Gas Export Spotlight:

Venture Global Calcasieu Pass Facility Accidents

January 18 - May 31, 2022





Start of gas export production: Jan 19, 2022

First shipment: Feb 3, 2022

On January 18, 2022, one day before gas liquefaction first started from Venture Global's Calcasieu Pass (CP) facility, a "preventable release" of approximately 180,099 pounds of gas was released from the southernmost storage tank.

An investigation of this initial accident, as described in a CP report, found that the release was a "combination of a failure in the management of change process, lack of adherence to procedures, and lack of training," and that "ultimately the release could have been prevented if the facility had followed the procedure that was initially developed for directing the vent stream to the LP Flare rather than to the roof vent on the LNG tank."

This serious accident at the outset of CP's operations set the scene for what was to follow: months of shoddy operations evidenced by near constant flaring, while state regulators turn a blind eye.

Methodology: The information in this report has been compiled from two sources:

- 1. Venture Global Calcasieu Pass's reports to the Louisiana Department of Environmental Quality (LDEQ). The facility is required by law to report its accidents also known as upsets or incidents if the emissions exceed a certain threshold.
- 2. Documentation by Cameron Parish resident John Allaire, a retired environmental engineer living adjacent to the Calcasieu Pass facility. Mr. Allaire has documented flaring at the facility since operations began in January 2022.

2 Ibid

¹ LDEQ Office of Environmental Compliance, Air Quality Inspection Report. 11 March 2022, https://edms.deq.louisiana.gov/app/doc/view?doc=13206986

Finding #1:

There are operational problems at Calcasieu Pass (CP), as demonstrated by its near constant flaring.



Venture Global touts the quick construction of its Calcasieu Pass facility, noting that it was built in three years, the fastest that such a facility has ever been built. Yet there are consequences of the speedy construction, as evidenced by the serious operational problems.

The frequent and persistent flaring is one symptom of CP's problems. Flaring is an emergency mechanism used to burn off waste gases and the flare should be used rarely. Yet CP uses its flare almost constantly.

The final environmental impact statement (EIS) prepared by the Federal Energy Regulatory Commission (FERC) for Calcasieu Pass notes:

"During normal operating conditions and regularly scheduled maintenance events, to the extent feasible, Venture Global Calcasieu Pass would avoid flaring at night, during low visibility conditions, and during peak migration seasons"

Mr. Allaire documented Calcasieu Pass flaring for 84 out of 90 days between January 27 and April 27, 2022. The photographs he provided also show flaring occurring on seven days between April 27 and May 10, 2022. This means that in total, Venture Global's Calcasieu Pass facility has flared for at least an estimated 91 days, or 68% of days since it began operating. Mr. Allaire's documentation shows flaring at night and during peak neo-tropical bird migration season, violating the commitment detailed in the facility's EIS.

Finding #2:

Venture Global is under-reporting accidents at Calcasieu Pass.

Finding #2: Venture Global Is Under Reporting Accidents



In the first 60 days of operations, CP filed five reports about its accidents to the state. Since that time, however, there have been no reports filed, despite excessive flaring.

Flares are used as an incineration device for disposal of excess and waste gases and in emergency situations. The discrepancy between accidents reported by Venture Global to LDEQ and the far greater number of days that flaring has occurred indicates underreporting of accidents at the Calcasieu Pass facility. While Venture Global has submitted 5 accident reports to LDEQ at Calcasieu Pass this year, documentation by Mr. Allaire indicates that flaring has occurred for 68% of the time the facility has been in operation.

Number of days since operations began:

133 days

(from 1/19/2022 to 5/31/2022)

Number of days flaring documented:

91 days

(between 1/19 and 5/10/2022)

Percentage of days flares has been observed:

68%

Number of accident reports submitted to DEQ:

5 (since 1/19/2022)



Table I: Accident reports + flare documentation at CP

Date of Report	Type of Report Venture Global report to LDEQ	Details Release of gas	Timestamp (for citizen documentation)*
24 January 2022	Citizen documentation	Continuous flaring	_
27 January 2022	Citizen documentation	Continuous flaring	6:39pm
28 January 2022	Venture Global report to LDEQ	Release of nitrous oxide	7:13am
04 February 2022	Citizen documentation	Continuous flaring	_
07 February 2022	Citizen documentation	Continuous flaring	6:18pm
10 February 2022	Citizen documentation	Continuous flaring	6:05am
11 February 2022	Citizen documentation	Continuous flaring	6:29pm
12 February 2022	Citizen documentation	Continuous flaring	6:12pm
14 February 2022	Citizen documentation	Continuous flaring	6:28pm
15 February 2022	Citizen documentation	Continuous flaring	10:30am
17 February 2022	Citizen documentation	Continuous flaring	6:16pm
18 February 2022	Citizen documentation	Continuous flaring	6:20pm
20 February 2022	Citizen documentation	Continuous flaring	10:13pm
22 February 2022	Venture Global report to LDEQ	Release of gas	11:12am
23 February 2022	Citizen documentation	Continuous flaring	_
23 February 2022	Citizen documentation	Continuous flaring	6:23pm
24 February 2022	Citizen documentation	Continuous flaring	12:53pm; 5:21pm; 7:08pm
25 February 2022	Venture Global report to LDEQ	Release of gas	8:37am
25 February 2022	Citizen documentation	Continuous flaring	-
28 February 2022	Citizen documentation	Continuous flaring	6:13pm
06 March 2022	Venture Global report to LDEQ	Release of gas	7:24pm
07 March 2022	Citizen documentation	Continuous flaring	-
07 March 2022	Citizen documentation	Continuous flaring	6:28pm



Table I: Accident reports + flare documentation at CP (continued)

Date of Report	Type of Report Venture Global report to LDEQ	Details Release of gas	Timestamp (for citizen documentation)*
08 March 2022	Citizen documentation	Continuous flaring	6:45am; 6:32pm
09 March 2022	Citizen documentation	Continuous flaring	9:31am
18 March 2022	Citizen documentation	Continuous flaring	3:57pm
19 March 2022	Citizen documentation	Continuous flaring	2:02pm; 3:26pm; 4:16pm; 7:08pm; 8:32pm
20 March 2022	Citizen documentation	Continuous flaring	11:49am
21 March 2022	Citizen documentation	Continuous flaring	7:37am
22 March 2022	Citizen documentation	Continuous flaring	4:21pm; 6:51pm
23 March 2022	Citizen documentation	Continuous flaring	5:10pm; 7:52pm
26 March 2022	Citizen documentation	Continuous flaring	7:15pm
27 March 2022	Citizen documentation	Continuous flaring	6:16am; 7:52pm
28 March 2022	Citizen documentation	Continuous flaring	4:47pm; 5:31pm; 6:27pm
29 March 2022	Citizen documentation	Continuous flaring	12:37pm; 7:22pm
30 March 2022	Citizen documentation	Continuous flaring	7:54pm
31 March 2022	Citizen documentation	Continuous flaring	6:12pm; 8:40pm
01 April 2022	Citizen documentation	Continuous flaring	12:25pm; 3:45pm
02 April 2022	Citizen documentation	Continuous flaring	6:33am; 10:33am; 7:54pm
03 April 2022	Citizen documentation	Continuous flaring	12:24pm
04 April 2022	Citizen documentation	Continuous flaring	8:24am
05 April 2022	Citizen documentation	Continuous flaring	11:00am



Table I: Accident reports + flare documentation at CP (continued)

Date of Report	Type of Report Venture Global report to LDEQ	Details Release of gas	Timestamp (for citizen documentation)*
06 April 2022	Citizen documentation	Continuous flaring	10:08pm
07 April 2022	Citizen documentation	Continuous flaring	10:05am
08 April 2022	Citizen documentation	Continuous flaring	8:18pm
09 April 2022	Citizen documentation	Continuous flaring	11:39am
13 April 2022	Citizen documentation	Continuous flaring	3:48am; 4:53pm; 8:33pm
14 April 2022	Citizen documentation	Continuous flaring	1:10am; 8:03am
15 April 2022	Citizen documentation	Continuous flaring	7:33pm
17 April 2022	Citizen documentation	Continuous flaring	4:18pm
18 April 2022	Citizen documentation	Continuous flaring	6:17am; 12:03pm; 3:30pm
19 April 2022	Citizen documentation	Continuous flaring	5:45am
20 April 2022	Citizen documentation	Continuous flaring	2:24pm; 6:03 pm
21 April 2022	Citizen documentation	Continuous flaring	1:17pm
22 April 2022	Citizen documentation	Continuous flaring	4:19pm
23 April 2022	Citizen documentation	Continuous flaring	2:18 pm
25 April 2022	Citizen documentation	Continuous flaring	8:13am; 10:24am; 5:10pm; 6:10pm; 6:36pm
26 April 2022	Citizen documentation	Continuous flaring	7:20 pm
27 April 2022	Citizen documentation	Continuous flaring	7:51am; 11:50am
28 April 2022	Citizen documentation	Continuous flaring	1:52pm
29 April 2022	Citizen documentation	Continuous flaring	11:34am
2 May 2022	Citizen documentation	Continuous flaring	3:12pm; 7:38 pm
3 May 2022	Citizen documentation	Continuous flaring	6:38am; 1:42pm
6 May 2022	Citizen documentation	Continuous flaring	3:40pm; 4:00pm
07 May 2022	Citizen documentation	Continuous flaring	7:39pm
10 May 2022	Citizen documentation	Continuous flaring	3:55pm

^{*}Timestamps do not reflect complete flaring time, flare regularly lasted for hours/days before and after picture was taken

Finding #3:

There are consistent miscalculations of releases from the facility.



Since January 2022, four of CP's five accident reports have been revised. Some of these reports involved significant changes, as noted in the table below. The reports of the gas releases do not explain why the numbers were altered so radically. Revision of quantities released below reportable quantities of a substance can prevent the state from investigating the incident.

Table II: Initial vs revised emission amounts in accident reports

Date of Report	Total Emissions from Initial	Venture Global Revised Total
04 February 2022	3,360 lbs of nitrous oxide (NOx)	126 lbs/hr of NOx
23 February 2022	43,489 lbs of gas	529 lbs of gas
25 February 2022	1000 lbs of gas	831 lbs of gas
07 March 2022	>1000 lbs of gas	1 lb of gas

Finding #4:

The Calcasieu Pass facility is violating state regulations.



The accident described at the outset of this report - the 180,000 pound spill before the first shipment - was a violation of Louisiana law.

The procedure that led to this incident was amended from the initial nitrogen displacement procedure, causing the equipment to become "deficient or inadequate to prevent the release of natural gas to the atmosphere." This constitutes a violation of the State of Louisiana's General Regulations on Control of Emissions and Emission Standards §905 (LAC 33:III.905)

LDEQ Inspection Report of January 18th accident

Violation of LAC 33:111.905.A

The Unauthorized Discharge Notification Report from the facility, dated 1/24/2022, showed that that the facility used a procedure that resulted in the preventable release of approximately 180,099 pounds of natural gas to atmosphere as reported on 1/18/2022. The procedure (control equipment) that was followed on the occasion of this incident was not "diligently maintained in proper working order" in that the initial procedure was amended to become deficient or inadequate to prevent the release of natural gas to atmosphere in excess of a Reportable Quantity during purging activities for commissioning of the South LNG Tank. As such, this is a violation of LAC 33:111.905.

Referred to Enforcement Division

Finding #5:

LDEQ is not enforcing permits, but is instead increasing them to meet the needs of gas export companies. The LDEQ continues to issue facility air and water discharge permits but is not enforcing the permit conditions.



Following the January 18th release of gas from the south tank, Venture Global submitted an application for a regulatory permit for release of gas from pipelines and associated equipment, dated February 25, 2022 and approved on March 2, 2022. This permit authorized the venting of natural gas in a similar manner to the unpermitted release in January, this time at the north tank. The approval of this permit allowed Venture Global Calcasieu Pass to release 2,052,000 cubic feet of natural gas from its north tank between 12:00 pm on March 18th and 11:00 am on March 19, 2022. The pollutants released into the atmosphere from this 23-hour venting period include 41.35 tons of methane and 1,033.64 tons of CO2e.

- January 18: Unpermitted release of 180,099 lbs of gas from south tank
- February 25: Venture Global submits permit application for release of gas at north tank
- March 2: Permit application approved by DEQ
- March 11: Investigation of January 18th accident published attributing the event to a "combination of a failure in the management of change process, lack of adherence to procedures, and lack of training."
- March 18-19: Permitted release of more than 2 million standard cubic feet (MSCF) of natural gas occurred at north tank

REPORT RECOMMENDATION

The first five months clearly show that Calcasieu Pass is unable to comply with the initial permits and that the state of Louisiana has no interest in compelling compliance. In this scenario, the planned construction of additional export terminals in Calcasieu and Cameron Parishes means overwhelming pollution and risk in the area. The consequences for worker safety, exacerbation of climate change, and relentless flooding are significant.

The state should enforce the law at this facility and should not approve construction of any additional gas export terminals.

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