





November 1, 2023

Melissa Sherman Louisiana Department of Natural Resources Office of Coastal Management 617 North 3rd Street Baton Rouge, LA 70804 melissa.sherman2@la.gov

RE: Venture Global CP2 LNG, LLC & Venture Global CP Express, LLC Supplemental Comments

Dear Ms. Sherman,

Healthy Gulf, ¹ Sierra Club (as co-counsel for itself and Healthy Gulf), ² and Earthjustice ³ (as co-counsel for Healthy Gulf and Sierra Club) (hereinafter collectively "Healthy Gulf") submit the following supplemental comments in opposition to the applications for coastal use permits by Venture Global CP2 LNG, LLC (CUP No. P20211131) and Venture Global CP Express, LLC (CUP No. P20211132) (collectively, "Applicant" or "Venture Global"). The Applicant seeks approval from the Louisiana Department of Natural Resources' Office of Coastal Management ("DNR") to construct and operate a methane gas liquefaction, storage, and export facility that would occupy or affect over 775 acres in Cameron Parish, and to construct 85.4 miles of a 48-inch diameter natural gas pipeline as well as 6.0 miles of a 24-inch diameter lateral pipeline, and associated above ground facilities.

As previously stated in Healthy Gulf's comments submitted on September 9, 2022, and December 9, 2022 (hereinafter collectively "original comments"), DNR must deny the Applicant's CUP applications under its regulatory and constitutional public trustee duties due to the proposed projects' immense adverse environmental impacts and the Applicant's many failures to provide information sufficient to assess, balance, or properly mitigate those impacts, in addition to other shortcomings. DNR must now consider additional new information presented in these supplemental comments when evaluating the Applicant's CUPs that show the proposed projects' real and potential adverse environmental impacts are far more severe and extensive than previously recognized. These supplemental comments detail the Applicant's continued violations at an already permitted and operational LNG export facility owned by the same parent company. They

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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 Sierra Club is an environmental organization that champions solutions to the climate crisis, and works for clean air, safe water, land protection, and a vibrant natural world.

³ Earthjustice is a public-interest environmental law firm with offices nationwide, including attorneys and staff based in Louisiana and Texas.

also highlight the greater risk to the area related to the Southwest Louisiana wildfires, saltwater intrusion, and the Ellender Ferry burn site. Additionally, these comments highlight the Louisiana Climate Action Plan which DNR must consider in its analysis of this CUP and the need for greater public participation. Commenters submit that the costs of these real and potential adverse impacts, together with those described in their original comments, outweigh the benefits of the proposed projects—especially in light of the industrial tax exemptions that Venture Global has applied for and is slated to receive—such that DR, as a public trustee, cannot approve these projects.

I. DNR must consider Venture Global's history of violations and the likelihood of far greater air pollutant emissions, as well as fire heat and light pollution impacts, than accounted for in the Applications.

New information since submitting the original comments related to Venture Global's CUP application for the CP2 LNG facility demonstrates that the proposed project's adverse impacts will be far greater and its environmental costs far higher than presented in that application (to the extent they are presented at all). Specifically, Venture Global's Calcasieu Pass LNG terminal, *1*) is regularly emitting nitrogen oxides (NOx) and other air pollutants at higher levels than permitted, ⁴ 2) is suffering extensive engineering failures and leaks, ⁵ and 3) has applied to increase air permit limits for most of its pollutant emissions ⁶ — including a nearly 20% increase of NOx emissions and also allowed fire flaring. The Calcasieu Pass LNG terminal is sited immediately adjacent to the proposed CP2 LNG terminal and is proposed to be technologically identical modular

gas-lease-auction-drilling-production-gulf-mexico.

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⁴ 2022 1st Semi-Annual Monitoring Report, Title V Air Permit No. 0560-00987-v4 (Sept. 30, 2022) ("2022 Monitoring Report"), Louisiana Department of Environmental Quality ("LDEQ") Electronic Document Management System ("EDMS") Document No. 13605970 (AI No. 194203), *available at* https://edms.deq.louisiana.gov/app/doc/view?doc=13605970 (attached as Attachment 1); Revised 2022 1st Semi-Annual Monitoring Report, Title V Air Permit No. 0560-00987-v4 (March 30, 2023) ("Revised 1st 2022 Monitoring Report"), LDEQ EDMS Document No. 13795262 (AI No. 194203), *available at* https://edms.deq.louisiana.gov/app/doc/view?doc=13795262 (attached as Attachment 2); 2022 2nd Semi-Annual Monitoring Report, Title V Air Permit No. 0560-00987-v4 (March 30, 2023) ("2nd 2022 Monitoring Report"), LDEQ EDMS Document No. 13795260 (AI No. 194203), *available at* https://edms.deq.louisiana.gov/app/doc/view?doc=13795260 (attached as Attachment 3).

⁵ See Reuters, Venture Global LNG delays commercial ops at Calcasieu in Louisiana, (Mar. 31, 2023) (attached as Attachment 4), available at <a href="https://www.reuters.com/article/usa-venture-global-lng-calcasieu-louisia/venture-global-lng-calcasieu-louisia/venture-global-lng-delays-commercial-ops-at-calcasieu-in-louisiana-idINL1N3631NH?utm_medium=email&_hsmi=252608681&_hsenc=p2ANqtz-9ILKqpAyTk4_46NjaiyFPfmfA9I7TAAkvWYGWgnnocllTSwW59Km2xUS49lcP1iCLn3-QIIDQKUbtxkd7FTcvm0AmRu17QUymWFJS_ekMlp7XC5F0&utm_content=252608681&utm_source=hs_email; S&P Commodities, Start of commercial operations at Calcasieu Pass delayed, Venture Global LNG tells US regulator, ("Venture Global LNG has issued force majeure to some of its spot and long-term customers saying its commercial operations date or COD will be delayed "because it continues to face periodic reliability challenges," according to one of at least four traders with knowledge of the matter who spoke to S&P Global."), (Mar. 30, 2023), available at https://www.spglobal.com/commodityinsights/en/market-insights/podcasts/crude/230410-laguros-oil-

⁶ Title V Permit Renewal and Significant Modification and PSD Major Modification Application ("CP 2023 Modification Application") (March 2023), LDEQ EDMS Document No. 13730261 (AI No. 194203), *available at* https://edms.deq.louisiana.gov/app/doc/view?doc=13730261 and excerpted at Attachment 5.

construction like the proposed CP2 LNG terminal, meaning its permit violations, pollutant emissions increases, and other shortcomings can be expected, *i.e.* are foreseeable, at CP2 LNG. So, this new information shows Venture Global's CUP application for the CP2 LNG terminal greatly underestimates the adverse impacts of the proposed terminal—including from air, fire, and light pollution—and that the facility will infringe on existing uses in the area far more than currently accounted for.

Venture Global's inability or unwillingness to meet its air pollutant emissions limitations is apparent on the face of its semi-annual monitoring reports. After initially disclosing extensive exceedances of air permit limitations in a September 2022 "first" semi-annual monitoring report, Venture Global's additional and revised reports about six months later showed the problems were far worse. Venture Global submitted two reports on March 30, 2023: 1) a revised 2022 1st Semi-Annual Monitoring Report for its Calcasieu Pass LNG terminal that showed at least 75 separate "deviations" encompassing 3,216 hours of violations or failures to meet its permit limitation in only six months—i.e. more than two times the violations and 20 times the hours originally reported; and 2) a 2nd Semi-Annual Monitoring Report for its Calcasieu Pass LNG terminal in 2022 that showed Venture Global remained unable to meet its permit limitations throughout 2022 with at least 63 separate "deviations" encompassing more than 500 hours during the second half of 2022.8 The failures during the second half of 2022 occurred even after November 2022, when the Revised 1st 2022 Monitoring Report suggests a fix was expected. The additional pollutant releases from these permit violations were substantial, including as much as 8,346 pounds (i.e. more than 4 tons) of unlawful NOx emissions from just *one* 25-hour "deviation" in late December $2022.^{10}$

Venture Global's own reports also show its Calcasieu Pass LNG terminal is suffering extensive engineering failures and leaks and regularly emitting nitrogen oxides (NOx) ¹¹ and other air pollutants at higher levels than permitted. Moreover, the March 2023 report revision shows that Venture Global is incapable of recognizing the scope of its operational problems in real time. The unlawful pollutant emissions that resulted from its engineering failure are worse than initially

⁷ See Revised 1st 2022 Monitoring Report, infra, note 4.

⁸ See 2nd 2022 Monitoring Report, infra, note 4.

⁹ See, e.g., Revised 1st 2022 Monitoring Report at page 6 (re "Corrective Actions"), infra note 4.

¹⁰ See id.

¹¹ NOx emissions increases are particularly unacceptable and unlawful for CP2 LNG because current modeling and air permits (like from adjacent Calcasieu Pass LNG and neighboring Commonwealth LNG) already allow NOx emissions that contribute to exceedances of public health-based standards that will disproportionately burden environmental justice communities. *See* Petition For Action Regarding Deficiencies In The Louisiana And Texas Clean Air Act Programs By Abusing Significant Impact Levels, In Violation Of The Prevention Of Significant Deterioration Permitting Program, National Ambient Air Quality Standards, And Title Vi Of Civil Rights Act, page 26-29, 25-34, *available at* https://earthjustice.org/wp-content/uploads/2023/05/petition-epa-under-caa-title-vi-resils.pdf, excerpt attached as Attachment 6.

understood. Indeed, Venture Global reported still more violations for Calcasieu Pass LNG's first half of 2023 semi-annual reports posted in October 2023 for January – June 2023. ¹² Accordingly, DNR can expect CP2 LNG *1*) will not operate optimally and *2*) will have significantly greater adverse environmental impacts than presented in its applications.

Remarkably, on March 17, 2023, within a few days of submitting its semi-annual monitoring reports, Venture Global also applied to modify its air permit to increase allowed emissions by hundreds of thousands of tons per year—so, rather than using some of its profits toward the costs of fixing its problems, Venture Global is trying to push those costs off onto the public and to the detriment of public health. Venture Global submitted to the Louisiana Department of Environmental Quality ("LDEQ") an air permit renewal application seeking to increase Calcasieu Pass LNG's emissions by hundreds of thousands of tons per year, as Table 1-2 from its permit application shows:¹³

Table 1-2. Emissions Summary - Currently Permitted and Proposed Emission Rates

Pollutant	Current Permit ^[1] (tpy)	Proposed (tpy)	Change (tpy)
PM ₁₀ /PM _{2.5}	236.00	276.24	(+) 40.24
SO ₂	96.25	126.91	(+) 30.66
NOx	459.51	550.92	(+) 91.41
СО	705.63	936.06	(+) 230.43
VOC	87.17	202.61	(+) 115.44
CO ₂ e	3,970,643	4,651,031	(+) 680,388
1,3-Butadiene	0.009	0.010	(+) 0.001
Acetaldehyde	0.86	1.16	(+) 0.30
Acrolein	0.115	0.189	(+) 0.074
Benzene	0.39	0.55	(+) 0.16
1,4-Dichlorobenzene	< 0.01	0.10	(+) 0.09
Ethylbenzene	0.69	0.95	(+) 0.26
Lead	0	0.05	(+) 0.05
Formaldehyde	1.80	2.10	(+) 0.30
n-Hexane	5.30	15.16	(+) 9.86
Naphthalene	0.08	0.06	(-) 0.02
PAH	0.048	0.063	(+) 0.015
Propylene Oxide	0.62	0.84	(+) 0.22
Toluene	2.93	4.00	(+) 1.07
Xylenes	1.40	1.95	(+) 0.55
Ammonia	162.06	162.09	(+) 0.03
Barium (and compounds)	0.011	0.041	(+) 0.030
Cadmium (and compounds)	0.003	0.010	(+) 0.007
Chromium VI (and compounds)	0.001	0.015	(+) 0.014
Copper (and compounds)	0.003	0.006	(+) 0.003
Manganese	0	0.05	(+) 0.05
Hydrogen Sulfide	0.04	0.53	(+) 0.49
Nickel (and compounds)	0.002	0.021	(+) 0.019
Selenium (and compounds)	0.001	-	(-) 0.001
Zinc (and compounds)	0.11	0.32	(+) 0.21

 $[\]ensuremath{^{[1]}}$ Based on the Turbine Final Operating Mode.

Venture Global confirms that the increased emissions are predictable from its current technology and planned operations when it acknowledges that it is "not proposing any new capital

¹² 1st Half of Reporting Year 2023 Title V Semiannual Monitoring Report (Oct. 25, 2023), EDMS Document No. 14006090, *available at* https://edms.deq.louisiana.gov/app/doc/view?doc=14006090.

¹³ See CP 2023 Modification Application, pages 22-23 of 719, available at https://edms.deq.louisiana.gov/app/doc/view?doc=13730261 and excerpted at Attachment 5.

expenditure projects, physical changes to the currently permitted emission sources, or expansion to the existing Terminal Facilities in [its a]pplication." Notably, Venture Global attributes the bulk of these proposed permit limit increases to its "duct burners" (a part of the turbines) and its "hot oil heaters" emissions, as well as to its flare systems. ¹⁵ As Venture Global also attributes the Calcasieu Pass LNG emission limits exceedances to it hot oil heaters and turbines, ¹⁶ it appears that the company cannot or will not fix its operations to meet air permit limits, and is modifying its air permits to allow the pollutant emissions problems instead.

Importantly, Venture Global appears to have profited from these failures and violations, not just because it has not paid for necessary repairs, but also because it has used its engineering failures as an excuse to stay in "commissioning" phase and so to sell its product at higher prices than its pre-construction long-term purchase contracts set for product during the regular "operations" phase. ¹⁷ Indeed, while LDEQ issued a compliance order memorializing permit violations at Calcasieu Pass, ¹⁸ the agency agreed to engage in settlement negotiations through March 2024 outside the public eye; Petitioners have seen no indication from LDEQ that it will penalize Venture Global in any manner equivalent to its windfall profits or the burden it has placed on the communities and environment in Cameron Parish.

DNR also must not allow the impacts of the increased light and fire pollution that CP2 would bring to the coastal zone and Cameron Parish. Below are photographs showing some of the enormous flames coming from the Calcasieu Pass LNG terminal flares and related LNG carriers¹⁹—confirming the horrific health, environmental, and visual impacts that will only increase in Cameron Parish, the Gulf Coast, and the Mississippi River if DNR approves the CUPs:

¹⁴ *Id.* at page 597 of 719.

¹⁵ *Id.* pages 23-24 of 719, Table 1-3.

¹⁶ See 2022 Monitoring Report, passim, available at https://edms.deq.louisiana.gov/app/doc/view?doc=13605970, attached as Attachment 1.

¹⁷ See, e.g., IEEFA U.S.: Calcasieu Pass LNG's unreliable operations result in excessive pollution and profits, Institute for Energy Economics and Financial Analysis (Oct. 25, 2023), available at https://ieefa.org/articles/ieefa-us-calcasieu-pass-lngs-unreliable-operations-result-excessive-pollution-and-profits (attached as Attachment 7).

¹⁸ LDEQ Consolidated Compliance Order & Notice of Potential Penalty (June 29, 2023), EDMS Document No. 13873284, *available at* https://edms.deq.louisiana.gov/app/doc/view?doc=13873284 (attached as Attachment 8).

¹⁹ These are a few of the more than 40 photographs of flames and flaring events at Calcasieu Pass that John Allaire documented, themselves representing "only a portion of the ongoing flaring events occurring at this facility," and submitted (with comments) to FERC on March 13, 2023, Docket No. CP22-21, Accession No. 20230313-5068. Those comments and photographs are available at

https://elibrary.ferc.gov/eLibrary/filelist?accession number=20230313-5068 and incorporated by reference herein.







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Flaring releases harmful chemicals, is associated with a host of adverse public health and environmental impacts, and weighs heavily against environmental justice, especially at this site in Cameron Parish.²¹

Ultimately, Venture Global has demonstrated that it cannot or will not abide by its air permit limitations and that its LNG terminals will bring more detrimental environmental impacts than DNR (and other agencies) have considered for their permitting decisions. DNR must take all these past, present, and foreseeable future adverse impacts to the coastal zone and Louisiana into account for its decision on both CUP applications. The failures at Calcasieu Pass LNG indicate that the current impacts to the environment are worse than accounted for and that the proposed LNG terminal Application significantly understates the adverse environmental impacts. DNR

²⁰ *Id*.

²¹ See, e.g., Chen C., et al., Black Carbon Emissions and Associated Health Impacts of Gas Flaring in the United States, Atmosphere 13(3), 385 (February 2022), available at https://doi.org/10.3390/atmos13030385; Cushing L., et al., Up in smoke: characterizing the population exposed to flaring from unconventional oil and gas development in the contiguous US, Environmental Research Letters, vol. 16, no. 16 (February 23, 2021), available at https://iopscience.iop.org/article/10.1088/1748-9326/abd3d4; NASA website, "Earth Observatory," Scientists Show Connection Between Gas Flaring and Arctic Pollution, (visited April 16, 2023), available at https://earthobservatory.nasa.gov/images/87910/scientists-show-connection-between-gas-flaring-and-arctic-pollution; Fawole, O., et al., Gas flaring and resultant air pollution: A review focusing on black carbon, Environmental Pollution, vol. 216, pages 182-197, (Sept. 2016), ("Gas flaring is a prominent source of VOCs, CO, CO₂, SO₂, PAH, NO_X and soot (black carbon)"), available at https://www.sciencedirect.com/science/article/abs/pii/S0269749116304638?via%3Dihub.

cannot lawfully grant the CUP without a full and careful consideration of the additional adverse impacts that Venture Global's Calcasieu Pass LNG facility shows are reasonably foreseeable for its proposed CP2 LNG terminal.

II. DNR must account for Venture Global's industrial tax exemptions when it performs its public trust duty.

Venture Global has applied for and is likely to receive millions of dollars in tax exemptions under Louisiana's Industrial Tax Exemption Program (commonly known as ITEP),²² such that Venture Global's private interests may retain—Cameron Parish may never receive—all or most of the project's purported economic benefits. According to the Louisiana Legislative Auditor's 2022 report, "ITEP cost local governments in Louisiana [and estimated] \$1.5 billion in foregone property tax revenue in calendar year 2021.²³ The same report shows Cameron Parish already foregoes the most revenue due to ITEP tax breaks for industry.²⁴ DNR must account for the dollar amount of any such ITEP or other tax exemption(s): What tax exemptions is Venture Global receiving or expected to receive? For how much and over what time period? What Cameron Parish entities will those exemptions affects and how (e.g. the school system, the sheriff's department, the general fund)? And how much do those exemptions lessen any purported economic and social benefits when DNR weighs against the projects' adverse environmental impacts? DNR cannot meet its public trustee duty and cannot approve the proposed projects without including these and other offsets²⁵ from purported economic benefits for a full economic accounting.

III. DNR must consider the impacts of climate change in evaluating the CUP applications.

The Coastal Use Guidelines mandate that DNR not only consider cumulative impacts in its analysis but also avoid adverse cumulative impacts to the maximum extent possible.²⁶ Recently, Southwest Louisiana was plagued by wildfires which burned thousands of acres of marsh land in Cameron Parish.²⁷ Governor John Bel Edwards blames climate change–fueled by the burning of

²² See Louisiana Economic Development website, available at https://www.opportunitylouisiana.gov/business-incentives/industrial-tax-exemption.

²³ Industrial Tax Exemption Program, Program Statistics and Fiscal Impact on Local Governments, at 3 (Oct. 10. 2022), available at https://app.lla.la.gov/publicreports.nsf/0/cc7686f9911ead8b862588d80069d4bb/\$file/00028368d.pdf.

²⁴ *Id.* at 5.

²⁵ See, e.g., the environmental and resulting economic impacts to the local commercial fishing industry discussed below

²⁶ LAC 43:I.701.F.15 ("Information regarding the following general factors shall be utilized by the permitting authority in evaluating whether the proposed use is in compliance with the guidelines . . . likelihood of, and extent of impacts of, resulting secondary impacts and cumulative impacts[.]"); LAC 43:I.701.G.10 ("It is the policy of the coastal resources program to avoid the following adverse impacts. To this end, all uses and activities shall be planned, sited, designed, constructed, operated, and maintained to avoid to the maximum extent practicable significant . . . adverse effects of cumulative impacts[.]").

²⁷ Emily Burleigh, *Marsh fires extinguished: Thousands of acres burned in Cameron Parish*, American Press (Aug. 22, 2023), available at <a href="https://www.americanpress.com/2023/08/22/marsh-fires-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousands-of-acres-extinguished-thousand

fossil fuels among other things—for these unprecedented wildfires.²⁸ DNR must not only consider the record number and increase likelihood of wildfires, but also the vulnerability of the site.

Dr. Torbjörn Törnqvist, a professor in earth and environmental sciences at Tulane University, who studies long term subsidence rates and causes in coastal Louisiana recently warned against siting massive gas export terminals like the proposed CP2 LNG terminal in such risky locations. ²⁹ The CP2 proposal "is at the epicenter of Louisiana's coastal land loss crisis . . . That's due not only to sea-level rise and climate change, but also because the area is extremely low-lying; is naturally sinking; and is not close to a source of sediments, like a river, that could help the coastline hang on" said Dr. Törnqvist. ³⁰ Thus, DNR must consider and avoid the cumulative impacts of climate change when evaluating the CUP applications for the Applicants–especially, after the loss of thousands of acres of valuable marsh land.

Lastly, DNR must consider and incorporate the Louisiana Climate Action Plan ("Climate Action Plan") when analyzing these CUP applications. On August 19, 2020, Governor Edwards signed Executive Order JBE 2020-18 which established the Climate Initiative Task Force ("Task Force"). The Task Force duties include, but are not limited to:

- A. Review[ing] and comment[ing] on ongoing efforts to update the state's greenhouse gas emissions inventory;
- B. Investigat[ing] and mak[ing] recommendations for the reduction of greenhouse gas emissions originating in Louisiana to achieve the following greenhouse gas emission reduction goals:
 - 1. By 2025, reduce net greenhouse gas emissions by 26-28% of 2005 levels;
 - 2. By 2030, reduce net greenhouse gas emissions by 40-50% of 2005 levels; and
 - 3. By 2050, reduce greenhouse gas emissions to net zero;
- C. Develop[ing] policies, strategies, and incentives designed to achieve the net emissions reduction targets established in this Order, while improving the health

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<u>burned-in-cameron-parish/</u> (attached as Attachment 9); see also Sara Cline, In a state used to hurricanes and flooding, Louisiana is battling an unprecedented wildfire season, AP News (Sept. 18, 2023), available at https://apnews.com/article/louisiana-wildfire-b9d8968c1ce98b009c3ce95fa08a8f40 (attached as Attached 10) ("Stoked by record-breaking heat, drought and plentiful dry vegetation to fuel the flames, more than 550 fires – in August alone – ravaged tens of thousands of acres of Louisiana land[.]").

²⁸ Sara Cline, *Louisiana plagued by unprecedented wildfires, as largest active blaze grows*, AP News (Aug. 29, 2023), available at https://apnews.com/article/louisiana-wildfire-f396f586d0404e4ceefa194ffbff8a82 (attached as Attachment 11) (Governor Edwards states that increased wildfires may be the "new normal").

²⁹ Miranda Wilson, *Emissions, rising seas test 'game-changer' LNG project*, E&E News by Politico (Oct. 17, 2023), available at https://subscriber.politicopro.com/article/eenews/2023/10/17/emissions-rising-seas-loom-over-game-changer-lng-project-00119086 (attached as Attachment 12).

 $^{^{30}}$ *Id*.

and welfare of the people of Louisiana and advancing Louisiana's economic and energy profile.³¹

On February 1, 2022, the Task Force finalized the Climate Action Plan which among other things tasks DNR with developing a new zero industry standard through the use of its permitting authority. ³² DNR must ensure that these CUP applications align with the policies, strategies, and incentives articulated in the Climate Action Plan.

IV. DNR must consider the impacts of saltwater intrusion on the Calcasieu Ship Channel.

DNR must also consider issues raised by saltwater intrusion. The proposed excavation of Monkey Island³³ would increase a section of Calcasieu Pass (the mouth of the Calcasieu Ship Channel "CSC") from a width of 400 feet to approximately 550 feet and change this stretch of the channel into a trapezoid (Figure 2)³⁴.

³¹ Exec. Order No. JBE 2020-18 (August 19, 2020).

³² Louisiana Climate Action Plan, Climate Initiatives Task Force (Feb. 2022), at 55, available at https://gov.louisiana.gov/assets/docs/CCI-Task-force/CAP/Climate Action Plan FINAL 3.pdf.

³³ Venture Global proposes to excavate 6.4 million cubic yards of Monkey Island ("Dredge Prism" in Figure 1), and transport the material through a slurry pipeline to the southern edge of Calcasieu Lake for "marsh creation" (Figure 1). *See* page 11 at https://srfrxprod.dnr.state.la.us/dnrservices/redirectUrl.jsp?dID=14181362.

³⁴ *Id*. at page 4.

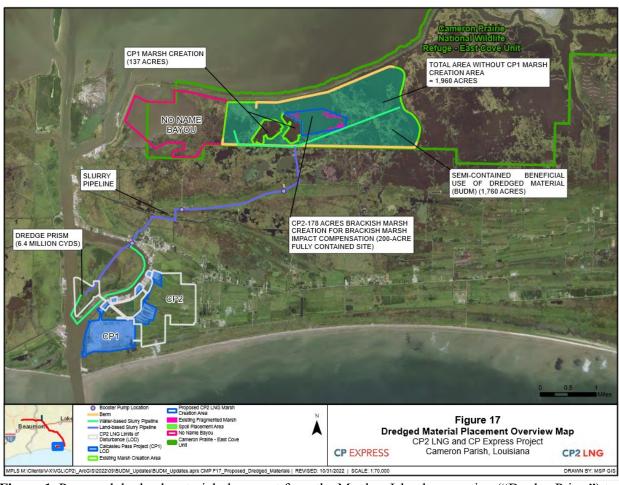


Figure 1. Proposed dredged material placement from the Monkey Island excavation ("Dredge Prism") to a marsh creation site south of Calcasieu Lake.³⁵

³⁵ See page 11 at https://srfrxprod.dnr.state.la.us/dnrservices/redirectUrl.jsp?dID=14181362.

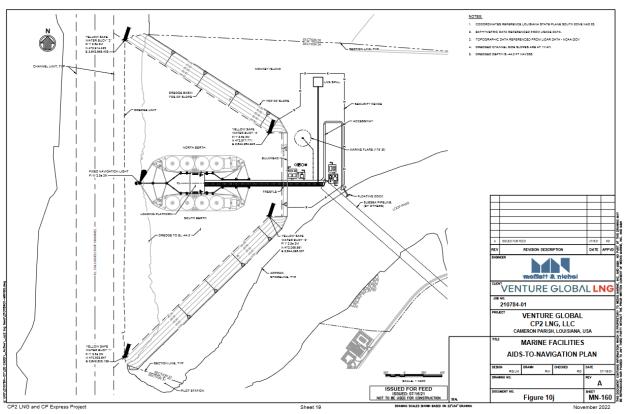


Figure 2. Schematic of the proposed CP2 LNG marine facility after excavating 6.4. million cubic yards of Monkey Island.³⁶

As explained in the December 9, 2022 comments on the CP2 LNG terminal, due to historical modifications to the Calcasieu River, the CSC already suffers from saltwater intrusion, which contributes to widespread land loss in the surrounding area.³⁷

In particular, tidal flow from the Gulf of Mexico pushes saltwater upstream. As freshwater from the Calcasieu River approaches the coast, the denser saltwater remains toward the bottom of the channel and the thinner more buoyant layer of freshwater floats above. ³⁸ This creates a salt wedge. Depending on the rainfall conditions upstream and discharge (velocity and volume) from the Calcasieu River, the "toe" of the salt wedge can migrate up and down the CSC. ³⁹

³⁶ *Id.* at page 4.

³⁷ See Earthjustice and Sierra Club, CP2 LNG Terminal Application for Coastal Use Permit, CUP #P20211131 Comments, at 27-31 (Dec. 9, 2022).

³⁸ See The Water Institute of the Gulf, *Identifying Sediment Sources and Optimizing Placement of Dredge Material to Protect Critical Infrastructure – Port of Lake Charles*, at pg. 4-5 (2019), *available at* https://thewaterinstitute.org/assets/docs/reports/Identifying-sediment-sources-and-optimizing-placement-of-dredge-material.pdf.

³⁹ *Id*.

Understanding the dynamics of this salt wedge is important because it can dramatically affect navigational safety and dredging needs in the CSC. Crucially, salinity can increase flocculation of sediment in the CSC. ⁴⁰ As larger particles tend to settle to the channel bottom more readily than finer particles, this can wreak havoc for navigation and can increase dredging frequency and cost. ⁴¹

The Applicant's CUP application lacks critical numerical modeling of how the proposed Dredge Prism could affect the existing salt wedge and flocculation issues already identified in the CSC. DNR should require the Applicant to conduct such an analysis to understand potential navigation safety issues, dredging needs and costs, and saltwater intrusion in Calcasieu Lake and surrounding wetlands.

V. DNR must evaluate the risks posed by the proximity of the proposed CP Express pipeline to the Ellender Ferry hazardous waste disposal site.

A significant concern of and risk to the local community in Cameron and Calcasieu Parishes involves the migration and/or disturbance of legacy toxic pollutants in and around the industrial ship channel, which would harm local communities and fisheries. The Ellender Ferry hazardous waste disposal site is located just north of the Cameron-Calcasieu Parish line near the Ellender Ferry Bridge. It is located approximately 4 miles north of Hackberry adjacent to Louisiana Highway 27, near the Intracoastal Waterway, part of the old canal connected to Mud Lake and the Calcasieu Ship Channel, and marsh wetlands. The area is surrounded by wetlands and waterbodies. The site was operated as a solid and liquid waste disposal and burning facility from the late 1950s to the early 1970s. ⁴² The site contains several buried pits and a former burn area where primarily vinyl chloride and polyethylene oils and waxes were received and burned on site. ⁴³

⁴⁰ *Id.* (flocculation is the amalgamation of smaller finer sediment particles into larger particles).

⁴¹ *Id*.

⁴² State of Louisiana v. Browning-Ferris, Inc. and Olin Corp., Case No. 80-4047 (14th JDC 1980), "Petition" at Paragraphs V-VIII, LDEQ EDMS Document No. 77690; "Settlement Agreement", at Paragraphs 3-4 (July 2, 1987), LDEQ EDMS Document No. 7382437; Letter from EPA to LDEQ, (Oct. 29, 1987), LDEQ EDMS Document No. 8815012 [hereinafter, "EPA NPL Letter"].

⁴³ See EPA NPL Letter. EPA evaluated the site but found that "[d]ue to the lack of sufficient ground and surface water targets" the site was not submitted to the National Priorities List and EPA declined to conduct remedial activities under the Comprehensive Environmental Response, Compensation and Liability Act of 1980. However, given the continued presence of pollutants of concern, both the state and federal agencies must more closely inspect the risks associated with the site and the existing and proposed development in the wetlands and waters directly adjacent to the capped closure.

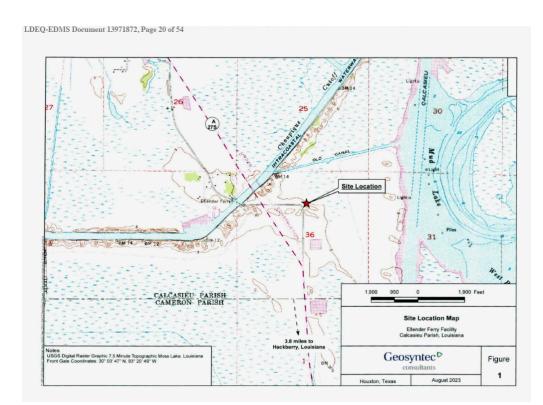


Figure 3. Location of Ellender Ferry site with specific identification of the proposed channel sand remediation location.⁴⁴

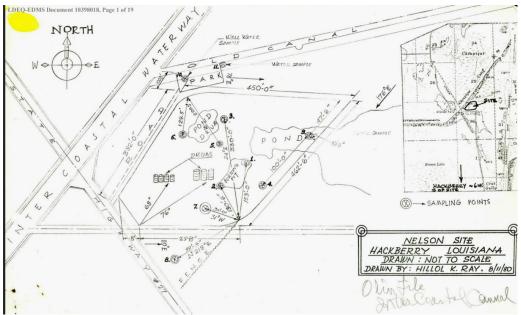


Figure 4. Map rendering of the "Nelson Site", also known as the Ellender Ferry site. 45

⁴⁴ See Channel Sand EISB Work Plan, Ellender Ferry Facility, Calcasieu Parish, Louisiana, Geosyntec consultants (Aug. 2023), LDEQ EDMS Document No. 13971872, Page 20 of 54, available at https://edms.deq.louisiana.gov/app/doc/view?doc=13971872.

⁴⁵ See also all monitoring reports and remediation planning for the site on LDEQ's EDMS system, LDEQ EDMS Document No. 1038018, Page 1 of 19, AI No. 4373, available at

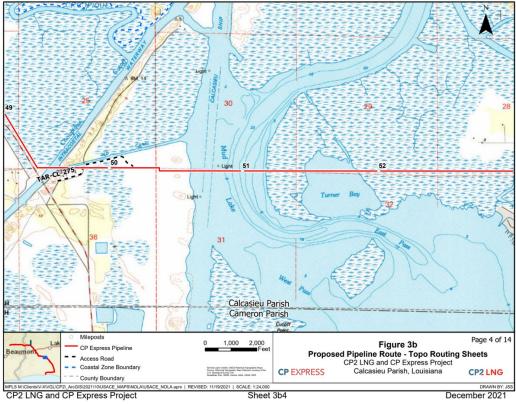


Figure 5. Proposed CP Express pipeline route just north of the Ellender Ferry site.

The CP Express Pipeline route would traverse less than 1,000 feet north of the designated capped closure burn pit site on property that was part of this legacy disposal area. To date, in accordance with terms of the 1987 Settlement Agreement and Closure Plan, the owner conducts groundwater monitoring to detect the ongoing presence and/or migration of toxic pollutants around the capped burn pit closure site. Many of the monitoring locations have consistently indicated detectable toxic pollutants. ⁴⁶ For example, the monitoring data included at Appendix C of the 2022 Annual Monitoring Report ⁴⁷ identified the following listed pollutants at the corresponding monitoring sites shown in figure 6 below:

- o MW-3A (southwest of the capped area): Vinyl chloride
- o MW-5 (west-northwest of the capped area): 1,1,2-Trichloroethane; 1,2-Dichloroethane; Chloroform; Vinyl chloride

https://edms.deq.louisiana.gov/edmsv2/quick-search.

⁴⁶ Which has prompted the preparation and recent approval of a corrective plan for proposed remediation to address the continued presence of volatile organic compounds in groundwater underlying the southern capped area of the site. *See* Channel Sand EISB Work Plan, Ellender Ferry Facility, Calcasieu Parish, Louisiana, Geosyntec consultants (Aug. 2023), LDEQ EDMS Document No. 13971872. *See also* all monitoring reports and remediation planning for the site on LDEQ's EDMS system, AI No. 4373, *available at* https://edms.deq.louisiana.gov/edmsv2/quick-search.

⁴⁷ 2022 Annual Groundwater Monitoring Report, Ellender Ferry Facility, Calcasieu Parish, Louisiana, Geosyntec consultants (March 2023), LDEQ EDMS Document No. 13753032 [hereinafter, "2022 Report"].

- o MW-7 (northeast of the capped area): 1,1,2-Trichloroethane; 1,1-Dichloroethene; Chloroform; Trichloroethene; Vinyl chloride
- o MW-8 (west of the capped area): 1,1,2-Trichloroethane; 1,1-Dichloroethene; 1,2-Dichloroethane, Trichloroethene, Vinyl chloride
- o MW-9 (west-southwest of the capped area): 1,1,2-Trichloroethane; 1,1-Dichloroethane; 1,1-Dichloroethane; 1,2-Dichloroethane; Chlorobenzene; cix-1,2-Dichloroethene; trans-1,2-Dichloroethene; Trichloroethene
- o CAM-OW-2 (west-southwest of the capped area): Vinyl chloride

And monitoring data shared as recent as August 2023 indicates the continued presence and potential migration of toxic pollutants from the burn pit.⁴⁸

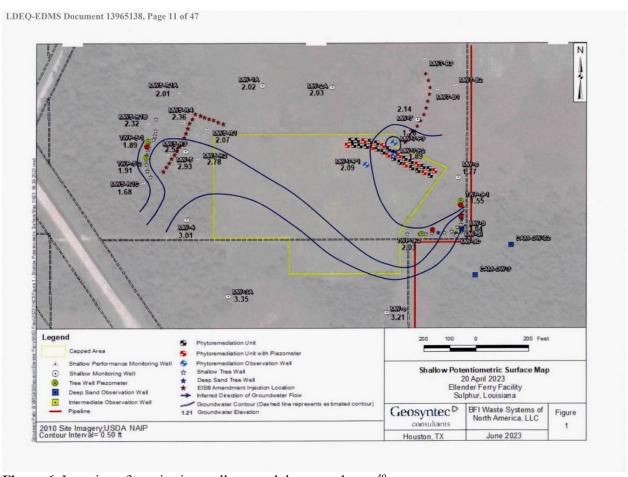


Figure 6. Location of monitoring wells around the capped area.⁴⁹

⁴⁸ First 2023 Semi-Annual Sampling Event, Ellender Ferry Facility, Calcasieu Parish, Louisiana, Geosyntec consultants, LDEQ EDMS Document No. 13965138 (August 2023), *available at* https://edms.deq.louisiana.gov/app/doc/view?doc=13965138.

⁴⁹ Groundwater Monitoring Data, First 2023 Semi-Annual Sampling Event, Geosyntec consultants (Aug. 2023), LDEQ EDMS Document No. 13965138, (AI No. 4373). Page 11 of 47, *available at* https://edms.deq.louisiana.gov/app/doc/view?doc=13965138.

The proposed CP Express pipeline will be located parallel to the capped closure site at Ellender Ferry, approximately 1,000 feet from the capped closure, and even closer to the monitoring wells located north of the capped closure. For example, monitoring well 7 is located just to the northeast of the capped site, between the capped closure and the proposed pipeline route. As indicated above, testing of this monitoring well continues to indicate the presence of harmful pollutants and the northern migration of contaminants from the capped site. Contaminants have also been identified in monitoring wells to the south and east of the capped site at monitoring wells 6, 8, and 9. Of additional concern is the apparent lack of monitoring at other locations beyond the capped burn pit but within the entire historic footprint of the waste site. Based on the information available, it does not appear that the Ellender Ferry site plume (the outer reaches in particular) has been adequately delineated or defined. The monitoring information available on the LDEQ EDMS system does not foreclose the concern of contaminants present in areas beyond those presently monitored directly adjacent to the capped site, and DNR must consider potential impacts of pipeline construction to the plume.

The DNR must assess and avoid the potential threat posed by proximity of the CP Express Pipeline to the Ellender Ferry Hazardous Waste Site. In accordance with its duties as a public trustee and the Office of Coastal Management ("OCM") guidelines, the DNR must assess the potential for pipeline construction to impact or contribute to the disturbance and/or migration of known pollutants present at the site. More information is needed regarding the historical migration of pollutants detected in shallow and deep groundwater monitoring wells around the capped site, the extent of the plume of pollutants, and why the risk is limited to just the monitoring locations/wells immediately surrounding the capped site. The local community is extremely concerned about their increased risk of contaminant exposure through air, water, and soil and the continued harm to fisheries upon which much of the local economy depends. At present, there is no information in the application or record that appears to adequately address these concerns regarding the proximity of pipeline construction to the legacy hazardous waste site at Ellender Ferry. We are not aware of any information in the record indicating that the Applicant or the DNR have specifically investigated the risk of contamination present in the vicinity of Ellender Ferry and the adjacent proposed pipeline route.

VI. DNR must engage the local commercial fishing community.

Venture Global's purported community outreach has failed to engage key local and threatened interests, *i.e.* the local commercial fishing community. The commercial fishing industry has a rich history in Cameron Parish, but is suffering and at risk of being wiped out entirely. Although the area's fisheries have suffered from historical development projects, the more recent boom of LNG terminal and pipeline development along the CSC has harmed the local commercial fishing industry in unprecedented ways. The imperiled commercial fishing community in Cameron Parish fears that the development and operation of both the proposed LNG terminal and pipeline will contribute direct and cumulative impacts that may result in the end of their trade, culture, and way of life as they know it. CP2 LNG and CP Express may not be the only contributor to harms that befall the local commercial fishing community in Cameron Parish, but DNR must consider the cumulative impact this terminal and pipeline project will have on a local industry already in

dire straits. The DNR cannot authorize this project because it is not consistent with the public interest at large, and especially, the survival of the local fishing economy in Cameron Parish.

DNR must directly engage the local stakeholders that have been and will be most affected by the development of LNG terminal projects on the CSC.⁵⁰ The local commercial fishermen are extremely worried about their future, the sustainability of the fisheries, and their ability to make a living and provide for their families. It can be difficult for this community to actively engage in the regulatory process without more direct outreach from the agency to better understand and assess the anticipated impacts of its actions on communities like the fisherfolk in Cameron.

The Applicant created a Community Advisory Group ("CAG") in 2019 as part of its community engagement plan for construction and operations of the Calcasieu Pass LNG project. Now, the Applicant represents to FERC that the CAG serves as its community liaison for the CP2 LNG project as well. ⁵¹ However, Venture Global admits that **the CAG does not include a single commercial fisherman**, or anyone directly involved in the commercial fishing/shrimping industry in Cameron Parish. Rather, Venture Global suggests that current members with connections to the industry is sufficient to allow Venture Global to address concerns of the fishing industry, despite its failure to include fishermen directly:

Although there are not any current shrimpers on the CAG, most of the members have direct connections to both the commercial and recreational shrimping and fishing industries through their parents, siblings, extended family, and neighbors. These individuals have knowledge and understanding of the local shrimping and fishing industries and are able to provide Venture Global valuable feedback and insight.⁵²

Most CAG members have direct connections to both the commercial and recreational shrimping and fishing industries through parents, siblings, extended family, and neighbors. If there are issues and/or concerns in Cameron Parish related to Project impacts on the shrimping community, the CAG will allow Venture Global LNG to hear and address them accordingly.⁵³

⁵⁰ The Venture Global Calcasieu Pass LNG, Sempra Cameron LNG, and Cheniere Energy Partners Sabine Pass LNG export terminal facilities are operational in this area, and various sources indicate that as many as 12 more facilities seeking to construct and operate in this already crowded coastal area.

⁵¹ FERC Docket Nos. CP22-21, CP22-22. *See, e.g.,* Venture Global's May 22, 2023 Response to FERC EIR, Socioeconomics 6 ("In addition to meeting with the CAG every quarter, the Venture Global team is in constant communication with the CAG members to ensure prompt identification and resolution of issues and concerns from the community. During the quarterly meetings, Venture Global provides company and project updates, as well as summaries of what the company has done in the community over the previous quarter. The CAG meetings also allow Venture Global the opportunity to hear community feedback as a group and properly address concerns. ... If there are issues and/or concerns in Cameron Parish, the CAG allows Venture Global an opportunity to hear and address them accordingly.").

⁵² Venture Global's May 22, 2023 Response to FERC EIR, Socioeconomics 6 (emphasis added).

⁵³ May 22, 2023 EIR Response, Attachment EIR10 Socioeconomics-2, "Engagement Plan for Local Commercial Shrimp Fishery", May 2023 [hereinafter, "Engagement Plan"]; Engagement Plan at 2, 3.0 Community Advisory Group.

Although Venture Global presents the CAG membership as representing "all parts of Cameron Parish"⁵⁴, its failure to include any member of the commercial fishing industry undermines its purpose, and especially its claims to engage and respond to concerns of the fishing community. Many locals – including commercial fisherfolk – are unaware of the existence of the CAG, let alone have been extended an invitation to join or participate. Additionally, Venture Global prepared a Shrimpers Engagement Plan, presented in response to FERC's requests for information, which offers no remedy for this unreasonable failure to include *any* commercial fishing representative in the CAG.

Venture Global shared its proposed "Engagement Plan for Local Commercial Shrimp Fishery" (the "Shrimpers Engagement Plan" or "Plan") that describes the company's "plan for engagement with local shrimper communities throughout development, construction, and operations of the [CP2 LNG] Project." Venture Global's stated objectives for the Plan include "fostering open communication and addressing concerns of local shrimp fishermen" as well as "provid[ing] updates, and encourag[ing] collaboration between involved parties." It states that the company "will rely on feedback it receives from direct outreach to local shrimp fishermen and also from the Community Advisory Group (CAG) to meet this objective." However, the Plan is woefully insufficient to meet its articulated aims because it not only ignores the Applicant's (and regulators') failure to engage the commercial fishermen in Cameron throughout the years-long process for both of its local LNG projects, but it also relies on an advisory group that excludes the fishermen. The underrepresentation of commercial fishing interests on the CAG completely undermines the Plan and proposed inclusion of fisheries related topics for consideration and feedback in future CAG meetings. Se

Venture Global claims that "CP2 LNG will continue to be engaged in Cameron Parish and is committed to being a responsible neighbor in the community, and is confident that CP2 LNG will not have significant impacts on commercial shrimp harvesting activities." ⁵⁹ If Venture Global were actually "committed to addressing concerns related to potential project impacts on commercial fisheries and the shrimping industry" ⁶⁰ it would, at a minimum, invite commercial fishermen and shrimpers to be members of the CAG. Instead, the flawed Plan relies entirely on

⁵⁸ *Id.* at 2-3, 4.0 Engagement to Minimize Impacts on Shrimp Harvest.

⁵⁴ Engagement Plan at 2, 3.0 Community Advisory Group ("The CAG has helped to ensure that *residents from <u>all parts</u> of Cameron Parish* are represented and can communicate promptly and directly with Venture Global LNG to express any concerns they have or to communicate adverse impacts that they or their neighbors have seen related to Calcasieu Pass LNG.") (emphasis added).

⁵⁵ 5.22.23 EIR Response, Attachment EIR10 Socioeconomics-2, "Engagement Plan for Local Commercial Shrimp Fishery", May 2023 [hereinafter, "Engagement Plan"].

⁵⁶ 5.22.23 EIR Response, Socioeconomics 2 Response; Engagement Plan, at 1, 1.0 Introduction.

⁵⁷ Engagement Plan, at 1, 1.0 Introduction.

⁵⁹ *Id.* at 2, 4.0 Engagement to Minimize Impacts on Shrimp Harvest.

⁶⁰ *Id.* at 2-3, 4.0 Engagement to Minimize Impacts on Shrimp Harvest.

group feedback that does not adequately represent these interests. Venture Global LNG represents that it has and will meaningfully engage with the local fishing community in Cameron, but that is not the case. This deficiency is most evident in the Applicant's dismissal of the impacts the commercial fishermen have already experienced, and their voiced concerns of cumulative impacts from construction of yet another terminal facility on the ship channel shared in comments on the docket.

Commercial fishermen in Cameron have already experienced harms from increased vessel traffic and dredging in the ship channel for LNG projects, including Venture Global's Calcasieu Pass and Sempra's Cameron LNG project. Channel dredging and wake from passing tankers traveling at unsafe speeds present serious threats to the fishermen's property (including vessels and traps) as well as their personal safety. Wake from speeding tankers move, destroy, and bury traps in disturbed silt and sediment that finds its way into local's boat slips preventing ingress/egress to their property, and is destroying the bank and fishing grounds. Fishermen have observed bank erosion prevention measures completely lost (e.g., heavy boulders placed near the banks to mitigate erosion washing onto shore). Fishermen struggle to find safe locations to wait out large vessel traffic passing at unsafe speeds, and even boat access to reach fishing grounds. There are concerns that there are no longer any safe spots to shrimp in Cameron because of the present large vessel traffic from the existing LNG terminal facilities and allowing additional terminal and marine berth development (according to FERC's FEIS) a 17% increase⁶¹ in vessel traffic will only contribute to these cumulative harms ultimately pushing out the local fishing economy. The fishing community fears for their livelihood, for the increased pollution from the project, and for the safety of themselves and their families living and working near the terminal facility and large tankers. Fishermen with decades of experience fishing in Cameron have observed that since the LNG vessel traffic began in the ship channel, the area has experienced a significant decline in the number of fish available and the accessibility of the fisheries with the increased traffic.

The DNR must conduct a cumulative impacts analysis of the Project's contribution to the existing impacts from other, operational LNG export facilities to the coastal resources of the CSC, including traffic, commercial fisheries, and the local commercial fishing community in accordance with the coastal use guidelines. ⁶² It must closely evaluate and assess these cumulative harms to the fisheries and local fishing economy and consider whether the addition of more traffic and terminal development in this area is sustainable and in the public interest. To accurately understand the onthe-ground impacts the fishing community is already experiencing, the DNR should engage this community directly and inquire as to the Applicant's community engagement, and the adequacy of its proposed Shrimper Engagement Plan to address concerns of this community throughout the entire process should the project proceed.

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⁶¹ FERC, Final Environmental Impact Statement for Venture Global CP2 LNG, LLC's et al CP2 LNG and CP Express Projects under CP22-21 et al., at 4-267, Dkt. No. CP22-21 (eLibrary No. 20230728-3008), available at https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230728-3008&optimized=false.

⁶² LAC 43:I.701(F)(15) and 701(G)(10).

Conclusion

Consequently, DNR must deny the Venture Global's CUP applications. As stated in the original comments, the Applications fail to provide the information necessary to conduct a proper analysis under DNR's public trustee duties in the Louisiana Construction and the Coastal Resources Management Act. Additionally, Venture Global has continued to violate its permits at its Calcasieu Pass LNG terminal establishing a pattern of wanton disregard for state laws and the public's health and safety. Moreover, DNR must consider the cumulative impacts of climate change as well as the impacts associated with constructing a pipeline in close proximity to a legacy hazardous waste site. Lastly, DNR should consider the fishermen in Cameron and Calcasieu Parish who have been overlooked and ignored in the permitting of LNG export facilities, which adversely affect their livelihood.

Respectfully submitted:

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