelines in Cameron Parish alone:



Even Venture Global's map shows some of these alternative sources—it just fails to consider them properly or at all.²²³ These pipelines could serve as alternative methods of accessing natural gas or alternative routes for connecting to other existing pipelines, like the Transcontinental pipeline at a point east of the proposed Pipeline termini.

222 See https://pvnpms.phmsa.dot.gov/PublicViewer/ (last visited 9/4/22)

²²¹ https://venturegloballng.com/project-calcasieu-pass/pipeline/

See Application Figure 57 "Major Pipeline Route Alternatives." Further, that map also shows Venture Global is using two connection points to the Transcontinental pipeline, including the "Enable Gulf Run Lateral" which the JPA Narrative mentions but does not explain.

The inadequacy of Venture Global's alternatives analysis can also be seen in its map of alternative pipeline routes, which arbitrarily and capriciously includes some existing pipelines and omits others. In fact, it omits entirely the Transcameron Pipeline and related extensions. These alternative routes may also be required under Guideline 705 for linear facilities, which provides: "Existing corridors, rights-of-way, canals, and streams shall be utilized to the maximum extent practicable for linear facilities." And, indeed, VG fails to show—in its map or its narrative—where it co-locates any of the proposed Pipeline route at all, save a few miles with Kinder Morgan, while purporting that it does for as much as 48.8% of way.

These shortcomings also extend to include inadequate consideration of alternative projects. For example, while Venture Global submits a 48" pipeline is required for the capacity it wants, it must also consider the alternative project of a smaller capacity pipeline and terminal. What would be the difference in environmental impacts? How much narrower would a construction area and right of way through wetlands be for a pipeline smaller than 48"? How much smaller could the compressor station be and how would that change its wetlands footprint?

C. Insufficient Geographic Scope of Alternatives

Venture Global arbitrarily limits the geographic scope of the area considered for its Terminal site alternatives, and consequently for its Pipeline site alternatives. The Louisiana First Circuit has explained that "it appears inherently unreasonable ... to limit consideration of alternative sites to arbitrary geographical boundaries where the potential benefits and risks of the proposed facility will impact a multiparish, if not a multi-state region." Here, VG failed to look outside of Cameron Parish for its alternatives to its proposed Terminal site. But the Project is expected to serve a much broader area.

Similarly, any potential benefits are not limited to Cameron Parish. To the contrary, most of the benefits VG points to are national. ²²⁵ VG also asserts benefits to state, regional interests as well. ²²⁶ Moreover, nothing supports or ensures that any apparently local benefits, like jobs, and the related income and taxes, will actually go to persons living or paying taxes to Cameron Parish. In fact, with the Project near the border of Texas with easy access via I-10, such benefits are likely to go outside of Louisiana altogether. Indeed, the Pipeline connects at Texas, so VG needed to consider alternative Terminal sites in Texas, as well as other Parishes and states.

D. Failure to Document Alternatives Process.

VG fails to present sufficient information to document how it performed its alternatives assessment. LDNR's Alternatives Guidance for pipelines provides that "[a]lternate routes and methods of installation that minimize adverse impacts to coastal resources to the maximum extent practicable should be considered during initial project development. Documentation of these efforts should be preserved for inclusion in an Alternatives Analysis if adverse impacts to coastal resources cannot be avoided." Indeed, the call for documentation appears throughout

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²²⁴ LAC 43.I.705(E).

²²⁵ See JPA Narrative, 2.0

²²⁶ See JPA Narrative, p. 4, 6.

²²⁷ See, e.g., OCM NAJ Guidance p. 47.

the Guidelines. ²²⁸ Yet Venture Global provides only an unsupported narrative, the JPA Narrative, for its so-called "comprehensive alternatives analysis." ²²⁹ For example, the JPA Narrative presents no documentation for its analysis of the proposed Pipeline routes. It also does not describe how it chose the alternative Pipeline routes or Terminal sites that it did. While Venture Global attaches two maps that it created to show where it says it considered putting the Pipeline and the compressor station, its Application does not include maps for alternatives to the Terminal site or related alternative pipeline routes. ²³⁰ Nothing supports why VG needs the capacity it claims, nor why it chose the connecting point for its termini, nor why it ignored alternatives like the TransCameron pipeline and extensions. In short, Venture Global simply fails to support its alternatives analysis such that it would be arbitrary and capricious for LDNR to grant the Permit.

E. Other Failures on Alternative Sites, Projects, and Methods

Additional examples of Venture Global's failures to adequately assess alternatives include:

- Failure to adequately assess compressor station alternatives. First, of the three alternative considered, the two Vinton alternatives are outside the Coastal Zone, a factor Venture Global fails to note and indicating a significant failure to meet the Coastal Use Guidelines generally. Similarly, Venture Global omits expected storm surge levels and flooding from the environmental factors it considered, though the Guidelines require those considerations. ²³¹ But national storm surge maps show the alternative sites in Vinton are outside the storm surge area, whereas the proposed Moss Lake site would be subject to storm surges. ²³² Moreover, even from the information Venture Global does provide, the proposed Moss Lake A site is not clearly not the most protective to the environment and people. For example, the Vinton B site includes comparable factors as the Moss Lake A site, except that it is 1.4 miles from the nearest residence and will require a longer electrical line. ²³³.
- Failure to consider additional Horizontal Directional Drilling ("HDD") for waterbody crossings or otherwise provide sufficient information to determine impacts at waterbody crossings will be avoided or minimized. For example, while Venture Global proposes to use HDD for 7 water crossings, its JPA Narrative indicates there would be significantly more than 7 water crossings total and fails to explain why Venture Global

²²⁹ See Application, p. 6, 11 Step 11.

²²⁸ See id., passim.

²³⁰ See Application, Figs 57 & 58 (depicting three alternative sites for the Pipeline and compressor station, respectively).

²³¹ JPA Narrative, p. 16-17; *See*, *e.g.*, LAC 43.I.701(F)(2)(requiring consideration of "flood and storm hazard characteristics of site"); 701(G)(20) (requiring avoidance of "increases in the potential for flood ... or increases in the likelihood that damage will occur from such hazards"); 711(A)(2) (surface alterations may "take place only ... on lands where flood and storm hazards are minimal or where protection from these hazards can be reasonably well achieved").

²³² See Figure 4.

²³³ JPA Narrative at 17.

does not plan to use the more protective HDD method at any of those other crossings or the cost if it did.²³⁴ Further, it fails to account for how many specific waterbodies the Pipeline will impact total or which. It also fails to explain why it is declining the more protective alternative method or what cost it would incur to use it at all.²³⁵

- Failure to provide a plan for monitoring and emergency response for construction, operation, and accidents in the wetlands. Guideline 719 requires that "[e]ffective environmental protection and emergency or contingency plans shall be developed and complied with for all mineral operations." But Venture Global appears currently not to have any such plan. Moreover, the JPA Narrative's statement that its "HDD Monitoring and Contingency Plan will outline the procedures that will be followed to minimize the potential for an inadvertent release of drilling mud and to undertake effective cleanup should a release occur," indicates that it does plan to provide for similar protections (whatever they may be) for other water or wetland crossings.
- Failure to consider electric or renewable power for the proposed compressor station.²³⁶ Indeed, Venture Global fails to consider any alternative projects or methods for the compressor station.
- Failure to consider alternative sites, projects, or methods for its meter station and valve sites. Venture Global briefly describes its choice of locations for its two standalone meter stations but provides no alternatives for and omits sufficient information even to test the validity of its assertions.²³⁷ Venture Global offers no information, let alone potential alternatives for the standalone mainline valves.

XII. Conclusion

We ask that you deny the Permit, because Venture Global's application for the CP2 Express Pipeline fails to address the core environmental harms from the Pipeline and the Project to the state's environment and the people who depend on it, as required by the Coastal Resources Management Act and Louisiana Constitution Article IX. The CP2 Express and the Project as a whole would cause long-lasting or irreversible damage to vanishing chenier wetlands that sustain southwest Louisiana while simultaneously increasing the risks to these wetlands and the people of Cameron Parish and Louisiana as a whole. Venture Global fails to apply for a Coastal Use Permit in a way that can allow consideration of the Project's impacts as a whole, as LDNR must. Further, its Application fails to provide the information necessary for LDNR to grant a Coastal Use Permit at all, including by failing to quantify, or even attempt to quantify, economic benefits or adverse environmental impacts or even social impacts or benefits. The real and potential harm of the Project would likely far outweigh the Project's speculative benefits, most of which likely

²³⁴ JPA Narrative, p. 28 (Table 5-2, listing HDD waterbody crossings), 33 (Table 6-4, showing a minimum of thirteen waterbody crossings).

²³⁵ *Id.*, *passim*.

²³⁶ Driftwood LNG has proposed an electric compressor station in the same area of Louisiana, confirming that the less polluting electric energy source is viable nearby.

²³⁷ See JPA Narrative, p. 16.

would accrue out-of-state. LDNR simply cannot allow such significant, potential consequences without the consideration the law requires. Should LDNR nonetheless choose to proceed with permitting, we ask that you first seek the legally required information lacking in Venture Global's application, as outlined in these comments, and allow further opportunity for public comment and a public hearing.

Sincerely,

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