Texas Commission on Environmental Quality
Investigation Report

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Customer: Gulf Coast Growth Ventures LLC
Customer Number: CN605632439
Regulated Entity Name: GULF COAST GROWTH VENTURES PROJECT
Regulated Entity Number: RN109753731

Investigation # 2040511

Investigator:ASHLEY FUQUA

Conducted: 02/21/2025 -- 02/21/2025

Incident Numbers
Incident 433,090

Site Classification MAJOR SOURCE

NAIC Code: 325211
NAIC Code: 325199
NAIC Code: 325110
SIC Code: 2821
SIC Code: 2869

Program: AIR NEW SOURCE PERMITS

Investigation Type : Compliance Invest File Review

Location : SOUTH OF HIGHWAY 181 AND WEST OF FM RD 2986

Additional ID 146425

Address: ; City , State Zip

Local Unit : REGION 99 - CENTRAL OFFICE

Activity Type: UML3IH - AIR UML3IH - IN HOUSE UPSETMAINTENANCE LEVEL 3

Principal(s):

Role RESPONDENT
Name GULF COAST GROWTH VENTURES LLC

Contact(s):

Role REGULATED ENTITY MAIL CONTACT **Name** Paul Fritsch
Title PRESIDENT AND SITE MANAGER
Phone Number for Phone is (361) 977-3001
End of record for this contac

Role REGULATED ENTITY CONTACT **Name** Travis Stephens
Title ENVIRONMENTAL MULTIMEDIA ADVISOR
Phone Number for Phone is (409) 269-9868
End of record for this contac

Other Staff Member(s):

Role QA Reviewer **Name** DAVARUND WHITTING
Role Supervisor **Name** DAVARUND WHITTING

Associated Check List

Checklist Name AIR EMISSIONS EVENT REVIEW (ON OR AFTER 01/05/2006)
Unit Name STEERS No. 433090

Investigation Comments:

INTRODUCTION

An in-house investigation was conducted in response to an incident notification (STEERS No. 433090) submitted on December 5, 2024, at 2:29 PM by Gulf Coast Growth Ventures LLC - Gulf Coast Growth Ventures Project (GCGV) to determine compliance with the emissions event rules. The incident occurred on December 4, 2024, at 2:30 PM in the Olefins Unit and ended on December 4, 2024, at 9:20 PM. The incident was discovered on December 4, 2024, at 2:30 PM. The final report was submitted on December 18, 2024. The initial incident notification and the final report are provided in Attachment 1.

Daily Narrative

The following information was requested on December 18, 2024: Emissions Event Affirmative Defense Demonstration Review.

The deadline for receipt of the requested information was January 18, 2025. The information was received on January 16, 2025. See Attachment 2.

Discussion of the Emissions Event

Based on the information provided, the emissions event occurred when the Propylene Refrigeration Compressor (PRC) unexpectedly tripped offline during a planned maintenance event in the Olefins Unit. This caused the Olefins Unit to shut down which led to a loss of steam across the plant and triggered the shutdown of additional equipment. According to GCGV, the PRC tripped offline due to the failure of the turbine governor valve (V1). The V1 received an "Electronics Fault" signal causing it to close. This stopped the steam flow to the turbine, and the PRC tripped due to the loss of steam. According to GCGV, the root cause analysis indicated that the "Electronics Fault" signal was generated due to a sudden and unavoidable malfunction of the electrical system associated with V1. As part of the routine maintenance event, site personnel were in the process of restoring power to one of the redundant power sources. GCGV stated that multiple checks were completed prior to re-energizing the valve, and there were no indications of an electrical fault risk to V1. In response to the event, GCGV's flaring procedures were followed, unit rates were decreased, and operations immediately responded to stabilize the unit.

This event resulted in the release of 14.33 pounds (lbs) of volatile organic compounds (VOCs), including acetaldehyde and ethylene, from the Glycol Vacuum Vent [Emission Point No. (EPN): GDVAC]; 6,928.20 lbs of carbon monoxide (CO), 0.15 lbs of hydrogen sulfide (H_2S), 3,237.18 lbs of nitrogen oxides (NOx), 23.70 lbs of sulfur dioxide (SO_2), and 1,594.47 lbs of VOCs, including 1,3-pentadiene, acetylene, benzene, 1,3-butadiene, butanes, butenes, ethylbenzene, ethylene, hexane, isoprene, methyl acetylene, pentanes, pentenes, propadiene, propane, propylene, styrene, toluene, and xylene, from the Multi-Point Ground Flare (EPN: UFFLARE01); 3.22 lbs of CO, 0.84 lbs of ammonia (NH_3), 2.76 lbs of NOx, 1.18 lbs of particulate matter (PM), 0.01 lbs of sulfuric acid (H_2SO_4), and 0.86 lbs of VOCs from Pyrolysis Furnace A (EPN: O_FAFO1); 121.74 lbs of CO, 2.36 lbs of NH_3, 30.10 lbs of NOx, 3.50 lbs of PM, 0.03 lbs of SO_2, 0.01 lbs of H_2SO_4, and 2.53 lbs of VOCs from Pyrolysis Furnace B (EPN: O_FBFO); 129.00 lbs of CO, 1.47 lbs of NH_3, 25.27 lbs of NOx, 3.42 lbs of PM, 0.03 lbs of SO_2, 0.01 lbs of H_2SO_4, and 2.47 lbs of VOCs from Pyrolysis Furnace C (EPN: O_FCF01); 156.91 lbs of CO, 1.47 lbs of NH_3, 25.27 lbs of NOx, 3.42 lbs of PM, 0.03 lbs of SO_2, 0.01 lbs of H_2SO_4, and 2.47 lbs of VOCs from Pyrolysis Furnace D (EPN: O_FDF01); 154.01 lbs of CO, 1.79 lbs of NH_3, 18.82 lbs of NOx, 3.40 lbs of PM, 0.03 lbs of SO_2, 0.01 lbs of H_2SO_4, and 2.45 lbs of VOCs from Pyrolysis Furnace E (EPN: O_FEF01); 87.08 lbs of CO, 0.69 lbs of NH_3, 24.36 lbs of NOx, 3.41 lbs of PM, 0.03 lbs of SO_2, 0.01 lbs of H_2SO_4, and 2.47 lbs of VOCs from Pyrolysis Furnace F (EPN: O_FFF01); 105.02 lbs of CO, 1.18 lbs of NH_3, 48.23 lbs of NOx, 3.42 lbs of PM, 0.03 lbs of SO_2, 0.01 lbs of H_2SO_4, and 2.48 lbs of VOCs from Pyrolysis Furnace G (EPN: O_FGF01); 2.98 lbs of CO, 0.51 lbs of NH_3, 57.81 lbs of NOx, 1.85 lbs of PM, 0.04 lbs of SO_2, 0.01 lbs of H_2SO_4, and 1.34 lbs of VOCs from Pyrolysis Furnace H (EPN: O_FHF01); 201.67 lbs of CO, 39.58 lbs of NOx, 0.02 lbs of SO_2, and 1,629.79 lbs of VOCs, including 1,3-pentadiene, acetylene, benzene, 1,3-butadiene, butanes, butenes, ethylene, hexane, pentanes, pentenes, propane, propylene, styrene, and toluene from the Shared Elevated Flare (EPN: UFFLARE02); and 0.01 lbs of VOCs as sitewide fugitive emissions (EPN: SITE_FUG). The duration of the event was 6 hours and 50 minutes.

According to GCGV, there is no information to indicate that there were off-site impacts due to the unauthorized emissions from this event which contributed to an exceedance of the national ambient air quality standard (NAAQS), a prevention of significant deterioration (PSD) increment, or to a condition of air pollution.

A database search confirmed that there were no complaints related to this incident.

EXCESSIVE EMISSIONS EVENT REVIEW

Based upon review of the information provided, it was determined that this incident is not an excessive emissions event.

NON-EXCESSIVE EMISSIONS EVENT REVIEW

Based upon review of the information provided, it was determined that this incident met all the affirmative defense demonstration criteria for non-excessive upset events in Title 30 Texas Administrative Code (30 TAC) §101.222(b).

GENERAL FACILITY AND PROCESS INFORMATION

Process Description

The Olefins Unit processes hydrocarbon feedstocks to produce ethylene and other products. Fresh ethane feed to the unit is superheated and combined with residual ethane from the recovery section. The unit also includes a dedicated propylene refrigeration system driven by a steam turbine. This refrigeration system provides the remaining refrigeration requirement that cannot be filled by the heat integration of the tail gas, ethylene, and ethane streams. The Olefins process unit produces steam necessary to support other equipment at the facility.

ADDITIONAL INFORMATION

Conclusions, Recommendations, and Current Enforcement Actions

No violation will be issued. Based on the information provided, the event appears to meet the demonstration criteria for affirmative defense. A Notice of Closure letter will be issued.

Additional Issues

No additional issues.

Report Attachments

1. Initial Notification and Final Report
2. Additional Information

No Violations Associated to this Investigation

Citations include TAC or T. A. C. which stands for Texas Administrative Code

No or N. O. stands for Number and Pg or P. G. stands for page.
Req or R. E. Q. stands for requirements

Signature lines for Environmental Investigator and supervisor with dates

Signed Ashley E. Fuqua **Date** 02/26/2025

Environmental Investigator

Signed **Date** 02/26/2025

Supervisor

Checklist for different types of attachments

Attachments: (in order of final report submittal)

___Enforcement Action Request (EAR)

_X_Letter to Facility (specify type) : Closure

Investigation Report

___Sample Analysis Results

___Manifests

___Notice of Registration

___Maps, Plans, Sketches

___Photographs

___Correspondence from the facility

_X_Other (specify) :

See the Attachment List above.

List of Attached files
Attachments_STEERS No. 433090.pdf

Attachment 1

Initial Notification and Final Report

GULF COAST GROWTH VENTURES LLC

GULF COAST GROWTH VENTURES PROJECT

RN109753731

GREGORY/SAN PATRICIO

February 21, 2025

Texas Commission on Environmental Quality
Reportable Event Notification

Submittal Type	Incident #	Incident Status	Investigation #	Investigation Status
INITIAL	433090	OPEN		

Customer Name	CN #
GULF COAST GROWTH VENTURES LLC	CN605632439

Name of Owner or Operator	RN/Air Acct #	Physical Location
GULF COAST GROWTH VENTURES PROJECT	RN109753731	

Event/Activity Type	Date / Time Event Discovered or Scheduled Activity Start/End		Duration
EMISSIONS EVENT	12/4/2024 2:30:00PM	12/4/2024 9:23:00PM	6 hours 53 minutes

Emission Point Common Name	Emission Point Number (EPN)
Multi-Point Ground Flare	UFFLARE01

List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
Carbon Monoxide	6,928.20	POUNDS	165.05	LBS/HR	146425 & PSDTX1518
Nitrogen Oxides (NOx)	3,237.18	POUNDS	107.92	LBS/HR	146425 & PSDTX1518

Facility Common Name	Facility Identification Number (FIN)
Multi-Point Ground Flare	UFFLARE01

Process Unit or Area Common Name

Olefins

Cause of Emissions Event, Excess Opacity Event, or Reason for Scheduled Activity:

During an Olefins planned maintenance event, the propylene refrigeration compressor unexpectedly tripped offline, resulting i loss of steam to the plant and subsequent shutdown of additional plant equipment.

Actions Taken, of Being Taken, to Minimize Emissions and/or Correct the Situation:

To minimize emissions, unit feed rates were reduced, and operations immediately responded to stabilize the facility and safel shutdown units as needed. Process streams were safely routed to the ground flare. Continuous monitoring was deployed alo the fence line for VOC, H2S, NO, NO2, CO, and SO2 and spot monitoring for VOC, Benzene, and Butadiene was conducted the community. All monitoring results indicate non-detect. Flaring is occurring as the facility continues to execute restart procedures.

Basis Used to Determine Quantities and Any additional Information Necessary to Evaluate the Event:

Process and engineering knowledge were used to determine emissions.

Person Making Initial Notification	TRAVIS STEPHENS (361) 424-2873
Initial Notification Date/Time	2024-12-5 14:29
Method	STEERS
Incident Primary Contact	TRAVIS STEPHENS (361) 424-2873
Jurisdiction(s) Notified	REGION 14 - CORPUS CHRISTI

Agency Comments **Assigned Staff Member: Kendra Houston**

Texas Commission on Environmental Quality
Reportable Event Report

Submittal Type	Incident #	Incident Status	Investigation #	Investigation Status
FINAL	433090	CLOSED	2040511	OPEN

Customer Name	CN #
GULF COAST GROWTH VENTURES LLC	CN605632439

Name of Owner or Operator	RN/Air Acct #	Physical Location
GULF COAST GROWTH VENTURES PROJECT	RN109753731	

Event/Activity Type	Date / Time Event Discovered or Scheduled Activity Start/End		Duration
EMISSIONS EVENT	12/4/2024 2:30:00PM	12/4/2024 9:20:00PM	6 hours 50 minutes

Emission Point Common Name: Glycol Vacuum Vent
Emission Point Number (EPN): GDVAC

List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
Acetaldehyde	12.69	POUNDS	3.81	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Ethylene	1.64	POUNDS	3.81	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

Emission Point Common Name: Multi-Point Ground Flare
Emission Point Number (EPN): UFFLARE01

List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
1,3 Pentadiene	0.34	POUNDS	500.00	LBS/HR	0.32 lbs of the total 0.34 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Acetylene	5.06	POUNDS	500.00	LBS/HR	4.74 lbs of the total 5.06 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Benzene	11.02	POUNDS	500.00	LBS/HR	10.37 lbs of the total 11.02 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Butadiene, 1-3	12.32	POUNDS	500.00	LBS/HR	11.53 lbs of the total 12.32 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Butanes	2.74	POUNDS	500.00	LBS/HR	2.6 lbs of the total 2.74 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
butenes	3.55	POUNDS	500.00	LBS/HR	3.44 lbs of the total 3.55 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Carbon Monoxide	6,928.20	POUNDS	165.05	LBS/HR	1273.37 lbs of the total 6928.2 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

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Ethylbenzene	0.06	POUNDS	500.00	LBS/HR	0.06 lbs of the total 0.06 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Ethylene	1,506.62	POUNDS	500.00	LBS/HR	1238.72 lbs of the total 1506.62 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Hexane	1.00	POUNDS	500.00	LBS/HR	0.99 lbs of the total 1 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Hydrogen Sulfide	0.15	POUNDS	500.00	LBS/HR	0.15 lbs of the total 0.15 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Isoprene	0.13	POUNDS	500.00	LBS/HR	0.13 lbs of the total 0.13 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Methyl Acetylene	0.26	POUNDS	500.00	LBS/HR	0.25 lbs of the total 0.26 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Nitrogen Oxides (NOx)	3,237.18	POUNDS	107.92	LBS/HR	824.72 lbs of the total 3237.18 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Pentanes	17.65	POUNDS	500.00	LBS/HR	17.56 lbs of the total 17.65 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Pentenes	1.35	POUNDS	500.00	LBS/HR	1.26 lbs of the total 1.35 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Propadiene	0.13	POUNDS	500.00	LBS/HR	0.12 lbs of the total 0.13 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Propane	9.53	POUNDS	500.00	LBS/HR	9.22 lbs of the total 9.53 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Propylene	12.48	POUNDS	500.00	LBS/HR	11.65 lbs of the total 12.48 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
SO2	23.70	POUNDS	22.00	LBS/HR	23.7 lbs of the total 23.7 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Styrene	1.17	POUNDS	500.00	LBS/HR	1.15 lbs of the total 1.17 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Toluene	4.56	POUNDS	500.00	LBS/HR	4.44 lbs of the total 4.56 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
VOC(unspeciated)	4.44	POUNDS	500.00	LBS/HR	4.23 lbs of the total 4.44 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Xylene	0.06	POUNDS	500.00	LBS/HR	0.06 lbs of the total 0.06 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

Emission Point Common Name	**Emission Point Number (EPN)**
Pyrolysis Furnace A	O_FAFO1

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List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
Carbon Monoxide	3.22	POUNDS	165.16	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
NH3	0.84	POUNDS	2.51	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Nitrogen Oxides (NOx)	2.76	POUNDS	25.20	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
PM (unspeciated)	1.18	POUNDS	4.32	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
SO2	0.00	POUNDS	0.34	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Sulfuric acid	0.01	POUNDS	0.03	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
VOC(unspeciated)	0.86	POUNDS	3.12	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

Emission Point Common Name
Pyrolysis Furnace B

Emission Point Number (EPN)
O_FBFO

List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
Carbon Monoxide	121.74	POUNDS	165.16	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
NH3	2.36	POUNDS	2.51	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Nitrogen Oxides (NOx)	30.10	POUNDS	25.20	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
PM (unspeciated)	3.50	POUNDS	4.32	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
SO2	0.03	POUNDS	0.34	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Sulfuric acid	0.01	POUNDS	0.03	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
VOC(unspeciated)	2.53	POUNDS	3.12	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

Emission Point Common Name
Pyrolysis Furnace C

Emission Point Number (EPN)
O_FCF01

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List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
Carbon Monoxide	129.00	POUNDS	165.16	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
NH3	1.47	POUNDS	2.51	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Nitrogen Oxides (NOx)	25.27	POUNDS	25.20	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
PM (unspeciated)	3.42	POUNDS	4.32	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
SO2	0.03	POUNDS	0.34	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Sulfuric acid	0.01	POUNDS	0.03	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
VOC(unspeciated)	2.47	POUNDS	3.12	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

Emission Point Common Name
Pyrolysis Furnace D

Emission Point Number (EPN)
O_FDF01

List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
Carbon Monoxide	156.91	POUNDS	165.16	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
NH3	1.47	POUNDS	2.51	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Nitrogen Oxides (NOx)	25.27	POUNDS	25.20	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
PM (unspeciated)	3.42	POUNDS	4.32	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
SO2	0.03	POUNDS	0.34	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Sulfuric acid	0.01	POUNDS	0.03	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
VOC(unspeciated)	2.47	POUNDS	3.12	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

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Emission Point Common Name
Pyrolysis Furnace E

Emission Point Number (EPN)
O_FEF01

List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
Carbon Monoxide	154.01	POUNDS	165.16	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
NH3	1.79	POUNDS	2.51	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Nitrogen Oxides (NOx)	18.82	POUNDS	25.20	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
PM (unspeciated)	3.40	POUNDS	4.32	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
SO2	0.03	POUNDS	0.34	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Sulfuric acid	0.01	POUNDS	0.03	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
VOC(unspeciated)	2.45	POUNDS	3.12	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

Emission Point Common Name
Pyrolysis Furnace F

Emission Point Number (EPN)
O_FFF01

List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
Carbon Monoxide	87.08	POUNDS	165.16	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
NH3	0.69	POUNDS	2.51	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Nitrogen Oxides (NOx)	24.36	POUNDS	25.20	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
PM (unspeciated)	3.41	POUNDS	4.32	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
SO2	0.03	POUNDS	0.34	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Sulfuric acid	0.01	POUNDS	0.03	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
VOC(unspeciated)	2.47	POUNDS	3.12	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

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Emission Point Common Name	Emission Point Number (EPN)
Pyrolysis Furnace G	O_FGF01

List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
Carbon Monoxide	105.02	POUNDS	165.16	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
NH3	1.18	POUNDS	2.51	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Nitrogen Oxides (NOx)	48.23	POUNDS	25.20	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
PM (unspeciated)	3.42	POUNDS	4.32	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
SO2	0.03	POUNDS	0.34	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Sulfuric acid	0.01	POUNDS	0.03	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
VOC(unspeciated)	2.48	POUNDS	3.12	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

Emission Point Common Name	Emission Point Number (EPN)
Pyrolysis Furnace H	O_FHF01

List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
Carbon Monoxide	2.98	POUNDS	165.16	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
NH3	0.51	POUNDS	2.51	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Nitrogen Oxides (NOx)	57.81	POUNDS	25.20	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
PM (unspeciated)	1.85	POUNDS	4.32	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
SO2	0.04	POUNDS	0.34	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Sulfuric acid	0.01	POUNDS	0.03	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
VOC(unspeciated)	1.34	POUNDS	3.12	LBS/HR	Portions may be authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

Texas Commission on Environmental Quality
Reportable Event Report

Emission Point Common Name	Emission Point Number (EPN)
Shared Elevated Flare	UFFLARE02

List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
1,3 Pentadiene	0.01	POUNDS	300.00	LBS/HR	0.01 lbs of the total 0.01 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Acetylene	0.07	POUNDS	300.00	LBS/HR	0.07 lbs of the total 0.07 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Benzene	0.31	POUNDS	300.00	LBS/HR	0.31 lbs of the total 0.31 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Butadiene, 1-3	0.36	POUNDS	300.00	LBS/HR	0.36 lbs of the total 0.36 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Butanes	21.52	POUNDS	300.00	LBS/HR	18.6 lbs of the total 21.52 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
butenes	267.85	POUNDS	300.00	LBS/HR	240.26 lbs of the total 267.85 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Carbon Monoxide	201.67	POUNDS	162.03	LBS/HR	201.67 lbs of the total 201.67 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Ethylene	169.38	POUNDS	300.00	LBS/HR	151.45 lbs of the total 169.38 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Hexane	130.33	POUNDS	300.00	LBS/HR	117.58 lbs of the total 130.33 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Nitrogen Oxides (NOx)	39.58	POUNDS	31.80	LBS/HR	39.58 lbs of the total 39.58 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Pentanes	1,011.70	POUNDS	300.00	LBS/HR	877.58 lbs of the total 1011.7 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Pentenes	0.04	POUNDS	300.00	LBS/HR	0.04 lbs of the total 0.04 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Propane	3.48	POUNDS	300.00	LBS/HR	3.24 lbs of the total 3.48 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Propylene	24.02	POUNDS	300.00	LBS/HR	21.64 lbs of the total 24.02 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
SO2	0.02	POUNDS	98.00	LBS/HR	0.02 lbs of the total 0.02 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

Texas Commission on Environmental Quality
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Styrene	0.02	POUNDS	300.00	LBS/HR	0.02 lbs of the total 0.02 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
Toluene	0.10	POUNDS	300.00	LBS/HR	0.1 lbs of the total 0.1 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170
VOC(unspeciated)	0.60	POUNDS	300.00	LBS/HR	0.55 lbs of the total 0.6 lbs are authorized under Permit # 146425 / PSDTX1518 / GHGPSDTX170

Emission Point Common Name
Sitewide Fugitives

Emission Point Number (EPN)
SITE_FUG

List of Compound Descriptive type(s) of Individually Listed or Mixtures of Air Contaminant Compounds Released, Including opacity	Estimated Total Quantity for Air Contaminants for Emissions / Opacity Value for Opacity	Units	Authorized Emissions Limit /	Units	Authorization (rule or permit #)
VOC(unspeciated)	0.01	POUNDS	20.29	LBS/HR	Permit # 146425 / PSDTX1518 / GHGPSDTX170

Facility Common Name
Multi-Point Ground Flare

Facility Identification Number (FIN)
UFFLARE01

Process Unit or Area Common Name
Olefins

Cause of Emissions Event, Excess Opacity Event, or Reason for Scheduled Activity:

During a planned maintenance event for the Olefins unit, the propylene refrigeration compressor unexpectedly tripped offline. This incident caused the Olefins unit to shut down, leading to a loss of steam across the plant and triggering the shutdown of additional equipment.

Actions Taken, of Being Taken, to Minimize Emissions and/or Correct the Situation:

To minimize emissions, unit feed rates were reduced, and operations immediately responded to stabilize the facility and safel shutdown units as needed. Process streams were safely routed to the ground flare. Continuous monitoring was deployed alo the fence line for VOC, H2S, NO, NO2, CO, and SO2 and spot monitoring for VOC, Benzene, and Butadiene was conducted the community. All monitoring results indicate non-detect. The root cause investigation for this event is still ongoing.

Basis Used to Determine Quantities and Any additional Information Necessary to Evaluate the Event:

Process and engineering knowledge were used to determine emissions.

Person Making Initial Notification TRAVIS STEPHENS (361) 424-2873
Initial Notification Date/Time 2024-12-5 14:29
Method STEERS
Incident Primary Contact TRAVIS STEPHENS (361) 424-2873
Jurisdiction(s) Notified REGION 14 - CORPUS CHRISTI

Agency Comments **Assigned Staff Member: Ashley Fuqua**

Attachment 2

Additional Information

GULF COAST GROWTH VENTURES LLC

GULF COAST GROWTH VENTURES PROJECT

RN109753731

GREGORY/SAN PATRICIO

February 21, 2025

Ashley Fuqua

From: EE
Sent: Thursday, January 16, 2025 2:14 PM
To: 'Stephens, Travis M'
Subject: RE: Records Request for Incident No. 433090 Confirmation

Good afternoon,

This is to confirm and acknowledge the receipt of your responses. This information will be provided to an investigator for further investigation.

Thank you,

Lisa Brunkenhoefer
Office of Compliance and Enforcement
Texas Commission on Environmental Quality

From: Stephens, Travis M [redacted]
Sent: Thursday, January 16, 2025 2:10 PM
To: EE <EE@tceq.texas.gov>
Subject: RE: Records Request for Incident No. 433090

Good afternoon,

Please see attached.

Thanks,

Travis Stephens
Environmental MultiMedia Advisor
Gulf Coast Growth Ventures
4589 FM 2986
Gregory, Texas 78359
A.3.50I
Mobile: (361) 424-2873
Zoom: (409) 269-9868

From: EE <EE@tceq.texas.gov>
Sent: Wednesday, December 18, 2024 2:39 PM
To: Stephens, Travis M [redacted]
Subject: Records Request for Incident No. 433090

Good afternoon,

This is to confirm and acknowledge the receipt of your report for STEERS, Inc. No. 433090 received on 12/18/2024.

Please complete the attached additional information request and reply to this email with your response within 30 days, by 1/18/2025.

However, if you have determined that all contaminants released were below a reportable quantity, please provide your final records as required by 30 TAC 101.201.

*Please note: The attached questions were updated on 01/01/2024. The intent of the questions is the same, but the order and wording has been updated.

Thank you,

Lisa Brunkenhoefer
Office of Compliance and Enforcement
Texas Commission on Environmental Quality

Affirmative Defense Questions

The information you submitted through the State of Texas Environmental Electronic Reporting System (STEERS) for the incident identified above has been received and will be assigned to an investigator. We are providing this opportunity to submit additional information that may not have been available at the time of the final STEERS report or may contain company confidential information. All responses are due no later than 30-days after the date of this email.

If the reported incident is ongoing, please provide the estimated end date for the incident.

If you have determined that all contaminants released were below a reportable quantity, please respond with your final record as required by 30 TAC 101.201.

The questions below reflect the requirements to claim an affirmative defense for enforcement actions and are intended to assist you in gathering the information TCEQ will assess in evaluating your claim. Your responses will be evaluated against the applicable demonstration criteria in 30 TAC 101.222.

If your response includes company confidential information, please clearly indicate what you intend to keep as confidential. All confidential information will be handled in accordance with Section 382.041(a) of the Texas Health and Safety Code.

If you wish to withdraw the affirmative defense claim you made with your STEERS report, please respond to this email with that request rather than answer the questions below. If there is a different format that you'd like to use to respond to the affirmative defense questions, please respond with that.

1. What was the specific equipment or process that failed and resulted in this incident? If this incident was due to a failure of equipment at a facility that you do not own or operate, identify the name of facility that had the failure and how the failure impacted your equipment or processes.

   GCGV Response: The incident was caused by a failure of the Olefins Propylene Refrigeration Compressor (PRC) turbine governor valve (V1). Specifically, V1 closed after receiving an "Electronics Fault" signal, which subsequently stopped the steam flow to the turbine. As a result, the compressor tripped due to the loss of steam.

2. Identify the best-known cause or causes of the emissions event and include all contributing factors that led to the emissions event. Discuss how the emissions event could not have been avoided by good design, maintenance, and operation practices, if applicable.

   Discuss any sudden breakdown of equipment or process that was beyond the owner/operator's control, if applicable.

   GCGV Response: GCGV's investigation indicates the root cause to be a sudden and unavoidable malfunction of the electrical system associated with V1, thereby generating an "Electronics Fault".

It should be noted that the "Electronics Fault" causes a valve closure by design, as configured by the vendor. GCGV intends to conduct further tear-down and analysis of V1 for any additional learnings during our scheduled unit shutdown in 2025, which will allow the valve to be safely pulled and sent offsite for further analysis by the vendor.

3. Are there any design, maintenance or operation practices that could have been foreseen and resulted in avoiding this event? If not, how did you determine that the incident could not have been foreseen and avoided through better, technically feasible design, design, maintenance and/or operation practices?

   GCGV Response: The design of the electrical system included redundant power to the valve. As part of the routine maintenance and good operating practices, site personnel were in the process of restoring power to one of the redundant power sources. Prior to conducting the maintenance online, multiple checks were completed prior to re-energizing the valve, all of which indicated that it was safe and proper to do so and did not discover any indications of Electronics Fault risk to V1. These measures demonstrate that the incident could not have been foreseen or avoided through better design, maintenance, or operation practices.

4. How were the air pollution control equipment or processes (if any) maintained and operated in a manner consistent with good practice for minimizing emissions and reducing the number of emissions events?

   GCGV Response: No pollution control equipment was bypassed during this incident. There were no known malfunctions of the air pollution control equipment (UFFLARE01 & UFFLARE02). During the emissions event, the flare was operated in a manner with the intent to minimize emissions and maintain compliance with all applicable regulations and permit requirements. One effect of the trip was a quantity of non-combustibles sent to the elevated flare from a unit that was forced to shutdown due to lack of steam. The destruction efficiencies of the flares were adjusted to reflect the actual combustion zone net heating values in the emissions calculations to determine reportable quantities (RQs) for both the State and Federal thresholds.

5. How soon was action taken to achieve compliance once the operator knew or should have known that applicable emission limitations were being exceeded?

   GCGV Response: Flaring procedures were immediately followed to safely route process streams to the ground flare; unit rates were promptly decreased, and duration and emissions were minimized to the maximum extent practicable. Plant operations immediately took steps to minimize emissions by stabilizing and restarting the unit.

6. While the incident was ongoing, what steps did you take to minimize the amount and duration of the unauthorized emissions/excess opacity?

   GCGV Response: To minimize emissions, unit feed rates were reduced, and operations immediately responded to stabilize the unit. Process streams were safely routed to the ground flare. Continuous monitoring was deployed along the fence line for VOC, H2S, CO, NOx, and SO2. All results indicated non-detect.

7. Discuss what monitoring systems were in place during this incident. Were they operating during the entire duration of the incident, if possible?

GCGV Response: All emissions monitoring systems associated with the Multi-point Ground Flare (UFFLARE01) for applicable standards and regulations, including the flow meters, were operational for the duration of the event.

8. How did you document your actions in response to the incident?

   GCGV Response: Operator logs and Incident reporting software (IMPACT).

9. How many reportable and recordable emissions events (including this incident) have occurred at the facility/facilities (see definition of facility in Texas Clean Air Act or 30 TAC 116.10; this is not the same as the site) involved in the emissions during this incident for the 12-month period prior to this incident?

   If any, provide a list of such incidents. What measures, if any, have already been attempted to prevent recurrence?

   GCGV Response: No incidents at the Propylene Recovery Compressor caused by an electrical fault have previously occurred at the facility.

10. What were the facility/facilities total actual operating hours during the past 12 months?

    GCGV Response: The total operating hours of the Olefins Unit were ~8669 hours.

11. Identify any information you have (e.g., complaints from neighbors, fence line monitoring, air modeling) which indicates an off-site impact. Identify any information you have which indicates the unauthorized emissions caused or contributed to an exceedance of the national ambient air quality standard (NAAQS), a prevention of significant deterioration (PSD) increment, or to a condition of air pollution.

    GCGV Response: Continuous monitoring was deployed along the fence line for VOC, H2S, NOx, CO, and SO2 and spot monitoring for VOC, Benzene, and Butadiene was conducted in the community. All monitoring results indicate non-detect. There were no complaints through our Community Inquiries and Complaints 24/7 Phone line service.

12. Provide a non-confidential process description for the facility(s) involved in the emissions event.

    GCGV Response: The olefins unit processes hydrocarbon feedstocks to produce ethylene and other products. Fresh ethane feed to the unit is superheated and combined with residual ethane from the recovery section. The unit also includes a dedicated propylene refrigeration system driven by steam turbine. This refrigeration system provides the remaining refrigeration requirement that cannot be filled by the heat integration of the tail gas, ethylene, and ethane streams. The Olefins process unit produces steam necessary to support other equipment at the facility.

13. Please provide the name and contact information, including email address, for the highest-ranking individual at the plant/site.

    GCGV Response: Paul Fritsch, (361)977-3001[redacted]

14. In addition to the primary contact, please provide a secondary contact, including email address and title.

    GCGV Response: Travis Stephens, (409)269-9868, [redacted]

15. Do you have any additional information to support your claim of an affirmative defense? If so, please provide it at this time.

    GCGV Response: Please refer to previous responses for available information. Unit control response and operator actions were prompt and appropriate to mitigate emissions from Incident No. 433090. Such actions demonstrate GCGV's preparedness and commitment to minimizing emissions associated with unit upsets. If TCEQ believes any affirmative defense criteria have not been satisfied, GCGV respectfully asks that TCEQ provide the basis and justification for its determination, submit additional inquiries, and provide GCGV sufficient opportunity to provide supplemental information accordingly.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 26, 2025

Paul Fritsch
President and Site Manager
Gulf Coast Growth Ventures LLC

Via email

Re: Notice of Closure for Incident No. 433090
Gulf Coast Growth Ventures Project, RN109753731
Investigation No. 2040511

Dear Paul Fritsch:

After reviewing the initial notification and final record submitted for Incident No. 433090, the Texas Commission on Environmental Quality (TCEQ) has completed its incident investigation. Based on the provided information, the TCEQ is not pursuing enforcement action regarding the incident at this time.

The TCEQ appreciates your assistance in this matter. If you have any questions, please contact Ashley Fuqua at (361) 881-6922 or at Ashley.Fuqua@tceq.texas.gov.

Sincerely,

Davarund Whitting, Team Leader
Emissions Event Review Section
Critical Infrastructure Division

DW/AEF/lab

cc: Travis Stephens, Environmental Multimedia Advisor, Gulf Coast Growth Ventures Project, via email