

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
CHENIERE CREOLE TRAIL PIPELINE, LP / GILLIS COMPRESSOR STATION
PROPOSED PART 70 AIR OPERATING PERMIT RENEWAL AND MODIFICATION

The LDEQ, Office of Environmental Services, is accepting written comments on the Proposed Part 70 Air Operating Permit Renewal and Modification for Cheniere Creole Trail Pipeline, LP, 700 Milam Street, Suite 1900, Houston, TX 77002 for the Gillis Compressor Station. **The facility is located at 1970 Texas Eastern Road, Ragley, Beauregard Parish.**

Cheniere Creole Trail Pipeline, LP requested a Part 70 Air Operating Permit Renewal and Modification authorizing the following changes:

1. Add a Titan 130e natural gas-fired turbine (EQT0033);
2. Add two natural gas-fired emergency generators (EQT0034 and EQT0035);
3. Add two Chemical Injection Totes GCTOTE07 and GCTOTE08 (EQT0042 and EQT0043);
4. Incorporate Condensate Storage Tank GCTK07 (EQT0036), which was authorized under Regulatory Permit RP_50619_PER20220002. Tank GCTK07 replaces Tank GCTK05 (EQT0026);
5. Incorporate Condensate Storage Tank GCTK08 (EQT0037), which was authorized under Regulatory Permit RP_50619_PER20230002;
6. Authorize the equipment associated with the Momentum Meter Station and Meter Station Nos. 1, 2, and 3. Emission points associated with these meter stations include Condensate Storage Tanks GCTK09 through GCTK12 (EQT0038 through EQT0041) and Chemical Injection Totes GCTOTE09 through GCTOTE12 (EQT0044 through EQT0047);
7. Update fugitive emissions from equipment leaks (FUG0001) to reflect the additional equipment components associated with the proposed sources. Fugitive emissions will be subject to 40 CFR 60 Subpart OOOOa due to the addition of the Titan 130e turbine;
8. Update emissions from turbine maintenance, startup, and shutdown events (GCMSS, EQT0008) to account for the addition of the Titan 130e turbine;
9. Increase the throughput of the Gasoline Storage Tank (GCGST, EQT0028) to 550 gallons/year;
10. Create an operational cap (GRP0002) to limit the blowdown activities from two Titan 130e turbines (EQT0012 and EQT0048) to no more than 208 hours/year;
11. Reassign the EQT numbers of Gas Turbine Driven Compressor Units A through D from EQT0003 through EQT0006 to EQT0029 through EQT0032; and
12. Update the General Condition XVII Activities list and Insignificant Activities list to reflect the proposed operating conditions.

This permit was processed as an expedited permit in accordance with LAC 33:I.Chapter 18.

Emissions from the plant are as follows:

Pollutant	Before	After	Change
PM ₁₀	12.01	17.26	+ 5.25
PM _{2.5}	11.97	17.21	+ 5.24
SO ₂	26.02	37.40	+ 11.38
NO _x	148.21	192.84	+ 44.63
CO	217.80	283.08	+ 65.28
VOC	79.16	131.64	+ 52.48

A working draft of the proposed permit was submitted to the facility representative. Any remarks received during the technical review will be addressed in the "Worksheet for Technical Review of Working Draft of Proposed Permit". All remarks received by LDEQ are included in the record that is available for public review.

Comments and requests for a public hearing or notification of the final decision can be submitted online on the public notice webpage (<http://www.deq.louisiana.gov/public-notice>), via personal delivery, U.S. mail, or email. **Comments and requests for public hearings must be received by 4:30 pm CST, Thursday, November 16, 2023.** Delivery may be made to the drop-box at 602 N. 5th St., Baton Rouge, LA 70802. U.S. Mail may be sent to LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313, and emails may be submitted to DEQ.PUBLICNOTICES@LA.GOV. Persons wishing to receive notice of the final permit action must include a complete mailing address when submitting comments.

Please see additional instructions for comment submission, hand delivery and information regarding electronic submission at <http://www.deq.louisiana.gov/page/the-public-participation-group> or call (225) 219-3276.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The application and the proposed permits are available for review at the LDEQ, Public Records Center, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

Additional copies may be reviewed at Beauregard Parish Library – South Beauregard Branch (Longville/Ragley), 7221 LA Hwy 12, Ragley, LA 70567.

Draft air permits, which as a matter of agency practice are placed in a public repository for public review and comments, will be available for public review at the DEQ Public Records Center or online via DEQ's Electronic Document Management System (EDMS) when those public repositories are closed due to COVID-19 **or if a public repository closes due to COVID-19 during the comment period.** In these instances, any person who does not have access to the Public Records Center or the internet may request hard copies of the draft permit from DEQ. Such requests will be processed on a case-by-case basis.

Inquiries or requests for additional information regarding this permit action should be directed to Dan Nguyen, LDEQ, Air Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3395.

Persons wishing to be included on the LDEQ permit public notice mailing list, wishing to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server, or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at DEQ.PUBLICNOTICES@LA.GOV or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the proposed permit and statement of basis can be viewed at the LDEQ permits public notice webpage at <http://www.deq.louisiana.gov/public-notice> and general information related to the public participation in permitting activities can be viewed at <http://www.deq.louisiana.gov/page/the-public-participation-group>.

All correspondence should specify AI Number 50619, Permit Number 0320-00160-V6, and Activity Number PER20230003.

Scheduled Publication Date: Thursday, October 12, 2023 – LDEQ Website

JOHN BEL EDWARDS
GOVERNOR



ROGER W. GINGLES
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

Certified Mail No.

Agency Interest No. 50619
Activity No.: PER20230003

Mr. Chris Williams
Vice President, Pipeline Operations
Cheniere Creole Trail Pipeline, LP
700 Milam St., Ste. 1900
Houston, TX 77002

RE: Part 70 Operating Permit Renewal and Modification
Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana

Dear Mr. Williams:

This is to inform you that the permit renewal and modification for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 operating permit. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the _____ of _____, 2028, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and Agency Interest number cited above should be referenced in future correspondence regarding this facility.

Please be advised that pursuant to provisions of the Environmental Quality Act and the Administrative Procedure Act, the Department may initiate review of a permit during its term. However, before it takes any action to modify, suspend or revoke a permit, the Department shall, in accordance with applicable statutes and regulations, notify the permittee by mail of the facts or operational conduct that warrant the intended action and provide the permittee with the opportunity to demonstrate compliance with all lawful requirements for the retention of the effective permit.

Done this _____ day of _____, 2023.

Permit No.: 0320-00160-V6

Sincerely,

Bliss M. Higgins
Assistant Secretary

BMH/DCN
c: EPA Region 6

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Agency Interest No. 50619
Ragley, Beauregard Parish, Louisiana

I. Background

Cheniere Creole Trail Pipeline, LP has owned and operated the Gillis Compressor Station, which is located near Ragley, Beauregard Parish, since 2014. Prior to issuance of this permit, the station operated under Permit No. 0320-00160-V5, dated June 3, 2022.

II. Origin

An application dated July 10, 2023, was submitted requesting a permit renewal and modification.

III. Description

Condensate and produced water are separated from the incoming natural gas, stored in storage tanks, and periodically loaded into tank trucks for shipping offsite. Four natural gas-fired compressor turbines are utilized to move treated natural gas along the Creole Trail Pipeline to the Sabine Pass LNG Terminal (AI 119267). Emissions from the station are from compressor turbines, emergency generators, turbine blowdowns, maintenance/startup/shutdown activities, storage tanks, loading, and fugitive leaks.

Cheniere Creole Trail Pipeline, LP requests a Part 70 operating permit renewal and modification authorizing the following changes:

1. Add a Titan 130e natural gas-fired turbine (EQT0033);
2. Add two natural gas-fired emergency generators (EQT0034 and EQT0035);
3. Add two Chemical Injection Totes GCTOTE07 and GCTOTE08 (EQT0042 and EQT0043);
4. Incorporate Condensate Storage Tank GCTK07 (EQT0036), which was authorized under Regulatory Permit RP_50619_PER20220002. Tank GCTK07 replaces Tank GCTK05 (EQT0026);
5. Incorporate Condensate Storage Tank GCTK08 (EQT0037), which was authorized under Regulatory Permit RP_50619_PER20230002;
6. Authorize the equipment associated with the Momentum Meter Station and Meter Station Nos. 1, 2, and 3. Emission points associated with these meter stations include Condensate Storage Tanks GCTK09 through GCTK12 (EQT0038 through EQT0041) and Chemical Injection Totes GCTOTE09 through GCTOTE12 (EQT0044 through EQT0047);
7. Update fugitive emissions from equipment leaks (FUG0001) to reflect the additional equipment components associated with the proposed sources. Fugitive emissions will be subject to 40 CFR 60 Subpart OOOOa due to the addition of the Titan 130e turbine;

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Agency Interest No. 50619
Ragley, Beauregard Parish, Louisiana

8. Update emissions from turbine maintenance, startup, and shutdown events (GCMSS, EQT0008) to account for the addition of the Titan 130e turbine;
9. Increase the throughput of the Gasoline Storage Tank (GCGST, EQT0028) to 550 gallons/year;
10. Create an operational cap (GRP0002) to limit the blowdown activities from two Titan 130e turbines (EQT0012 and EQT0048) to no more than 208 hours/year;
11. Reassign the EQT numbers of Gas Turbine Driven Compressor Units A through D from EQT0003 through EQT0006 to EQT0029 through EQT0032; and
12. Update the General Condition XVII Activities list and Insignificant Activities list to reflect the proposed operating conditions.

Permitted emissions from the station in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	12.01	17.26	+ 5.25
PM _{2.5}	11.97	17.21	+ 5.24
SO ₂	26.02	37.40	+ 11.38
NO _x	148.21	192.84	+ 44.63
CO	217.80	283.08	+ 65.28
VOC	79.16	131.64	+ 52.48
LAC 33:III.Chapter 51 Regulated Toxic Air Pollutants			
2,2,4-Trimethylpentane	-	0.01	+ 0.01
Acetaldehyde	0.09	0.14	+ 0.05
Acrolein	0.014	0.021	+ 0.007
Benzene	0.04	0.06	+ 0.02
Ethylbenzene	0.06	0.09	+ 0.03
Formaldehyde	4.93	6.88	+ 1.95
Naphthalene	1.17	1.98	+ 0.81
n-Hexane	2.83	4.06	+ 1.23
PAH	0.005	0.007	+ 0.002
Propylene Oxide	0.05	0.07	+ 0.02
Toluene	0.22	0.33	+ 0.11
Xylene (mixed isomers)	0.11	0.16	+ 0.05
Total	9.519	13.808	+ 4.289

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Agency Interest No. 50619
Ragley, Beauregard Parish, Louisiana

IV. Type of Review

This application was reviewed for compliance with the Louisiana Part 70 operating permit program, Louisiana Air Quality Regulations, NESHAP, and NSPS. The station is an area source of hazardous air pollutants (HAPs) and a minor source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

The compressor station's source category is not listed in Table A of the definition of "major stationary source" in LAC 33:III.509. As such, the PSD major source threshold is 250 tons/year (of any regulated NSR pollutant, except greenhouse gases). Prior to issuance of this permit renewal/modification, permitted emissions of all regulated NSR pollutants were less than 250 tons/year. Therefore, the Gillis Compressor Station was not classified as a major source under the PSD program. The proposed permit renewal/modification does not authorize any regulated NSR pollutant to increase more than the PSD major source threshold of 250 tons/year; as such, PSD review is not required.

V. Credible Evidence

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

VI. Public Notice

In accordance with LAC 33:III.531.A.3, a notice requesting public comment on the proposed permit was published on the department's website on xxxx, 2023. On xxxx, 2023, copies of the public notice were mailed to the individuals who have requested to be placed on the mailing list maintained by the Office of Environmental Services (OES). The proposed permit was submitted to EPA on xxxx, 2023. Comments received during the comment period will be considered prior to a permit decision.

VII. Effects on Ambient Air

Based on the level of permitted emissions, emissions from the facility are not anticipated to prevent the attainment or maintenance of any state or national ambient air quality standard.

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Agency Interest No. 50619
Ragley, Beauregard Parish, Louisiana

VIII. General Condition XVII Activities

Work Activity	Schedule (per year)	Emissions (tons/year)		
		VOC	n-Hexane	Naphthalene
Truck Loading Operations	177,472 gallons	0.30		0.02
Station Suction Blowdown Stack 1	2	0.57	0.08	
Station Suction Blowdown Stack 2	2	0.57	0.08	
Station Suction Blowdown Stack 3	2	0.57	0.08	
Station Suction Blowdown Stack 4	2	0.57	0.08	
Station Discharge Blowdown Stack 1	2	0.69	0.09	
Station Discharge Blowdown Stack 2	2	0.69	0.09	
Miscellaneous Venting from Filter Separators/Slug Catchers	8 per filter separator/ slug catcher	1.16	0.16	0.06

IX. Insignificant Activities (LAC 33:III.501.B.5)

ID No.	Description	Capacity (gallons)	Citation
ISA-21, ISA-24	Wastewater Tanks (2)	4,200 (each)	A.3
ISA-23	Portable Diesel Tank	500	A.8
ISA-25, ISA-26, ISA-27	Lube Oil Tanks (3)	1,500 (each)	A.3
ISA-28, ISA-29	Lube Oil Tanks (2)	2,500 (each)	A.3

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station

Agency Interest No. 50619

Ragley, Beauregard Parish, Louisiana

X. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	LAC 33:III.									LAC 33:III.Chapter								
		2103	2104	2107	2109	2111	2113	2115	2121	2201	2	5*	9	11	13	15	51*	56	59*
EQT0001	GCGEN1 – Emergency Generator												2	1	3				
EQT0002	GCGEN2 – Emergency Generator												2	1	3				
EQT0007	GCTK01 – Condensate Storage Tank No. 1	2	3																
EQT0008	GCMSS – Maintenance, Startup, and Shutdown										1								
EQT0009	GCBA – Taurus 70 Unit A Blowdown Stack										1								
EQT0010	GCBB – Taurus 70 Unit B Blowdown Stack										1								
EQT0011	GCBC – Taurus 70 Unit C Blowdown Stack										1								
EQT0012	GCBD – Titan 130e Unit D Blowdown Stack										1								
EQT0016	GCGEN3 – Emergency Generator												2	1	3				
EQT0017	GCTK02 – Condensate Storage Tank No. 2	2	3																
EQT0018	GCTK03 – Condensate Storage Tank No. 3	2	3																
EQT0019	GCTK04 – Condensate Storage Tank No. 4	2	3																
EQT0020	GCTOTE01 – Chemical Injection Tote No. 1	3																	
EQT0021	GCTOTE02 – Chemical Injection Tote No. 2	3																	
EQT0022	GCTOTE03 – Chemical Injection Tote No. 3	3																	
EQT0023	GCTOTE04 – Chemical Injection Tote No. 4	3																	
EQT0024	GCTOTE05 – Chemical Injection Tote No. 5	3																	
EQT0025	GCTOTE06 – Chemical Injection Tote No. 6	3																	
EQT0027	GCTK06 – Condensate Storage Tank No. 6	2	3																
EQT0028	GCGST – Gasoline Storage Tank	1																	
EQT0029	GCPLC1 – Gas Turbine Driven Compressor Unit A – Taurus 70												2	1	3				
EQT0030	GCPLC2 – Gas Turbine Driven Compressor Unit B – Taurus 70												2	1	3				
EQT0031	GCPLC3 – Gas Turbine Driven Compressor Unit C – Taurus 70												2	1	3				
EQT0032	GCPLC4 – Gas Turbine Driven Compressor Unit D – Titan 130e												2	1	1				

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station

Agency Interest No. 50619

Ragley, Beauregard Parish, Louisiana

X. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	LAC 33:III.										LAC 33:III.Chapter								
		2103	2104	2107	2109	2111	2113	2115	2121	2201	2	5 [▲]	9	11	13	15	51*	56	59*	
EQT0033	GCPLC5 – Gas Turbine Driven Compressor Unit E – Titan 130e													2	1	1				
EQT0034	GCGEN4 – Emergency Generator													2	1	3				
EQT0035	GCGEN5 – Emergency Generator													2	1	3				
EQT0036	GCTK07 – Condensate Storage Tank No. 7	2	3																	
EQT0037	GCTK08 – Condensate Storage Tank No. 8	2	3																	
EQT0038	GCTK09 – Condensate Storage Tank No. 9	2	3																	
EQT0039	GCTK10 – Condensate Storage Tank No. 10	2	3																	
EQT0040	GCTK11 – Condensate Storage Tank No. 11	2	3																	
EQT0041	GCTK12 – Condensate Storage Tank No. 12	2	3																	
EQT0042	GCTOTE07 – Chemical Injection Tote No. 7	3																		
EQT0043	GCTOTE08 – Chemical Injection Tote No. 8	3																		
EQT0044	GCTOTE09 – Chemical Injection Tote No. 9	3																		
EQT0045	GCTOTE10 – Chemical Injection Tote No. 10	3																		
EQT0046	GCTOTE11 – Chemical Injection Tote No. 11	3																		
EQT0047	GCTOTE12 – Chemical Injection Tote No. 12	3																		
EQT0048	GCBE – Titan 130e Unit E Blowdown Stack												1							
FUG0001	GCFUG11 – Fugitive Emissions					1			3											
UNF0001	AI50619 – Gillis Compressor Station						1			3	1	1	1	1	1		3	1	3	

KEY TO MATRIX
 * The regulations indicated above are State Only regulations.
 ▲ All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.501.C.6 citations, except when the requirement found in the “Specific Requirements” report specifically states that the regulation is State Only.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station

Agency Interest No. 50619

Ragley, Beauregard Parish, Louisiana

X. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60						40 CFR 61			40 CFR 63						40 CFR				
		A	Kb	GG	4K	4J	4O	4Oa	A	J	V	A	HH	HHH	4E	4Y	4Z	6C	64	68	82
EQT0001	GCGEN1 – Emergency Generator					1											1				
EQT0002	GCGEN2 – Emergency Generator					1											1				
EQT0007	GCTK01 – Condensate Storage Tank No. 1		3					3	3												
EQT0008	GCMSS – Maintenance, Startup, and Shutdown																				
EQT0009	GCBA – Taurus 70 Unit A Blowdown Stack																				
EQT0010	GCBB – Taurus 70 Unit B Blowdown Stack																				
EQT0011	GCBC – Taurus 70 Unit C Blowdown Stack																				
EQT0012	GCBD – Titan 130e Unit D Blowdown Stack																				
EQT0016	GCGEN3 – Emergency Generator					1											1				
EQT0017	GCTK02 – Condensate Storage Tank No. 2		3					3	3												
EQT0018	GCTK03 – Condensate Storage Tank No. 3		3					3	3												
EQT0019	GCTK04 – Condensate Storage Tank No. 4		3					3	3												
EQT0020	GCTOTE01 – Chemical Injection Tote No. 1		3					3	3												
EQT0021	GCTOTE02 – Chemical Injection Tote No. 2		3					3	3												
EQT0022	GCTOTE03 – Chemical Injection Tote No. 3		3					3	3												
EQT0023	GCTOTE04 – Chemical Injection Tote No. 4		3					3	3												
EQT0024	GCTOTE05 – Chemical Injection Tote No. 5		3					3	3												
EQT0025	GCTOTE06 – Chemical Injection Tote No. 6		3					3	3												
EQT0027	GCTK06 – Condensate Storage Tank No. 6		3					3	3												
EQT0028	GCGST – Gasoline Storage Tank		3															1			
EQT0029	GCPLC1 – Gas Turbine Driven Compressor Unit A – Taurus 70			2	1			3	3								3				
EQT0030	GCPLC2 – Gas Turbine Driven Compressor Unit B – Taurus 70			2	1			3	3								3				
EQT0031	GCPLC3 – Gas Turbine Driven Compressor Unit C – Taurus 70			2	1			3	3								3				
EQT0032	GCPLC4 – Gas Turbine Driven Compressor Unit D – Titan 130e			2	1			3	3								3				
EQT0033	GCPLC5 – Gas Turbine Driven Compressor Unit E – Titan 130e			2	1			3	3								3				
EQT0034	GCGEN4 – Emergency Generator					1															1

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station

Agency Interest No. 50619

Ragley, Beauregard Parish, Louisiana

X. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60						40 CFR 61			40 CFR 63						40 CFR				
		A	Kb	GG	4K	4J	4O	4Oa	A	J	V	A	HH	HHH	4E	4Y	4Z	6C	64	68	82
EQT0035	GCGEN5 – Emergency Generator					1											1				
EQT0036	GCTK07 – Condensate Storage Tank No. 7		3					3	3												
EQT0037	GCTK08 – Condensate Storage Tank No. 8		3					3	3												
EQT0038	GCTK09 – Condensate Storage Tank No. 9		3					3	3												
EQT0039	GCTK10 – Condensate Storage Tank No. 10		3					3	3												
EQT0040	GCTK11 – Condensate Storage Tank No. 11		3					3	3												
EQT0041	GCTK12 – Condensate Storage Tank No. 12		3					3	3												
EQT0042	GCTOTE07 – Chemical Injection Tote No. 7		3					3	3												
EQT0043	GCTOTE08 – Chemical Injection Tote No. 8		3					3	3												
EQT0044	GCTOTE09 – Chemical Injection Tote No. 9		3					3	3												
EQT0045	GCTOTE10 – Chemical Injection Tote No. 10		3					3	3												
EQT0046	GCTOTE11 – Chemical Injection Tote No. 11		3					3	3												
EQT0047	GCTOTE12 – Chemical Injection Tote No. 12		3					3	3												
EQT0048	GCBE – Titan 130e Unit E Blowdown Stack																				
FUG0001	GCFUG11 – Fugitive Emissions							3	1												
UNF0001	AI50619 – Gillis Compressor Station	1												3	3	3					3

KEY TO MATRIX

- 1 - The regulations have applicable requirements which apply to this particular emission source.
 - The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
 - 2 - The regulations have applicable requirements which apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
 - 3 - The regulations apply to this general type of emission source (i.e. vents, furnaces, and fugitives) but do not apply to this particular emission source.
- Blank – The regulations clearly do not apply to this type of emission source.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station

Agency Interest No. 50619

Ragley, Beauregard Parish, Louisiana

XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Status	Citation	Explanation
EQT0001, EQT0002, EQT0016	LAC 33:III.Chapter 11	Exempt	LAC 33:III.1107.B.1	Fueled by natural gas.
EQT0034, EQT0035	LAC 33:III.Chapter 15	Does not apply	LAC 33:III.1502.A.3	Potential SO ₂ emissions < 5 tons/year.
EQT0007	LAC 33:III.2103	Exempt	LAC 33:III.2103.G.1	Tank volume < 420,000 gallons and stores condensate.
	LAC 33:III.2104	Does not apply	LAC 33:III.2104	Potential flash gas emissions < 100 tons/year.
	40 CFR 60 Subpart Kb	Does not apply	40 CFR 60.110b	Tank volume < 75 cubic meters.
	40 CFR 60 Subpart OOOO	Does not apply	40 CFR 60.5365(e)	Potential to emit VOC < 6 tons/year.
	40 CFR 60 Subpart OOOOa	Does not apply	40 CFR 60.5365a(e)	The tank was constructed prior to September 18, 2015.
EQT0017, EQT0018 EQT0019, EQT0027, EQT0036 through EQT0041	LAC 33:III.2103	Exempt	LAC 33:III.2103.G.1	Tank volume < 420,000 gallons and stores condensate
	LAC 33:III.2104	Does not apply	LAC 33:III.2104	Potential flash gas emissions < 100 tons/year
	40 CFR 60 Subpart Kb	Does not apply	40 CFR 60.110b	Tank volume < 75 cubic meters
	40 CFR 60 Subpart OOOO	Does not apply	40 CFR 60.5365(e)	The tanks were constructed after September 18, 2015.
	40 CFR 60 Subpart OOOOa	Does not apply	40 CFR 60.5365a(e)	Potential to emit VOC < 6 tons/year.
EQT0020 through EQT0025 EQT0042 through EQT0047	LAC 33:III.2103	Does not apply	LAC 33:III.2103.A	Tank volume <= 250 gallons
	40 CFR 60 Subpart Kb	Does not apply	40 CFR 60.110b	Tank volume < 75 cubic meters
	40 CFR 60 Subpart OOOO	Does not apply	40 CFR 60.5365(e)	The tanks were constructed after September 18, 2015.
	40 CFR 60 Subpart OOOOa	Does not apply	40 CFR 60.5365a(e)	Potential to emit VOC < 6 tons/year.
EQT0028	40 CFR 60 Subpart Kb	Does not apply	40 CFR 60.110b	Tank volume < 75 cubic meters
EQT0029, EQT0030, EQT0031	LAC 33:III.Chapter 11	Exempt	LAC 33:III.1107.B.1	Fueled by natural gas.
	LAC 33:III.Chapter 15	Does not apply	LAC 33:III.1502.A.3	Potential SO ₂ emissions < 5 tons/year.
	40 CFR 60 Subpart GG	Exempt	40 CFR 60.4305(b)	Subject to 40 CFR 60 Subpart KKKK.
	40 CFR 63 Subpart YYYY	Does not apply	40 CFR 63.6080	The compressor station is not a major source of HAP.
	40 CFR 60 Subpart OOOO	Does not apply	40 CFR 60.5365(b)	The centrifugal compressors are equipped with dry seals.
	40 CFR 60 Subpart OOOOa	Does not apply	40 CFR 60.5365a(b)	The compressors were constructed prior to September 18, 2015.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station

Agency Interest No. 50619

Ragley, Beauregard Parish, Louisiana

XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Status	Citation	Explanation
EQT0032	LAC 33:III.Chapter 11	Exempt	LAC 33:III.1107.B.1	Fueled by natural gas.
	LAC 33:III.1503.C	Exempt	LAC 33:III.1503.C	Potential SO ₂ emissions < 250 tons/year.
	40 CFR 60 Subpart GG	Exempt	40 CFR 60.4305(b)	Subject to 40 CFR 60 Subpart KKKK.
	40 CFR 63 Subpart YYYY	Does not apply	40 CFR 63.6080	The compressor station is not a major source of HAP.
	40 CFR 60 Subpart OOOO	Does not apply	40 CFR 60.5365(b)	The centrifugal compressor is equipped with dry seals.
	40 CFR 60 Subpart OOOOa	Does not apply	40 CFR 60.5365a(e)	The compressor was constructed prior to September 18, 2015.
EQT0033	LAC 33:III.Chapter 11	Exempt	LAC 33:III.1107.B.1	Fueled by natural gas.
	LAC 33:III.1503.C	Exempt	LAC 33:III.1503.C	Potential SO ₂ emissions < 250 tons/year.
	40 CFR 60 Subpart GG	Exempt	40 CFR 60.4305(b)	Subject to 40 CFR 60 Subpart KKKK.
	40 CFR 63 Subpart YYYY	Does not apply	40 CFR 63.6080	The compressor station is not a major source of HAP.
	40 CFR 60 Subpart OOOO	Does not apply	40 CFR 60.5365(e)	The compressor was constructed after September 18, 2015.
	40 CFR 60 Subpart OOOOa	Does not apply	40 CFR 60.5365a(e)	The centrifugal compressors are equipped with dry seals.
FUG0001	LAC 33:III.2121	Does not apply	LAC 33:III.2121.A	Not an affected facility
	40 CFR 60 Subpart OOOO	Does not apply	40 CFR 60.5365	Not a natural gas processing plant
UNF0001	LAC 33:III.Chapter 51	Does not apply	LAC 33:III.5101	Potential TAP emissions < 10/25 tons/year
	LAC 33:III.Chapter 59 40 CFR Part 68	Does not apply	LAC 33:III.5907.A 40 CFR 68.10(a)	Does not produce, process, handle, or store substances listed in Table 59.0 or 59.1 of Chapter 59 or in 40 CFR 68.130 in quantities greater than the threshold quantities.
	40 CFR 63 Subpart HH	Does not apply	40 CFR 63.760	Does not meet criteria in 40 CFR 63.760
	40 CFR 63 Subpart HHH	Does not apply	40 CFR 63.1270	Not a major source of HAP
	40 CFR 63 Subpart EEEE	Does not apply	40 CFR 63.2330	Not a major source of HAP

The above table provides explanation for both the exemption status or non-applicability of a source cited by 2 or 3 in the matrix presented in Section X of this permit

INVENTORIES

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

Subject Item Inventory:

ID	Description	Tank Volume	Max Operating Rate	Normal Operating Rate	Comments	Operating Time
Gillis Compressor Station						
EQT 0001	GCGEN1 - Emergency Generator		543 horsepower	543 horsepower	Natural Gas	100 hr/yr
EQT 0002	GCGEN2 - Emergency Generator		543 horsepower	543 horsepower	Natural Gas	100 hr/yr
EQT 0007	GCTK01 - Condensate Storage Tank No. 1	4324.15 gallons		12568.3 gallons/yr		8760 hr/yr
EQT 0008	GCMSS - Maintenance, Startup, and Shutdown					179.33 hr/yr
EQT 0009	GCBA - Taurus 70 Unit A Blowdown Stack					None Specified
EQT 0010	GCBB - Taurus 70 Unit B Blowdown Stack					None Specified
EQT 0011	GCBC - Taurus 70 Unit C Blowdown Stack					None Specified
EQT 0012	G CBD - Titan 130e Unit D Blowdown Stack					None Specified
EQT 0016	GCGEN3 - Emergency Generator		543 horsepower	543 horsepower	Natural Gas	100 hr/yr
EQT 0017	GCTK02 - Condensate Storage Tank No. 2	2100 gallons		12685 gallons/yr		8760 hr/yr
EQT 0018	GCTK03 - Condensate Storage Tank No. 3	2100 gallons		12685 gallons/yr		8760 hr/yr
EQT 0019	GCTK04 - Condensate Storage Tank No. 4	2100 gallons		12685 gallons/yr		8760 hr/yr
EQT 0020	GCTOTE01 - Chemical Injection Tote No. 1	250 gallons		2920 gallons/yr		8760 hr/yr
EQT 0021	GCTOTE02 - Chemical Injection Tote No. 2	250 gallons		2920 gallons/yr		8760 hr/yr
EQT 0022	GCTOTE03 - Chemical Injection Tote No. 3	250 gallons		3285 gallons/yr		8760 hr/yr
EQT 0023	GCTOTE04 - Chemical Injection Tote No. 4	250 gallons		3285 gallons/yr		8760 hr/yr
EQT 0024	GCTOTE05 - Chemical Injection Tote No. 5	250 gallons		3285 gallons/yr		8760 hr/yr
EQT 0025	GCTOTE06 - Chemical Injection Tote No. 6	250 gallons		13140 gallons/yr		8760 hr/yr
EQT 0027	GCTK06 - Condensate Storage Tank No. 6	441 gallons		11770 gallons/yr		8760 hr/yr
EQT 0028	GCGST - Gasoline Storage Tank	550 gallons		550 gallons/yr		8760 hr/yr
EQT 0029	GCPLC1 - Gas Turbine Driven Compressor Unit A - Taurus 70		93.78 MM BTU/hr	78.5 MM BTU/hr	Natural Gas	8760 hr/yr
EQT 0030	GCPLC2 - Gas Turbine Driven Compressor Unit B - Taurus 70		93.78 MM BTU/hr	78.5 MM BTU/hr	Natural Gas	8760 hr/yr
EQT 0031	GCPLC3 - Gas Turbine Driven Compressor Unit C - Taurus 70		93.78 MM BTU/hr	78.5 MM BTU/hr	Natural Gas	8760 hr/yr
EQT 0032	GCPLC4 - Gas Turbine Driven Compressor Unit D - Titan 130e		215.68 MM BTU/hr	182.5 MM BTU/hr	Natural Gas	8760 hr/yr
EQT 0033	GCPLC5 - Gas Turbine Driven Compressor Unit E - Titan 130e		215.68 MM BTU/hr	182.5 MM BTU/hr	Natural Gas	8760 hr/yr
EQT 0034	GCGEN4 - Emergency Generator		543 horsepower	543 horsepower	Natural Gas	100 hr/yr
EQT 0035	GCGEN5 - Emergency Generator		543 horsepower	543 horsepower	Natural Gas	100 hr/yr
EQT 0036	GCTK07 - Condensate Storage Tank No. 7	2100 gallons		11770 gallons/yr		8760 hr/yr
EQT 0037	GCTK08 - Condensate Storage Tank No. 8	4324.15 gallons		12568.3 gallons/yr		8760 hr/yr
EQT 0038	GCTK09 - Condensate Storage Tank No. 9	2100 gallons		12685 gallons/yr		8760 hr/yr
EQT 0039	GCTK10 - Condensate Storage Tank No. 10	2100 gallons		12685 gallons/yr		8760 hr/yr
EQT 0040	GCTK11 - Condensate Storage Tank No. 11	2100 gallons		12685 gallons/yr		8760 hr/yr
EQT 0041	GCTK12 - Condensate Storage Tank No. 12	2100 gallons		12685 gallons/yr		8760 hr/yr
EQT 0042	GCTOTE07 - Chemical Injection Tote No. 7	250 gallons		2920 gallons/yr		8760 hr/yr
EQT 0043	GCTOTE08 - Chemical Injection Tote No. 8	250 gallons		2920 gallons/yr		8760 hr/yr
EQT 0044	GCTOTE09 - Chemical Injection Tote No. 9	250 gallons		13140 gallons/yr		8760 hr/yr
EQT 0045	GCTOTE10 - Chemical Injection Tote No. 10	250 gallons		13140 gallons/yr		8760 hr/yr
EQT 0046	GCTOTE11 - Chemical Injection Tote No. 11	250 gallons		13140 gallons/yr		8760 hr/yr
EQT 0047	GCTOTE12 - Chemical Injection Tote No. 12	250 gallons		13140 gallons/yr		8760 hr/yr
EQT 0048	GCBE - Titan 130e Unit E Blowdown Stack					None Specified
FUG 0001	GCFUG11 - Fugitive Emissions					8760 hr/yr

INVENTORIES

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

Stack Information:

ID	Description	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Temperature (oF)
Gillis Compressor Station							
EQT 0001	GCGEN1 - Emergency Generator	.83		25	95	3112	844
EQT 0002	GCGEN2 - Emergency Generator	.83		25	95	3112	844
EQT 0009	GCBA - Taurus 70 Unit A Blowdown Stack	4.5		12	74	70537	80
EQT 0010	GCBB - Taurus 70 Unit B Blowdown Stack	4.5		12	74	70537	80
EQT 0011	GCBC - Taurus 70 Unit C Blowdown Stack	4.5		12	74	70537	80
EQT 0012	GCBD - Titan 130e Unit D Blowdown Stack	6.5		12	84	166330	80
EQT 0016	GCGEN3 - Emergency Generator	.83		25	95	3112	844
EQT 0029	GCPLC1 - Gas Turbine Driven Compressor Unit A - Taurus 70		56.25	45	38.19	128890	933
EQT 0030	GCPLC2 - Gas Turbine Driven Compressor Unit B - Taurus 70		56.25	45	38.19	128890	933
EQT 0031	GCPLC3 - Gas Turbine Driven Compressor Unit C - Taurus 70		56.25	45	38.19	128890	933
EQT 0032	GCPLC4 - Gas Turbine Driven Compressor Unit D - Titan 130e		75.11	45	52.87	238264	933
EQT 0033	GCPLC5 - Gas Turbine Driven Compressor Unit E - Titan 130e		75.11	45	52.87	238264	933
EQT 0034	GCGEN4 - Emergency Generator	.83		25	95	3112	844
EQT 0035	GCGEN5 - Emergency Generator	.83		25	95	3112	844
EQT 0048	GCBE - Titan 130e Unit E Blowdown Stack	6.5		12	84	166330	80
FUG 0001	GCFUG11 - Fugitive Emissions						70

Subject Item Groups:

ID	Group Type	Group Description
CRG 0001	Common Requirements Group	TURBINES - Common Requirements for Turbines
CRG 0002	Common Requirements Group	E-GENS - Common Requirements for Emergency Generators
GRP 0001	Equipment Group	T-70 BLOWDOWN - Taurus 70 Blowdown Emissions
GRP 0002	Equipment Group	130e BLOWDOWN - Titan 130e Blowdown Emissions
UNF 0001	Unit or Facility Wide	AI50619 - Gillis Compressor Station

Group Membership:

ID	Description	Member of Groups
EQT 0001	GCGEN1 - Emergency Generator	CRG0000000002
EQT 0002	GCGEN2 - Emergency Generator	CRG0000000002
EQT 0009	GCBA - Taurus 70 Unit A Blowdown Stack	GRP0000000001
EQT 0010	GCBB - Taurus 70 Unit B Blowdown Stack	GRP0000000001
EQT 0011	GCBC - Taurus 70 Unit C Blowdown Stack	GRP0000000001
EQT 0012	GCBD - Titan 130e Unit D Blowdown Stack	GRP0000000002
EQT 0016	GCGEN3 - Emergency Generator	CRG0000000002
EQT 0029	GCPLC1 - Gas Turbine Driven Compressor Unit A - Taurus 70	CRG0000000001
EQT 0030	GCPLC2 - Gas Turbine Driven Compressor Unit B - Taurus 70	CRG0000000001
EQT 0031	GCPLC3 - Gas Turbine Driven Compressor Unit C - Taurus 70	CRG0000000001
EQT 0032	GCPLC4 - Gas Turbine Driven Compressor Unit D - Titan 130e	CRG0000000001
EQT 0033	GCPLC5 - Gas Turbine Driven Compressor Unit E - Titan 130e	CRG0000000001
EQT 0034	GCGEN4 - Emergency Generator	CRG0000000002
EQT 0035	GCGEN5 - Emergency Generator	CRG0000000002
EQT 0048	GCBE - Titan 130e Unit E Blowdown Stack	GRP0000000002

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group.

INVENTORIES

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

Annual Maintenance Fee:

Fee Number	Air Contaminant Source	Multiplier	Units of Measure
1430	1430 Natural Gas Comp (Turbines)	792.18	100 hp

SIC Codes:

1311	Crude petroleum and natural gas	AI 50619
4922	Natural gas transmission	UNF 001

EMISSION RATES FOR CRITERIA POLLUTANTS AND CO2e

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

All Phases
Gillis Compressor Station

Subject Item	PM 10			PM 2.5			SO2			NOx		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0001 GCGEN1	0.04	0.04	<0.01	0.04	0.04	<0.01	0.05	0.05	<0.01	2.39	2.39	0.12
EQT 0002 GCGEN2	0.04	0.04	<0.01	0.04	0.04	<0.01	0.05	0.05	<0.01	2.39	2.39	0.12
EQT 0007 GCTK01												
EQT 0008 GCMSS	0.97	1.54	0.09	0.97	1.54	0.09	2.11	3.35	0.19	8.48	14.40	0.76
EQT 0009 GCBA												
EQT 0010 GCBB												
EQT 0011 GCBC												
EQT 0012 GCBD												
EQT 0016 GCGEN3	0.04	0.04	<0.01	0.04	0.04	<0.01	0.05	0.05	<0.01	2.39	2.39	0.12
EQT 0017 GCTK02												
EQT 0018 GCTK03												
EQT 0019 GCTK04												
EQT 0020 GCTOTE01												
EQT 0021 GCTOTE02												
EQT 0022 GCTOTE03												
EQT 0023 GCTOTE04												
EQT 0024 GCTOTE05												
EQT 0025 GCTOTE06												
EQT 0027 GCTK06												

EMISSION RATES FOR CRITERIA POLLUTANTS AND CO2e
AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station
Activity Number: PER20230003
Permit Number: 0320-00160-V6
Air - Title V Regular Permit Renewal/Sign Mod

All Phases
 Gillis Compressor Station

Subject Item	CO			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0001 GCGEN1	4.79	4.79	0.24	1.20	1.20	0.06
EQT 0002 GCGEN2	4.79	4.79	0.24	1.20	1.20	0.06
EQT 0007 GCTK01				1.35	1.35	5.94
EQT 0008 GCMSS	752.35	1,245.60	67.46	8.60	14.28	0.77
EQT 0009 GCBA					70.79	
EQT 0010 GCBB					70.79	
EQT 0011 GCBC					70.79	
EQT 0012 GCBD					173.72	
EQT 0016 GCGEN3	4.79	4.79	0.24	1.20	1.20	0.06
EQT 0017 GCTK02				1.34	1.34	5.87
EQT 0018 GCTK03				1.34	1.34	5.87
EQT 0019 GCTK04				1.34	1.34	5.87
EQT 0020 GCTOTE01				0.003	0.003	0.01
EQT 0021 GCTOTE02				0.003	0.003	0.01
EQT 0022 GCTOTE03				0.003	0.003	0.01
EQT 0023 GCTOTE04				0.003	0.003	0.01
EQT 0024 GCTOTE05				0.003	0.003	0.01
EQT 0025 GCTOTE06				0.01	0.01	0.03
EQT 0027 GCTK06				1.23	1.23	5.39

EMISSION RATES FOR CRITERIA POLLUTANTS AND CO₂e
AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station
Activity Number: PER20230003
Permit Number: 0320-00160-V6
Air - Title V Regular Permit Renewal/Sign Mod

All Phases
 Gillis Compressor Station

Subject Item	PM 10			PM 2.5			SO ₂			NO _x		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0028 GCGST												
EQT 0029 GCPLC1	0.51	0.61	2.24	0.51	0.61	2.23	1.11	1.32	4.86	7.85	9.38	34.38
EQT 0030 GCPLC2	0.51	0.61	2.24	0.51	0.61	2.23	1.11	1.32	4.86	7.85	9.38	34.38
EQT 0031 GCPLC3	0.51	0.61	2.24	0.51	0.61	2.23	1.11	1.32	4.86	7.85	9.38	34.38
EQT 0032 GCPLC4	1.19	1.54	5.20	1.18	1.54	5.19	2.58	3.35	11.29	10.08	13.11	44.17
EQT 0033 GCPLC5	1.19	1.54	5.20	1.18	1.54	5.19	2.58	3.35	11.29	10.08	13.11	44.17
EQT 0034 GCGEN4	0.04	0.04	<0.01	0.04	0.04	<0.01	0.05	0.05	<0.01	2.39	2.39	0.12
EQT 0035 GCGEN5	0.04	0.04	<0.01	0.04	0.04	<0.01	0.05	0.05	<0.01	2.39	2.39	0.12
EQT 0036 GCTK07												
EQT 0037 GCTK08												
EQT 0038 GCTK09												
EQT 0039 GCTK10												
EQT 0040 GCTK11												
EQT 0041 GCTK12												
EQT 0042 GCTOTE07												
EQT 0043 GCTOTE08												
EQT 0044 GCTOTE09												
EQT 0045 GCTOTE10												
EQT 0046 GCTOTE11												

EMISSION RATES FOR CRITERIA POLLUTANTS AND CO2e

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

All Phases

Gillis Compressor Station

Subject Item	CO			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0028 GCGST				0.01	0.01	0.05
EQT 0029 GCPLC1	9.50	11.35	41.60	0.55	0.66	2.41
EQT 0030 GCPLC2	9.50	11.35	41.60	0.55	0.66	2.41
EQT 0031 GCPLC3	9.50	11.35	41.60	0.55	0.66	2.41
EQT 0032 GCPLC4	10.23	13.30	44.81	1.17	1.52	5.12
EQT 0033 GCPLC5	10.23	13.30	44.81	1.17	1.52	5.12
EQT 0034 GCGEN4	4.79	4.79	0.24	1.20	1.20	0.06
EQT 0035 GCGEN5	4.79	4.79	0.24	1.20	1.20	0.06
EQT 0036 GCTK07				1.24	1.24	5.45
EQT 0037 GCTK08				1.35	1.35	5.94
EQT 0038 GCTK09				1.34	1.34	5.87
EQT 0039 GCTK10				1.34	1.34	5.87
EQT 0040 GCTK11				1.34	1.34	5.87
EQT 0041 GCTK12				1.34	1.34	5.87
EQT 0042 GCTOTE07				0.003	0.003	0.01
EQT 0043 GCTOTE08				0.003	0.003	0.01
EQT 0044 GCTOTE09				0.01	0.01	0.03
EQT 0045 GCTOTE10				0.01	0.01	0.03
EQT 0046 GCTOTE11				0.01	0.01	0.03

EMISSION RATES FOR CRITERIA POLLUTANTS AND CO2e

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

All Phases
Gillis Compressor Station

Subject Item	PM 10			PM 2.5			SO2			NOx		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0047 GCTOTE12												
EQT 0048 GCBE												
FUG 0001 GCFUG11												
GRP 0001 T-70 BLOWDOWN												
GRP 0002 130e BLOWDOWN												

EMISSION RATES FOR CRITERIA POLLUTANTS AND CO2e

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

All Phases

Gillis Compressor Station

Subject Item	CO			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0047 GCTOTE12				0.01	0.01	0.03
EQT 0048 GCBE					173.72	
FUG 0001 GCFUG11				4.40	4.40	19.27
GRP 0001 T-70 BLOWDOWN				70.79		11.68
GRP 0002 130e BLOWDOWN				173.72		18.07

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

All phases

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0001 GCGEN1	Acetaldehyde	0.03	0.03	<0.01
	Acrolein	0.019	0.019	0.001
	Formaldehyde	0.20	0.20	0.01
EQT 0002 GCGEN2	Acetaldehyde	0.03	0.03	<0.01
	Acrolein	0.019	0.019	0.001
	Formaldehyde	0.20	0.20	0.01
EQT 0007 GCTK01	Naphthalene	0.02	0.02	0.07
EQT 0009 GCBA	n-Hexane		9.63	
EQT 0010 GCBB	n-Hexane		9.63	
EQT 0011 GCBC	n-Hexane		9.63	
EQT 0012 GCBD	n-Hexane		23.64	
EQT 0016 GCGEN3	Acetaldehyde	0.03	0.03	<0.01
	Acrolein	0.019	0.019	0.001
	Formaldehyde	0.20	0.20	0.01
EQT 0017 GCTK02	Naphthalene	0.02	0.02	0.08
EQT 0018 GCTK03	Naphthalene	0.02	0.02	0.08
EQT 0019 GCTK04	Naphthalene	0.02	0.02	0.08
EQT 0027 GCTK06	Naphthalene	0.03	0.03	0.15
EQT 0028 GCGST	2,2,4-Trimethylpentane	<0.001	<0.001	<0.01
	Benzene	<0.001	<0.001	<0.01
	Toluene	<0.001	<0.001	<0.01
EQT 0029 GCPLC1	Acetaldehyde	0.003	0.004	0.01
	Acrolein	0.001	0.001	0.002
	Benzene	0.001	0.001	<0.01
	Ethyl benzene	0.003	0.003	0.01
	Formaldehyde	0.23	0.27	0.99
	Polynuclear Aromatic Hydrocarbons	<0.001	<0.001	0.001
	Propylene oxide	0.002	0.003	0.01
	Toluene	0.01	0.01	0.04
	Xylene (mixed isomers)	0.01	0.01	0.02
EQT 0030 GCPLC2	Acetaldehyde	0.003	0.004	0.01
	Acrolein	0.001	0.001	0.002
	Benzene	0.001	0.001	<0.01
	Ethyl benzene	0.003	0.003	0.01
	Formaldehyde	0.23	0.27	0.99
	Polynuclear Aromatic Hydrocarbons	<0.001	<0.001	0.001
	Propylene oxide	0.002	0.003	0.01
	Toluene	0.01	0.01	0.04
	Xylene (mixed isomers)	0.01	0.01	0.02
EQT 0031 GCPLC3	Acetaldehyde	0.003	0.004	0.01
	Acrolein	0.001	0.001	0.002
	Benzene	0.001	0.001	<0.01
	Ethyl benzene	0.003	0.003	0.01
	Formaldehyde	0.23	0.27	0.99
	Polynuclear Aromatic Hydrocarbons	<0.001	<0.001	0.001

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

All phases

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
	Propylene oxide	0.002	0.003	0.01
	Toluene	0.01	0.01	0.04
	Xylene (mixed isomers)	0.01	0.01	0.02
EQT 0032 GCPLC4	Acetaldehyde	0.01	0.01	0.03
	Acrolein	0.001	0.002	0.005
	Benzene	0.002	0.003	0.01
	Ethyl benzene	0.01	0.01	0.03
	Formaldehyde	0.44	0.57	1.93
	Naphthalene	<0.001	<0.001	<0.01
	Polynuclear Aromatic Hydrocarbons	<0.001	0.001	0.002
	Propylene oxide	0.01	0.01	0.02
	Toluene	0.02	0.03	0.10
	Xylene (mixed isomers)	0.01	0.02	0.05
EQT 0033 GCPLC5	Acetaldehyde	0.01	0.01	0.03
	Acrolein	0.001	0.002	0.005
	Benzene	0.002	0.003	0.01
	Ethyl benzene	0.01	0.01	0.03
	Formaldehyde	0.44	0.57	1.93
	Naphthalene	<0.001	<0.001	<0.01
	Polynuclear Aromatic Hydrocarbons	<0.001	0.001	0.002
	Propylene oxide	0.01	0.01	0.02
	Toluene	0.02	0.03	0.10
	Xylene (mixed isomers)	0.01	0.02	0.05
EQT 0034 GCGEN4	Acetaldehyde	0.03	0.03	<0.01
	Acrolein	0.019	0.019	0.001
	Formaldehyde	0.20	0.20	0.01
EQT 0035 GCGEN5	Acetaldehyde	0.03	0.03	<0.01
	Acrolein	0.019	0.019	0.001
	Formaldehyde	0.20	0.20	0.01
EQT 0036 GCTK07	Naphthalene	0.03	0.03	0.15
EQT 0037 GCTK08	Naphthalene	0.02	0.02	0.07
EQT 0038 GCTK09	Naphthalene	0.02	0.02	0.08
EQT 0039 GCTK10	Naphthalene	0.02	0.02	0.08
EQT 0040 GCTK11	Naphthalene	0.02	0.02	0.08
EQT 0041 GCTK12	Naphthalene	0.02	0.02	0.08
EQT 0048 GCBE	n-Hexane		23.64	
FUG 0001 GCFUG11	n-Hexane	0.001	0.001	<0.01
	Naphthalene	0.22	0.22	0.96
GRP 0001 T-70 BLOWDOWN	n-Hexane	9.63		1.59
GRP 0002 130e BLOWDOWN	n-Hexane	23.64		2.46
UNF 0001 AI50619	2,2,4-Trimethylpentane			0.01
	Acetaldehyde			0.14
	Acrolein			0.021
	Benzene			0.06
	Ethyl benzene			0.09

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

All phases

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
	Formaldehyde			6.88
	n-Hexane			4.06
	Naphthalene			1.98
	Polynuclear Aromatic Hydrocarbons			0.007
	Propylene oxide			0.07
	Toluene			0.33
	Xylene (mixed isomers)			0.16

Note: Emission rates associated with alternate operating scenarios (SCN) are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

SPECIFIC REQUIREMENTS

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

CRG 0001 TURBINES - Common Requirements for Turbines

Group Members: EQT 0029 EQT 0030 EQT 0031 EQT 0032 EQT 0033

- 1 [40 CFR 60.4320(a)] Nitrogen oxides (NOx) \leq 25 ppm @ 15%O₂ or 150 ppm at 15% O₂ when operating at less than 75% of peak load. Subpart KKKK. [40 CFR 60.4320(a)]
Which Months: All Year Statistical Basis: Hourly average
- 2 [40 CFR 60.4330(a)(2)] Sulfur dioxide (SO₂) \leq 0.060 lb/MMBTU (26 ng/J) heat input. Subpart KKKK. [40 CFR 60.4330(a)(2)]
Which Months: All Year Statistical Basis: None specified
- 3 [40 CFR 60.4333(a)] Operate and maintain the stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. Subpart KKKK. [40 CFR 60.4333(a)]
- 4 [40 CFR 60.4340(a)] The permittee shall perform annual performance tests in accordance with 40 CFR 60.4400 to demonstrate continuous compliance. If the NO_x emission result from the performance test is less than or equal to 75 percent of the NO_x emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_x emission limit for the turbine, you must resume annual performance tests. [40 CFR 60.4340(a)]
- 5 [40 CFR 60.4365] Sulfur dioxide (SO₂) \leq 0.060 lb/MMBTU (26 ng/J). Use one of the sources of information specified in 40 CFR 60.4365(a) and (b) to make the required demonstration. Subpart KKKK.
Which Months: All Year Statistical Basis: None specified
- 6 [40 CFR 60.4375(b)] Submit performance test results: Due in writing before the close of business on the 60th day following the completion of the performance test. Submit KKKK. [40 CFR 60.4375(b)]
- 7 [40 CFR 60.4400(a)] Conduct an initial performance test for NO_x, as required in 40 CFR 60.8. Use one of methodologies specified in 40 CFR 60.4400(a)(1)(i) and (a)(1)(ii). Subsequent NO_x performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). Subpart KKKK. [40 CFR 60.4400(a)]
- 8 [40 CFR 60.4400(b)] Permittee shall conduct the performance test at any load condition within plus or minus 25 percent of 100 percent of peak load. The test may be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. Three separate test runs must be conducted for each performance test. The minimum time per run is 20 minutes. [40 CFR 60.4400(b)]
- 9 [40 CFR 60.4415(a)] Conduct initial and annual performance tests for SO₂ using the methodology set forth in 40 CFR 60.4415(a)(1). Subpart KKKK. [40 CFR 60.4415(a)]
- 10 [LAC 33:III.1311.C] Opacity \leq 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. (Complies by using sweet natural gas as fuel).
Which Months: All Year Statistical Basis: Six-minute average
- 11 [LAC 33:III.1513.C] EQT0032 and EQT0033: Equipment/operational data recordkeeping by electronic or hard copy once initially and annually. Record and retain at the site sufficient data to show annual potential sulfur dioxide emissions.

CRG 0002 E-GENS - Common Requirements for Emergency Generators

Group Members: EQT 0001 EQT 0002 EQT 0016 EQT 0034 EQT 0035

- 12 [40 CFR 60.4233(e)] Nitrogen oxides (NOx) \leq 2.0 g/BHP-hr (0.0044 lb/HP-hr; 160 ppm_{dv} at 15% O₂), Carbon monoxide \leq 4.0 g/BHP-hr (0.0088 lb/HP-hr; 540 ppm_{dv} at 15% O₂), and VOC, Total (Excluding formaldehyde) \leq 1.0 g/BHP-hr (0.0022 lb/HP-hr; 86 ppm_{dv} at 15% O₂). Subpart JJJJ. [40 CFR 60.4233(e)]
Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

CRG 0002 E-GENS - Common Requirements for Emergency Generators

Group Members: EQT 0001 EQT 0002 EQT 0016 EQT 0034 EQT 0035

- 13 [40 CFR 60.4234] Operate and maintain stationary SI ICE to achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. Subpart JJJJ.
- 14 [40 CFR 60.4237] Operating time monitored by hour/time monitor continuously during operation, if the engine meets the standards applicable to emergency engines. Install a non-resettable hour meter upon startup of engine. Subpart JJJJ.
Which Months: All Year Statistical Basis: None specified
- 15 [40 CFR 60.4243(b)(2)] Conduct an initial performance test. Conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. Subpart JJJJ. [40 CFR 60.4243(b)(2)]
- 16 [40 CFR 60.4243(b)(2)] Demonstrate compliance according to the emission standards specified in 40 CFR 60.4233(e), the requirements specified in 40 CFR 60.4244, as applicable, and the requirements specified in 40 CFR 60.4243(b)(2)(i) and (b)(2)(ii), as applicable. Subpart JJJJ. [40 CFR 60.4243(b)(2)]
- 17 [40 CFR 60.4243(b)(2)] Ensure that the engine is maintained and operated to the extent practicable in a manner consistent with good air pollution control practice for minimizing emissions. Subpart JJJJ. [40 CFR 60.4243(b)(2)]
- 18 [40 CFR 60.4243(d)(1)] There is no time limit on the use of emergency stationary ICE in emergency situations. Subpart JJJJ. [40 CFR 60.4243(d)(1)]
- 19 [40 CFR 60.4243(d)(2)(i)] Operate for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by the federal, state or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. LDEQ may be petitioned for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if records are maintained indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. Subpart JJJJ. [40 CFR 60.4243(d)(2)(i)]
- 20 [40 CFR 60.4243(d)(3)] Operate for up to 50 hours per calendar year in non-emergency situations. Count the 50 hours of operation in non-emergency situations as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4243(d)(2). Do not use the 50 hours per calendar year for non-emergency situations for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except as provided in 40 CFR 60.4243(d)(3) (i). Subpart JJJJ. [40 CFR 60.4243(d)(3)]
- 21 [40 CFR 60.4243(d)] Operate according to the requirements in 40 CFR 60.4243(d)(1), (d)(2)(i), and (d)(3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart JJJJ, any operation other than as described in 40 CFR 60.4243(d)(1), (d)(2)(i), and (d)(3) is prohibited. If the engine is not operated according to these requirements, the engine will not be considered an emergency engine under 40 CFR 60 Subpart JJJJ and must meet all requirements for non-emergency engines. Subpart JJJJ. [40 CFR 60.4243(d)]
- 22 [40 CFR 60.4243(e)] Operate using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations. Keep records of such use. If propane is used for more than 100 hours per year and the engine is not certified to the emission standards when using propane, conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233. Subpart JJJJ. [40 CFR 60.4243(e)]
- 23 [40 CFR 60.4244] Conduct performance tests by following the procedures in 40 CFR 60.4244(a) through (g). Subpart JJJJ.
- 24 [40 CFR 60.4245(a)] Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep records of the information in 40 CFR 60.4245(a)(1) through (a)(4). Subpart JJJJ. [40 CFR 60.4245(a)]
- 25 [40 CFR 60.4245(b)] Operating time recordkeeping by electronic or hard copy upon occurrence of event, if the engine meets the standards applicable to emergency engines. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. Subpart JJJJ. [40 CFR 60.4245(b)]

SPECIFIC REQUIREMENTS

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

CRG 0002 E-GENS - Common Requirements for Emergency Generators

Group Members: EQT 0001 EQT 0002 EQT 0016 EQT 0034 EQT 0035

- 26 [40 CFR 60.4245(c)] Submit an initial notification as required in 40 CFR 60.7(a)(1). Include the information in 40 CFR 60.4245(c)(1) through (c)(5). Subpart JJJJ. [40 CFR 60.4245(c)]
- 27 [40 CFR 60.4245(d)] Submit performance test results: Due within 60 days after each test conducted according to 40 CFR 60.4244 has been completed. Subpart JJJJ. [40 CFR 60.4245(d)]
- 28 [40 CFR 63.6590(c)] Meet the requirements of 40 CFR 60 Subpart JJJJ for spark ignition engines. Subpart ZZZZ. [40 CFR 63.6590(c)]
- 29 [LAC 33:III.1311.C] Opacity \leq 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. (Complies by using sweet natural gas as fuel).
Which Months: All Year Statistical Basis: Six-minute average

EQT 0008 GCMSS - Maintenance, Startup, and Shutdown

- 30 [LAC 33:III.501.C.6] To demonstrate compliance with permitted limits, permittee shall monitor and record emissions from each startup, shutdown, maintenance activity, and turbine blowdown. The records shall include the quantity of any releases and the date/time and duration of each event. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.

EQT 0028 GCGST - Gasoline Storage Tank

- 31 [40 CFR 63.11115(a)] Shall, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.11115(a)]
- 32 [40 CFR 63.11116(a)] Do not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, those specified in 40 CFR 63.11116(a)(1) through (a)(4). Subpart CCCCCC. [40 CFR 63.11116(a)]
- 33 [40 CFR 63.11116(b)] Have records available within 24 hours of a request by DEQ to document gasoline throughput. Subpart CCCCCC. [40 CFR 63.11116(b)]
- 34 [40 CFR 63.11125(d)] Shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment and records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.11125(d)]
- 35 [LAC 33:III.2103.A] Equip with a submerged fill pipe.
- 36 [LAC 33:III.2103.I] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 through I.7, as applicable. Maintain records for at least two years.

FUG 0001 GCFUG11 - Fugitive Emissions

- 37 [40 CFR 60.5397a(b)] Develop an emissions monitoring plan that covers the collection of fugitive emissions components at well sites and compressor stations within each company-defined area in accordance with 40 CFR 60.5397a(c) and (d). Subpart OOOOa. [40 CFR 60.5397a(b)]
- 38 [40 CFR 60.5397a(c)] Include in the fugitive emission monitoring plans the elements specified in 40 CFR 60.5397a(c)(1) through (c)(8), at a minimum. Subpart OOOOa. [40 CFR 60.5397a(c)]
- 39 [40 CFR 60.5397a(d)] Include in the fugitive emission monitoring plans the elements specified in 40 CFR 60.5397a(d)(1) through (d)(3), at a minimum, as applicable. Subpart OOOOa. [40 CFR 60.5397a(d)]
- 40 [40 CFR 60.5397a(e)] Ensure each monitoring survey observes each fugitive emissions component, as defined in 40 CFR 60.5430a, for fugitive emissions. Subpart OOOOa. [40 CFR 60.5397a(e)]

SPECIFIC REQUIREMENTS

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

FUG 0001 GCFUG11 - Fugitive Emissions

- 41 [40 CFR 60.5397a(f)(2)] Conduct the initial monitoring survey within 90 days of the modification or by June 3, 2017, whichever is later. Subpart OOOOa. [40 CFR 60.5397a(f)(2)]
- 42 [40 CFR 60.5397a(f)(2)] Conduct the initial monitoring survey within 90 days of the startup of the compressor station or by June 3, 2017, whichever is later. Subpart OOOOa. [40 CFR 60.5397a(f)(2)]
- 43 [40 CFR 60.5397a(g)(3)] Fugitive emissions components that cannot be monitored without elevating the monitoring personnel more than 2 meters above the surface may be designated as difficult-to-monitor. Ensure that the fugitive emissions components that are designated difficult-to-monitor meet the specifications of 40 CFR 60.5397a(g)(3)(i) through (g)(3)(iv). Subpart OOOOa. [40 CFR 60.5397a(g)(3)]
- 44 [40 CFR 60.5397a(g)(4)] Fugitive emissions components that cannot be monitored because monitoring personnel would be exposed to immediate danger while conducting a monitoring survey may be designated as unsafe-to-monitor. Ensure that fugitive emissions components that are designated unsafe-to-monitor meet the specifications of 40 CFR 60.5397a(g)(4)(i) through (g)(4)(iv). Subpart OOOOa. [40 CFR 60.5397a(g)(4)]
- 45 [40 CFR 60.5397a(h)(1)] Make a first attempt at repair of each identified source of fugitive emissions no later than 30 calendar days after detection of the fugitive emissions. Subpart OOOOa. [40 CFR 60.5397a(h)(1)]
- 46 [40 CFR 60.5397a(h)(2)] Complete repair of each identified source of fugitive emissions as soon as practicable, but no later than 30 calendar days after the first attempt at repair as required in 40 CFR 60.5397a(h)(1). Subpart OOOOa. [40 CFR 60.5397a(h)(2)]
- 47 [40 CFR 60.5397a(h)(3)] Complete repair of each identified source of fugitive emissions during the next scheduled compressor station shutdown for maintenance, scheduled well shutdown, scheduled well shut-in, after a planned vent blowdown (as defined in 40 CFR 60.5397a(h)(3)), or within 2 years, whichever is earliest, if the repair is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit. Subpart OOOOa. [40 CFR 60.5397a(h)(3)]
- 48 [40 CFR 60.5397a(h)(4)(ii)] Take a digital photograph of the component or tag the component during the monitoring survey when fugitives are initially found for identification purposes and subsequent repair, if a repair cannot be made during the monitoring survey when fugitive emissions are initially found. Ensure that the digital photograph includes the date that the photograph was taken and clearly identifies the component by location within the site. Subpart OOOOa. [40 CFR 60.5397a(h)(4)(ii)]
- 49 [40 CFR 60.5397a(h)(4)] Resurvey fugitive emissions components after repair to verify repair using either 40 CFR 60, Appendix A-7, Method 21 or optical gas imaging. Comply with the resurvey provisions specified in 40 CFR 60.5397a(h)(4)(iii)(A) and (B), if Method 21 is used to resurvey. Comply with the resurvey provisions specified in 40 CFR 60.5397a(h)(4)(iv)(A) and (B), if optical gas imaging is used to resurvey. Subpart OOOOa. [40 CFR 60.5397a(h)(4)]
- 50 [40 CFR 60.5397a(i)] Maintain records for each monitoring survey as specified 40 CFR 60.5420a(c)(15). Subpart OOOOa. [40 CFR 60.5397a(i)]
- 51 [40 CFR 60.5397a(j)] Submit annual reports that include the information specified in 40 CFR 60.5420a(b)(7). Multiple collection of fugitive emissions components at a well site or at a compressor station may be included in a single annual report. Subpart OOOOa. [40 CFR 60.5397a(j)]
- 52 [40 CFR 60.5397a] In accordance with EPA's Questions and Answers document titled "Congressional Review Act Resolution to Disapprove EPA's 2020 Oil and Gas Policy Rule," dated June 30, 2021, the permittee shall comply with the applicable requirements of 40 CFR 60 Subpart OOOOa as promulgated on June 3, 2016 (81 FR 35898) and amended on March 12, 2018 (83 FR 10638).
- 53 [LAC 33:III.2111] Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.

SPECIFIC REQUIREMENTS

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

GRP 0001 T-70 BLOWDOWN - Taurus 70 Blowdown Emissions

Group Members: EQT 0009 EQT 0010 EQT 0011

- 54 [LAC 33:III.501.C.6] (Total Blowdown Duration) Operating time \leq 330 hr/yr. Noncompliance with this limitation is a reportable violation of the permit. Notify the Office of Environmental Compliance if total blowdown duration exceeds the maximum listed in this specific condition for any twelve consecutive month period.
Which Months: All Year Statistical Basis: Twelve-consecutive-month maximum
- 55 [LAC 33:III.507.H.1.a] (Total Blowdown Duration) Operating time monitored by technically sound method upon each occurrence.
Which Months: All Year Statistical Basis: None specified
- 56 [LAC 33:III.507.H.1.a] (Total Blowdown Duration) Operating time recordkeeping by electronic or hard copy monthly. Keep records of the total blowdown duration each month, as well as the total blowdown duration for the last twelve months. Make records available for inspection by DEQ personnel.
- 57 [LAC 33:III.507.H.1.a] Submit report : Due annually, by the 31st of March. Report total blowdown duration for the preceding calendar year, as well as the twelve consecutive month total for each month, to the Office of Environmental Compliance. This report can be combined with reports required under LAC 33:III.535.

GRP 0002 130e BLOWDOWN - Titan 130e Blowdown Emissions

Group Members: EQT 0012 EQT 0048

- 58 [LAC 33:III.501.C.6] (Total Blowdown Duration) Operating time \leq 208 hr/yr. Noncompliance with this limitation is a reportable violation of the permit. Notify the Office of Environmental Compliance if total blowdown duration exceeds the maximum listed in this specific condition for any twelve consecutive month period.
Which Months: All Year Statistical Basis: Twelve-consecutive-month maximum
- 59 [LAC 33:III.507.H.1.a] (Total Blowdown Duration) Operating time monitored by technically sound method upon each occurrence.
Which Months: All Year Statistical Basis: None specified
- 60 [LAC 33:III.507.H.1.a] (Total Blowdown Duration) Operating time recordkeeping by electronic or hard copy monthly. Keep records of the total blowdown duration each month, as well as the total blowdown duration for the last twelve months. Make records available for inspection by DEQ personnel.
- 61 [LAC 33:III.507.H.1.a] Submit report : Due annually, by the 31st of March. Report total blowdown duration for the preceding calendar year, as well as the twelve consecutive month total for each month, to the Office of Environmental Compliance. This report can be combined with reports required under LAC 33:III.535.

UNF 0001 AI50619 - Gillis Compressor Station

- 62 [40 CFR 60.] All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A.
- 63 [LAC 33:III.1103] Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensifies an existing traffic hazard condition are prohibited.
- 64 [LAC 33:III.1303.B] Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.
- 65 [LAC 33:III.2113.A] Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5.

SPECIFIC REQUIREMENTS

AI ID: 50619 - Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

UNF 0001 AI50619 - Gillis Compressor Station

- 66 [LAC 33:III.219] Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.
- 67 [LAC 33:III.535] Comply with the Part 70 General Conditions as set forth in LAC 33:III.535 and the Louisiana General Conditions as set forth in LAC 33:III.537. [LAC 33:III.535, LAC 33:III.537]
- 68 [LAC 33:III.5611.A] Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency: Due within 30 days after requested by the administrative authority.
- 69 [LAC 33:III.5611.B] During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by the department to enforce these regulations.
- 70 [LAC 33:III.919] Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 30th of April to the Office of Environmental Services, for the reporting period of the previous calendar year that coincides with period of ownership or operatorship, unless otherwise directed by DEQ. Submit both an emissions inventory and the certification statement required by LAC 33:III.919.F.1.c, separately for each AI, in a format specified by DEQ. Include the information specified in LAC 33:III.919.F.1.a through F.1.d.
-

General Information

AI ID: 50619 Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

Alternate Identifiers	Name	User Group	Dates
2201100160	Cheniere Creole Trail Pipeline LP - Gillis Compressor Station	AFS (EPA Air Facility System)	11-20-1999
0320-00160	CDS #	CDS Number	04-30-2012
17640811	EIS Id	EPA EIS Facility Site ID	01-01-2016
LAR000082685	Cheniere Creole Trail Pipeline LP - Gillis Compressor Station	Haz Waste EPA ID Number	04-10-2014

Physical Location: 1970 Texas Eastern Rd
Ragley LA 70657 **Main Phone:** 7133755000

Mailing Address: 6008 Horseman Dr
Lake Charles LA 70615

Location of Front Gate: -93.147806 Longitude, 30.449147 Latitude, Coordinate Method: Lat.\Long. - DMS, Coordinate Datum: NAD83

Related People:	Mail Address	Work Phone	Email	Relationship
Chris Williams	700 Milam St Ste 1900 Houston, TX 77002	7133755662	chris.williams@cheniere.com	Air Billing Contact for HW-1 Certifier for Haz. Waste Billing Party for Responsible Official for
Ken Guidry	6008 Horseman Dr Lake Charles, LA 70615	3375332111	ken.guidry@cheniere.com	HW-1 Notification Contact for
Kevin Romine	700 Milam St Ste 1900 Houston, TX 77002	7133755727	kevin.romine@cheniere.com	Emission Inventory Facility Contact for
Paul Newman	700 Milam St Ste 1900 Houston, TX 770024102	7133755591	paul.newman@cheniere.com	Air Permit Contact For

Related Organizations:	Mailing Address	Work Phone	Relationship
Cheniere Creole Trail Pipeline LP	700 Milam Ste 1900 Houston, TX 770024102	7133755662	Air Billing Party for Emission Inventory Billing Party Operates Owns

SIC Codes: 1311, Crude petroleum and natural gas

NAIC Codes: 486210, Pipeline Transportation of Natural Gas

Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required, or if you have questions regarding this document, please

General Information

AI ID: 50619 Cheniere Creole Trail Pipeline LP - Gillis Compressor Station

Activity Number: PER20230003

Permit Number: 0320-00160-V6

Air - Title V Regular Permit Renewal/Sign Mod

email the Permit Support Services Division at facupdate@la.gov.

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL SERVICES**

STATEMENT OF BASIS¹

PROPOSED PART 70 OPERATING PERMIT 0320-00160-V6

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003**

I. APPLICANT

Applicant: Cheniere Creole Trail Pipeline, LP
700 Milam St., Ste. 1900
Houston, TX 77002

Facility: Gillis Compressor Station

SIC Code: 1311

Location: 1970 Texas Eastern Road, Ragley, Beauregard Parish, LA

II. PERMITTING AUTHORITY

Louisiana Department of Environmental Quality
Office of Environmental Services
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313

III. CONTACT INFORMATION

Mr. Dan Nguyen
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313
Phone: (225) 219-3181

IV. FACILITY BACKGROUND AND CURRENT PERMIT STATUS

Cheniere Creole Trail Pipeline, LP has owned and operated the Gillis Compressor Station, which is located near Ragley, Beauregard Parish, since 2014. Prior to issuance of this permit, the station operated under Permit No. 0320-00160-V5, dated June 3, 2022.

V. PROPOSED PERMIT/PROJECT INFORMATION

An application dated July 10, 2023, was submitted requesting a permit renewal and modification. The application was deemed administratively complete in accordance with LAC 33:III.519.A on July 12, 2023.

¹ 40 CFR 70.7(a)(5) and LAC 33:III.531.A.4 require the permitting authority to “provide a statement that sets forth the legal and factual basis for the proposed permit conditions of any permit issued to a Part 70 source, including references to the applicable statutory or regulatory provisions.”

STATEMENT OF BASIS

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6**

Process Description

Condensate and produced water are separated from the incoming natural gas, stored in storage tanks, and periodically loaded into tank trucks for shipping offsite. Four natural gas-fired compressor turbines are utilized to move treated natural gas along the Creole Trail Pipeline to the Sabine Pass LNG Terminal (AI 119267). Emissions from the station are from compressor turbines, emergency generators, turbine blowdowns, maintenance/startup/shutdown activities, storage tanks, loading, and fugitive leaks.

Proposed Modifications

Cheniere Creole Trail Pipeline, LP requests a Part 70 operating permit renewal and modification authorizing the following changes:

1. Add a Titan 130e natural gas-fired turbine (EQT0033);
2. Add two natural gas-fired emergency generators (EQT0034 and EQT0035);
3. Add two Chemical Injection Totes (EQT0042 and EQT0043);
4. Incorporate Condensate Storage Tank GCTK07 (EQT0036), which was authorized under Regulatory Permit RP_50619_PER20220002. Tank GCTK07 replaces Tank GCTK05 (EQT0026);
5. Incorporate Condensate Storage Tank GCTK08 (EQT0037), which was authorized under Regulatory Permit RP_50619_PER20230002;
6. Authorize the equipment associated with the Momentum Meter Station and Meter Station Nos. 1, 2, and 3. Emission points associated with these meter stations include Condensate Storage Tanks GCTK09 through GCTK12 (EQT0038 through EQT0041) and Chemical Injection Totes GCTOTE09 through GCTOTE12 (EQT0044 through EQT0047);
7. Update fugitive emissions (FUG0001) to reflect the additional equipment components associated with the proposed sources. Fugitive emissions will be subject to 40 CFR 60 Subpart OOOOa due to the addition of the Titan 130e turbine;
8. Update emissions from turbine maintenance, startup, and shutdown events (GCMSS, EQT0008) to account for the addition of the Titan 130e turbine;
9. Increase the throughput of the Gasoline Storage Tank (GCGST, EQT0028) to 550 gallons/year;
10. Create an operational cap (GRP0002) to limit the blowdown activities from two Titan 130e turbines (EQT0012 and EQT0048) to no more than 208 hours/year;
11. Reassign the EQT numbers of Gas Turbine Driven Compressor Units A through D from EQT0003 through EQT0006 to EQT0029 through EQT0032; and
12. Update the General Condition XVII Activities list and Insignificant Activities list to reflect the proposed operating conditions.

STATEMENT OF BASIS

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6**

VI. ATTAINMENT STATUS OF PARISH

<u>Pollutant</u>	<u>Attainment Status</u>	<u>Designation</u>
PM _{2.5}	Attainment	N/A
PM ₁₀	Attainment	N/A
SO ₂	Attainment	N/A
NO ₂	Attainment	N/A
CO	Attainment	N/A
Ozone ²	Attainment	N/A
Lead	Attainment	N/A

VII. PERMITTED AIR EMISSIONS

Sources of air emissions are listed on the “Inventories” page of the proposed permit. Estimated emissions of criteria pollutants from the facility, in tons per year (TPY), are as follows:

Pollutant	Before	After	Change
PM ₁₀	12.01	17.26	+ 5.25
PM _{2.5}	11.97	17.21	+ 5.24
SO ₂	26.02	37.40	+ 11.38
NO _x	148.21	192.84	+ 44.63
CO	217.80	283.08	+ 65.28
VOC	79.16	131.64	+ 52.48

LAC 33:III.Chapter 51-regulated toxic air pollutants (TAP), including those listed as PM₁₀ and VOC compounds, are speciated below. This list encompasses all Hazardous Air Pollutants (HAP) regulated pursuant to Section 112 of the Clean Air Act. Note, however, all TAPs are not HAPs (e.g., ammonia, hydrogen sulfide).

Pollutant	Before	After	Change
2,2,4-Trimethylpentane	-	0.01	+ 0.01
Acetaldehyde	0.09	0.14	+ 0.05
Acrolein	0.014	0.021	+ 0.007
Benzene	0.04	0.06	+ 0.02
Ethylbenzene	0.06	0.09	+ 0.03
Formaldehyde	4.93	6.88	+ 1.95
Naphthalene	1.17	1.98	+ 0.81
n-Hexane	2.83	4.06	+ 1.23

² VOC and NO_x are regulated as surrogates.

STATEMENT OF BASIS

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6**

Pollutant	Before	After	Change
PAH	0.005	0.007	+ 0.002
Propylene Oxide	0.05	0.07	+ 0.02
Toluene	0.22	0.33	+ 0.11
Xylene (mixed isomers)	0.11	0.16	+ 0.05
Total	9.519	13.808	+ 4.289

The station is classified as a minor source of HAP, and TAP.

Permitted limits for individual emissions units and groups of emissions units, if applicable, are set forth in the tables of the proposed permit entitled “Emission Rates for Criteria Pollutants and CO₂e” and “Emission Rates for TAP/HAP & Other Pollutants.” These tables are part of the permit.

Emissions calculations can be found in Appendix B of the permit application. The calculations address the manufacturer’s specifications, fuel composition (e.g., sulfur content), emissions factors, and other assumptions on which the emissions limitations are based and have been reviewed by the permit writer for accuracy.

General Condition XVII Activities

Very small emissions to the air resulting from routine operations that are predictable, expected, periodic, and quantifiable and that are submitted by the applicant and approved by the Air Permits Division are considered authorized discharges. These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. However, such emissions are considered when determining the facility’s potential to emit for evaluation of applicable requirements. Approved General Condition XVII activities are noted in Section VIII of the proposed permit.

Insignificant Activities

The emissions units or activities listed in Section IX of the proposed permit have been classified as insignificant pursuant to LAC 33:III.501.B.5. By such listing, the LDEQ exempts these sources or types of sources from the requirement to obtain a permit under LAC 33:III.Chapter 5. However, such emissions are considered when determining the facility’s potential to emit for evaluation of applicable requirements.

VIII. REGULATORY APPLICABILITY

Regulatory applicability is discussed in three sections of the proposed permit: Section X (Table 1), Section XI (Table 2), and Specific Requirements. Each is discussed in more detail below.

Section X (Table 1): Applicable Louisiana and Federal Air Quality Requirements

Section X (Table 1) summarizes all applicable federal and state regulations. In the matrix, a “1” represents a regulation applies to the emissions unit. A “1” is also used if the

STATEMENT OF BASIS

Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6

emissions unit is exempt from the emissions standards or control requirements of the regulation, but monitoring, recordkeeping, and/or reporting requirements apply.

A “2” is used to note that the regulation has requirements that would apply to the emissions unit, but the unit is exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified, or reconstructed since the regulation has been effective. If the specific criterion changes, the emissions unit will have to comply at a future date. Each “2” entry is explained in Section XI (Table 2).

A “3” signifies that the regulation applies to this general type of source (e.g., furnace, distillation column, boiler, fugitive emissions, etc.), but does not apply to the particular emissions unit. Each “3” entry is explained in Section XI (Table 2).

If blank, the regulation clearly does not apply to this type of emissions unit.

Section XI (Table 2): Explanation for Exemption Status or Non-Applicability of a Source

Section XI (Table 2) of the proposed permit provides explanation for either the exemption status or non-applicability of given federal or state regulation cited by 2 or 3 in the matrix presented in Section X (Table 1).

Specific Requirements

Applicable regulations, as well as any additional monitoring, recordkeeping, and reporting requirements necessary to demonstrate compliance with both the federal and state terms and conditions of the proposed permit, are provided in the “Specific Requirements” section. Any operating limitations (e.g., on hours of operation or throughput) are also set forth in this section. Associated with each Specific Requirement is a citation of the federal or state regulation upon which the authority to include that Specific Requirement is based.

1. Federal Regulations

40 CFR 60 – New Source Performance Standards (NSPS)

The following subparts are applicable at the facility: A, KKKK, JJJJ, and OOOOa. Applicable emission standards, monitoring, test methods and procedures, recordkeeping, and reporting requirements are summarized in the “Specific Requirements” section of the proposed permit.

40 CFR 61 – National Emission Standards for Hazardous Air Pollutants (NESHAP)

The station is not subject to any requirements of 40 CFR Part 61.

40 CFR 63 – Maximum Achievable Control Technology (MACT)

The following subparts are applicable at the facility: A, ZZZZ, and CCCCCC. Applicable emission standards, monitoring, test methods and procedures, recordkeeping, and reporting requirements are summarized in the “Specific Requirements” section of the proposed permit.

STATEMENT OF BASIS

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6**

Clean Air Act §112(g) or §112(j) – Case-By-Case MACT Determinations

A case-by-case MACT determination pursuant to §112(g) or §112(j) of the Clean Air Act was not required.

40 CFR 64 – Compliance Assurance Monitoring (CAM)

Per 40 CFR 64.2(a), CAM applies to each pollutant-specific emissions unit (PSEU) that 1) is subject to an emission limitation or standard, 2) uses a control devices to achieve compliance, and 3) has potential pre-control device emissions that are equal to or greater than 100 percent of the amount, in TPY, required for a source to be classified as a major source. The station is not subject to any CAM requirements.

Acid Rain Program

The Acid Rain Program, 40 CFR Part 72 – 78, applies to the fossil fuel-fired combustion devices listed in Tables 1-3 of 40 CFR 73.10 and other utility units, unless a unit is determined not to be an affected unit pursuant to 40 CFR 72.6(b). LDEQ has incorporated the Acid Rain Program by reference at LAC 33:III.505. The station is not subject to the Acid Rain Program.

2. SIP-Approved State Regulations

Applicable state regulations are also noted in Section X (Table 1) of the proposed permit. Some state regulations have been approved by the U.S. Environmental Protection Agency (EPA) as part of Louisiana’s State Implementation Plan (SIP). These regulations are referred to as “SIP-approved” and are enforceable by both LDEQ and EPA. All LAC 33:III.501.C.6 citations are federally enforceable unless otherwise noted.

3. State-Only Regulations

Individual chapters or sections of LAC 33:III noted by an asterisk in Section X (Table 1) are designated “state-only” pursuant to 40 CFR 70.6(b)(2). Terms and conditions of the proposed permit citing these chapters or sections are not SIP-approved and are not subject to the requirements of 40 CFR Part 70. These terms and conditions are enforceable by LDEQ, but not EPA. All conditions not designated as “state-only” are presumed to be federally enforceable.

State MACT (LAC 33:III.Chapter 51)

The Green Diesel Plant is a major source of LAC 33:III.Chapter 51 regulated TAP. The owner or operator of any major source that emits or is permitted to emit a Class I or Class II TAP at a rate equal to or greater than the Minimum Emission Rate (MER) listed for that pollutant in LAC 33:III.5112 shall control emissions of that TAP to a degree that constitutes Maximum Achievable Control Technology (MACT), except that compliance with an applicable federal standard promulgated by the U.S. EPA in 40 CFR Part 63 shall constitute compliance with MACT for emissions of toxic air pollutants. Applicable Part 63 standards are addressed in Section VIII.1 of this Statement of Basis. MACT is not

STATEMENT OF BASIS

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6**

required for Class III TAPs; however, the impact of all TAP emissions must be below their respective Ambient Air Standards (AAS).

The station is a minor source of TAPs. Therefore, equipment at the station is not subject to the State MACT.

IX. NEW SOURCE REVIEW (NSR)

1. Prevention of Significant Deterioration (PSD)

The compressor station’s source category is not listed in Table A of the definition of “major stationary source” in LAC 33:III.509. As such, the PSD major source threshold is 250 tons/year (of any regulated NSR pollutant, except greenhouse gases). Prior to issuance of this permit renewal/modification, permitted emissions of all regulated NSR pollutants were less than 250 tons/year. Therefore, the Gillis Compressor Station was not classified as a major source under the PSD program. The proposed permit renewal/modification does not authorize any regulated NSR pollutant to increase more than the PSD major source threshold of 250 tons/year; as such, PSD review is not required.

2. Nonattainment New Source Review (NNSR)

The Gillis Compressor Station is located in an attainment area for all criteria pollutants; therefore, NNSR does not apply.

3. Notification of Federal Land Managers

Because both PSD and NNSR review are not applicable, notification to Federal Land Managers is not required.

4. Reasonable Possibility

Prior to issuance of this permit renewal/modification, permitted emissions of all regulated NSR pollutants were less than 250 tons/year. Therefore, the Gillis Compressor Station was not classified as a major source under the PSD program. Requirements of LAC 33:III.509.R.6 do not apply.

X. ADDITIONAL MONITORING AND TESTING REQUIREMENTS

In addition to the monitoring and testing requirements set forth by applicable state and federal regulations (see Section VIII of this Statement of Basis), a number of “LAC 33:III.507.H.1.a” and/or “LAC 33:III.501.C.6” conditions may appear in the “Specific Requirements” section of the proposed permit. These conditions have been added where no applicable regulation exists or where an applicable regulation does not contain sufficient monitoring, recordkeeping, and/or reporting provisions to ensure compliance. LAC 33:III.507.H.1.a provisions, which may include recordkeeping requirements, are intended to fulfill Part 70 periodic monitoring obligations under 40 CFR 70.6(a)(3)(i)(B).

<u>ID</u>	<u>Description</u>	<u>Pollutant</u>	<u>Method</u>	<u>Frequency</u>
	(none)			

STATEMENT OF BASIS

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6**

XI. OPERATIONAL FLEXIBILITY

Emissions Caps

An emissions cap is a permitting mechanism to limit allowable emissions of two or more emissions units below their collective potential to emit (PTE). To provide operational flexibility to the station, two emissions caps are set up to limit emissions from compressors blowdown.

Alternative Operating Scenarios

LAC 33:III.507.G.5 allows the owner or operator to operate under any operating scenario incorporated in the permit. Any reasonably anticipated alternative operating scenarios may be identified by the owner or operator through a permit application and included in the permit. The proposed permit does not include an alternative operating scenario.

Streamlined Requirements

When applicable requirements overlap or conflict, the permitting authority may choose to include in the permit the requirement that is determined to be most stringent or protective as detailed in EPA's "White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program" (March 5, 1996). The overall objective is to determine the set of permit terms and conditions that will assure compliance with all applicable requirements for an emissions unit or group of emissions units so as to eliminate redundant or conflicting requirements.

Louisiana Consolidated Fugitive Emission Program (LCFEP)

The station does not propose a streamlined equipment leak monitoring program.

XII. PERMIT SHIELD

A permit shield, as described in 40 CFR 70.6(f) and LAC 33:III.507.I, provides an "enforcement shield" which protects the facility from enforcement action for violations of applicable federal requirements. It is intended to protect the facility from liability for violations if the permit does not accurately reflect an applicable federal or federally enforceable requirement. The proposed permit does not establish a permit shield.

XIII. IMPACTS ON AMBIENT AIR

Based on the level of permitted emissions, emissions from the facility are not anticipated to prevent the attainment or maintenance of any state or national ambient air quality standard.

XIV. COMPLIANCE HISTORY AND CONSENT DECREES

The Gillis Compressor Station's compliance history can be found in Section 15a of the permit application. It must be disclosed per LAC 33:III.517.E and 517.D.12, if applicable.

STATEMENT OF BASIS

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6**

No federal or state actions have been issued since the existing permit for the last permit issuance.

XV. REQUIREMENTS THAT HAVE BEEN SATISFIED

The following state and/or federal obligations have been satisfied and are therefore not included as Specific Requirements.

<u>Source ID</u>	<u>Citation</u>	<u>Description</u>
(None)		

XVI. OTHER REQUIREMENTS

Executive Order No. BJ 2008-7 directs all state agencies to administer their regulatory practices, programs, contracts, grants, and all other functions vested in them in a manner consistent with Louisiana’s Comprehensive Master Plan for a Sustainable Coast and public interest to the maximum extent possible. If a proposed facility or modification is located in the Coastal Zone, LDEQ requires the applicant to document whether or not a Coastal Use Permit is required, and if so, whether it has been obtained. Coastal Use Permits are issued by the Coastal Management Division of the Louisiana Department of Natural Resources (LDNR).

The facility is located in the Coastal Zone. A Coastal Use Permit is not required for this permit renewal.

XVII. PUBLIC NOTICE/PUBLIC PARTICIPATION

Written comments, written requests for a public hearing, or written requests for notification of the final decision regarding this permit action may be submitted to:

LDEQ, Public Participation Group
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313

Written comments and/or written requests must be received prior to the deadline specified in the public notice. If LDEQ finds a significant degree of public interest, a public hearing will be held. All comments will be considered prior to a final permit decision.

LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The permit application, proposed permit, and this Statement of Basis are available for review at LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, Louisiana. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). Additional copies may be viewed at the local library identified in the public notice. The available information can also be accessed electronically via LDEQ’s

STATEMENT OF BASIS

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6**

Electronic Document Management System (EDMS) on LDEQ's public website, www.deq.louisiana.gov.

Inquiries or requests for additional information regarding this permit action should be directed to the contact identified on page 1 of this Statement of Basis.

Persons wishing to be included on the public notice mailing list or for other public participation-related questions should contact LDEQ's Public Participation Group at P.O. Box 4313, Baton Rouge, LA 70821-4313; by e-mail at maillistrequest@ldeq.org; or contact LDEQ's Customer Service Center at (225) 219-LDEQ (219-5337). Alternatively, individuals may elect to receive public notices via e-mail by subscribing to LDEQ's Public Notification List Service at http://www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm.

Permit public notices can be viewed at LDEQ's "Public Notices" webpage, <http://www.deq.louisiana.gov/apps/pubNotice/default.asp>. Electronic access to each proposed permit and Statement of Basis current on notice is also available on this page. General information related to public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

STATEMENT OF BASIS

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6**

APPENDIX A - ACRONYMS

AAS	Ambient Air Standard (LAC 33:III.Chapter 51)
AP-42	EPA document number of the Compilation of Air Pollutant Emission Factors
BACT	Best Available Control Technology
BTU	British Thermal Units
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAM	Compliance Assurance Monitoring, 40 CFR 64
CEMS	Continuous Emission Monitoring System
CMS	Continuous Monitoring System
CO	Carbon monoxide
COMS	Continuous Opacity Monitoring System
CFR	Code of Federal Regulations
EI	Emissions Inventory (LAC 33:III.919)
EPA	(United States) Environmental Protection Agency
EIQ	Emission Inventory Questionnaire
ERC	Emission Reduction Credit
FR	Federal Register or Fixed Roof
H ₂ S	Hydrogen sulfide
H ₂ SO ₄	Sulfuric acid
HAP	Hazardous Air Pollutants
Hg	Mercury
HON	Hazardous Organic NESHAP
IBR	Incorporation by Reference
LAER	Lowest Achievable Emission Rate
LDEQ	Louisiana Department of Environmental Quality
M	Thousand
MM	Million
MACT	Maximum Achievable Control Technology
MEK	Methyl ethyl ketone
MIK	Methyl isobutyl ketone
MSDS	Material Safety Data Sheet
MTBE	Methyl tert-butyl ether
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industrial Classification System (replacement to SIC)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMOC	Non-Methane Organic Compounds
NO _x	Nitrogen Oxides
NNSR	Nonattainment New Source Review

STATEMENT OF BASIS

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6**

APPENDIX A - ACRONYMS

NSPS	New Source Performance Standards
NSR	New Source Review
OEA	LDEQ Office of Environmental Assessment
OEC	LDEQ Office of Environmental Compliance
OES	LDEQ Office of Environmental Services
PM	Particulate Matter
PM10	Particulate Matter less than 10 microns in nominal diameter
PM2.5	Particulate Matter less than 2.5 microns in nominal diameter
ppm	parts per million
ppmv	parts per million by volume
ppmw	parts per million by weight
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
RBLC	RACT-BACT-LAER Clearinghouse
RMP	Risk Management Plan (40 CFR 68)
SICC	Standard Industrial Classification Code
SIP	State Implementation Plan
SO2	Sulfur Dioxide
SOCMI	Synthetic Organic Chemical Manufacturing Industry
TAP	Toxic Air Pollutants (LAC 33:III.Chapter 51)
TOC	Total Organic Compounds
TPY	Tons Per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
µg/m ³	Micrograms per Cubic Meter
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound
VOL	Volatile Organic Liquid
VRU	Vapor Recovery Unit

STATEMENT OF BASIS

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6**

APPENDIX B – GLOSSARY

Best Available Control Technologies (BACT) – an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this Part (Part III) which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

CAM - Compliance Assurance Monitoring – A federal air regulation under 40 CFR Part 64.

Carbon Monoxide (CO) – (Carbon monoxide) a colorless, odorless gas produced by incomplete combustion of any carbonaceous (gasoline, natural gas, coal, oil, etc.) material.

Cooling Tower – A cooling system used in industry to cool hot water (by partial evaporation) before reusing it as a coolant.

Continuous Emission Monitoring System (CEMS) – The total combined equipment and systems required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a source effluent.

Cyclone – A control device that uses centrifugal force to separate particulate matter from the carrier gas stream.

Federally Enforceable Specific Condition – A federally enforceable specific condition written to limit the potential to Emit (PTE) of a source that is permanent, quantifiable, and practically enforceable. In order to meet these requirements, the draft permit containing the federally enforceable specific condition must be placed on public notice and include the following conditions:

- A clear statement of the operational limitation or condition which limits the source's potential to emit;
- Recordkeeping requirements related to the operational limitation or condition;
- A requirement that these records be made available for inspection by LDEQ personnel;
- A requirement to report for the previous calendar year.

Grandfathered Status – those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

STATEMENT OF BASIS

Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6

APPENDIX B – GLOSSARY

Lowest Achievable Emission Rate (LAER) – for any source, the more stringent rate of emissions based on the following:

- a. the most stringent emissions limitation that is contained in the implementation plan of any state for such class or category of major stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or
- b. the most stringent emissions limitation that is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified major stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

NESHAP – National Emission Standards for Hazardous Air Pollutants – Air emission standards for specific types of facilities, as outlined in 40 CFR Parts 61 through 63.

Maximum Achievable Control Technology (MACT) – the maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

NSPS – New Source Performance Standards – Air emission standards for specific types of facilities, as outlined in 40 CFR Part 60.

New Source Review (NSR) – a preconstruction review and permitting program applicable to new or modified major stationary sources of criteria air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C (“Prevention of Significant Deterioration of Air Quality”) and D (“Nonattainment New Source Review”).

Nonattainment New Source Review (NNSR) – a New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) set forth at 40 CFR Part 50. NNSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

Organic Compound – any compound of carbon and another element. Examples: methane (CH₄), ethane (C₂H₆), carbon disulfide (CS₂).

STATEMENT OF BASIS

**Cheniere Creole Trail Pipeline, LP – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Agency Interest No. 50619 - Activity No. PER20230003
Proposed Permit No. 0320-00160-V6**

APPENDIX B – GLOSSARY

Part 70 Operating Permit – also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507.

PM₁₀ – particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – a New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Selective Catalytic Reduction (SCR) – A non-combustion control technology that destroys NO_x by injecting a reducing agent (e.g., ammonia) into the flue gas that, in the presence of a catalyst (e.g., vanadium, titanium, or zeolite), converts NO_x into molecular nitrogen and water.

Sulfur Dioxide (SO₂) – An oxide of sulphur.

TAP – LDEQ acronym for toxic air pollutants regulated under LAC 33 Part III, Chapter 51, Tables 1 through 3.

“Top Down” Approach – An approach which requires use of the most stringent control technology found to be technically feasible and appropriate based on environmental, energy, economic, and cost impacts.

Title V permit – see Part 70 Operating Permit.

Volatile Organic Compound (VOC) – any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the Administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.

Worksheet for Technical Review of Working Draft of Proposed Permit

Company Name:	Cheniere Creole Trail Pipeline, LP	AI #:	50619	TEMPO Activity No:	PER20230003
Facility Name:	Gillis Compressor Station	Remarks Submitted Deadline:	September 13, 2023		
Permit Writer:	Dan Nguyen	Remarks Submitted to:	Dan.nguyen@la.gov		

Instructions

Permit Reference – Indicate specific portion(s) of the permit to which the remark relates (i.e. “Specific Condition 120”, or “Section II Air Permits Briefing Sheet”, etc.).

Remarks – Explain the basis for each remark. Provide regulatory citations where possible. If the remark is made due to an error or omission in the permit application this must be noted and the revised information *must be submitted*. Revised information may be submitted separately from this worksheet. Please be aware that revised information must be submitted in writing and certified by the Responsible Official, and if necessary, by a Professional Engineer licensed in Louisiana. *Please Note:* New or additional equipment, processes or operating conditions not addressed in the original permit application will be addressed on a case-by-case basis. The Department reserves the right to address such changes in a separate permit action.

DEQ Response – **DO NOT COMPLETE THIS SECTION.** This section will be completed by Air Permits Division of DEQ, included in the proposed permit package and made available for public review during any required public comment period.

- Additional rows may be added as necessary.
- Completed Form shall be emailed to the Permit writer in MS Word compatible format within the deadline specified in the email notification.
- **DO NOT USE THIS FORM TO SUBMIT COMMENTS DURING THE OFFICIAL PUBLIC COMMENT PERIOD.**

Permit Reference	Remarks	Air Permits Division Response (for official use only)
1. Global Comment	For GCPLC1 – Gas Turbine Driven Compressor Unit A – Taurus 70, GCPLC2 – Gas Turbine Driven Compressor Unit B – Taurus 70, GCPLC3 – Gas Turbine Driven Compressor Unit C – Taurus 70, and GCPLC4 – Gas Turbine Driven Compressor Unit D – Titan 130e, their respective “ID Nos.” were updated by LDEQ to EQT0029 through EQT0032, respectively. This update was not requested by Cheniere in the July 10, 2023 Title V Permit Renewal and Significant Modification Application (Application). Therefore, Cheniere requests that LDEQ revert to the currently permitted “ID Nos.” of EQT0003 through EQT0006.	
2. Air Permit Briefing Sheet, VIII. General Condition XVII Activities, Pg. 4	Consistent with Section 19 of the Application for Approval of Emissions of Air Pollutants from Part 70 Sources (AAE) Form included in the Application, for “Miscellaneous Venting from Filter Separators/Slug Catchers” update the “Emissions (tons/year)” as follows: <ul style="list-style-type: none"> • For VOC, update to 1.16 • For n-Hexane, updated to 0.16 • For Naphthalene, update to 0.06 	✓
3. Air Permit Briefing Sheet, X. Applicable Louisiana and Federal Air Quality Requirements, Pg. 5	Consistent with Section XI and the Specific Requirements of the draft permit, update the following: <ul style="list-style-type: none"> 12 • For GCMSS - Maintenance, Startup, and Shutdown and GCBD - Titan 130e Unit D Blowdown Stack, add a “1” under the LAC 33:III.Chapter 5 column. ✓ • Add EQT0024, GCTOTE05 – Chemical Injection Tote No. 5 and a “3” under the LAC 33:III.2103 column. 	✓

Permit Reference	Remarks	Air Permits Division Response (for official use only)
4. Air Permit Briefing Sheet, X. Applicable Louisiana and Federal Air Quality Requirements, Pg. 6	<p>Consistent with Section XI and the Specific Requirements of the draft permit, update the following:</p> <ul style="list-style-type: none"> For GCBE – Titan 130e Unit E Blowdown Stack, add a “1” under the LAC 33:III.Chapter 5 column. Add a column for LAC 33:III.Chapter 2 and add a “1” in the row for AI50619 – Gillis Compressor Station. 	<p>✓ ✓</p>
5. Air Permit Briefing Sheet, X. Applicable Louisiana and Federal Air Quality Requirements, Pgs. 7 and 8	<p>Consistent with Section 22 of the AAE Form included in the Application, update the following:</p> <ul style="list-style-type: none"> For all condensate storage tanks (GCTK01 – GCTK04, and GCTK06 – GCTK12), all chemical injection totes (GCTOTE01 – GCTOTE12), and turbines (GCPLC1 – GCPLC5), add a “3” under the 40 CFR 60 OOOO and OOOOa columns. Add EQT0024, GCTOTE05 – Chemical Injection Tote No. 5 and a “3” under the 40 CFR 60 Subpart Kb, OOOO, and OOOOa columns. 	<p>✓</p>
6. Air Permit Briefing Sheet, XI. Explanation for Exemption Status or Non-Applicability of a Source, Pg. 9	<p>Consistent with Section 22 of the AAE Form included in the Application, update the following:</p> <ul style="list-style-type: none"> For all condensate storage tanks (GCTK01 – GCTK04, and GCTK06 – GCTK12), all chemical injection totes (GCTOTE01 – GCTOTE12), and turbines (GCPLC1 – GCPLC5), add the non-applicability of 40 CFR 60 Subpart OOOO and OOOOa as detailed in the Application. For UNF0001, update the non-applicability of LAC 33:III.2115 to LAC 33:III.2115.N and “The Gillis Compressor Station does not generate any “waste gas stream” as defined under LAC 33:III.2115.N.” For UNF0001, add the non-applicability of LAC 33:III.Chapter 22 as detailed in the Application. 	<p>✓ ○ ○</p>
7. Inventories, Pg. 3	<p>Consistent with Section 5 of the AAE Form included in the Application, under the “Annual Maintenance Fee” table, update the “Multiplier” to 792.18.</p>	<p>✓</p>
8. Specific Requirements, Pg. 1	<p>Consistent with Section 22 of the AAE Form included in the Application, under CRG 0001, include Specific Requirement 8 from the current permit as detailed below:</p> <p>40 CFR 60.4415(a) - Conduct initial and annual performance tests for SO2 using the methodology set forth in 40 CFR 60.4415(a)(1). Subpart KKKK. [40 CFR 60.4415(a)]</p>	
9. Specific Requirements, Pgs. 3 and 4	<p>Consistent with Section 22 of the AAE Form included in the Application, for GCFUG11 – Fugitive Emissions, replace Specific Requirements 35 through 49 with the 40 CFR Part 60 Subpart OOOOa requirements as detailed in the Application. Further justification is provided below:</p> <p>As a result of the Congressional Review Act (CRA) resolution, the Gillis Compressor Station is subject to the methane and VOC requirements published in 40 CFR Part 60, Subpart OOOOa: 81 FR 35898 (June 3, 2016) and as amended at 83 FR 10638 (March 12, 2018) (2016 NSPS OOOOa). Accordingly, as provided in Section 22 of the AAE Form included in the Application, Cheniere performed the regulatory review of 40 CFR Part 60 Subpart OOOOa based on the regulatory text as it was published in the 2016 NSPS OOOOa.</p>	
10. Specific Requirements, Pg. 5	<p>Consistent with Specific Requirements 32 and 40 of the current Title V Permit that requires monitoring and recordkeeping, Cheniere requests the removal of Specific Requirements 54 and 58. Further, if the operating time limitation for either GRP 0001 or GRP 0002 is exceeded, Specific Requirements 51 and 55 require Cheniere to notify the LDEQ.</p>	<p>○</p>



State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL SERVICES

July 12, 2023

CERTIFIED MAIL 7020 1810 0002 0384 1300

Agency Interest No. 50619
Permit No.: 0320-00160-V6
Activity No.: PER20230003

Mr. Chris Williams
Cheniere Creole Trail Pipeline LP
700 Milam St, Ste 1900
Houston, TX 77002

RE: Cheniere Creole Trail Pipeline LP – Gillis Compressor Station
Administrative Completeness Determination and Public Notice for Publication

Dear Mr. Williams:

The Office of Environmental Services received your application for a Title V permit modification and renewal on July 12, 2023. As of the date of this letter, the application, along with any additional information submitted to date, has been determined to be administratively complete and has been assigned to the Petrochemical Section. Please note that the Department may require additional information if technical deficiencies are found at a later date.

Pursuant to LAC 33:I.1505.A.5, within 30 days after receipt of this letter of administrative completeness, the applicant shall publish a notice, provided by the Department, of the completeness determination in a major local newspaper of general circulation and submit proof of publication to the Department. Please publish the enclosed public notice once in the Beauregard Daily News. The proof of publication should be mailed to:

Jeffrey Budd
Permit Application Administrative Review Group
Permit Support Services Division
Office of Environmental Services
Post Office Box 4313
Baton Rouge, LA 70821-4313

In addition, Section 2018 of the Environmental Quality Act requires certain permit applications to contain an environmental assessment statement (I.T. questions). "Simultaneously with the submission of the statement to the department, the applicant must also submit copies of the

statement to the local governmental authority and designated public library where the facility is located, at no cost to the local governmental authority or the designated public library.”

Within 30 days from the date of this letter, please provide confirmation for our records to indicate that this required task has been accomplished for the application you submitted on June 30, 2023. To accomplish this, complete and sign the enclosed form, “*Confirmation of Submittal of Environmental Assessment Statement to Required Entities*,” and return as instructed on the form.

If you have any questions about the Administrative Completeness Determination, please call me at (225) 219-3369. For technical questions, please call Dan Nguyen at (225) 219-3395. Thank you for your attention to this matter.

Sincerely,

Jeffrey Budd
Environmental Project Specialist
Permit Application Administrative Review Group

Enclosures

c: IO-Air

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
CHENIERE CREOLE TRAIL PIPELINE LP – GILLIS COMPRESSOR STATION
ADMINISTRATIVE COMPLETENESS DETERMINATION

The LDEQ, Office of Environmental Services, has reviewed a Title V permit modification and renewal application from Cheniere Creole Trail Pipeline LP (700 Milam St, Ste 1900 in Houston, TX 77002) for the Gillis Compressor Station and determined that it is administratively complete. The application was received on July 12, 2023. **The facility can be reached at 1970 Texas Eastern Rd in Ragley, LA, Beauregard Parish.**

Cheniere Creole Trail Pipeline LP proposes to modify and renew a Title V permit.

Inquiries or requests for additional information regarding this application should be directed to Air Permits Division, LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3417.

Persons wishing to be included on the LDEQ permit public notice mailing list, wishing to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server, or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at DEQ.PUBLICNOTICES@LA.GOV or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices can be viewed at the LDEQ permits public notice webpage at <http://www.deq.louisiana.gov/public-notices> and general information related to the public participation in permitting activities can be viewed at <http://www.deq.louisiana.gov/page/the-public-participation-group>.

All correspondence should specify AI Number 50619, Permit Number 0320-00160-V6 and Activity Number PER20230003.

Wednesday, July 12, 2023

1:43:28 PM

RECEIPT OF CHECK

Master AI #: 50619
Name on Check: Cheniere LNG O&M Services LLC
Master File Name: Cheniere Creole Trail Pipeline LP - Gillis Compresso
Check Received Date: 7/12/2023
Check Date: 6/21/2023
Check Number: 102052
Check Amount (\$): \$12,180.86
Staff Entry: P00333122
Date data entered: 7/12/2023
Media: AIR
Comments: Title V Permit Modification and Renewal

COPY

PER20230003



Cheniere Energy, Inc.
700 Milam Street, Suite 1900
Houston, Texas 77002
phone: 713.375.5000
fax: 713.375.6000

LDEQ RECEIPT

2023 JUL 12 PM 12:51

original to IOA
913
copy to Petro/Nguyen, D
PAAR

July 10, 2023

Ms. Bliss Higgins
Assistant Secretary
Office of Environmental Services
Louisiana Department of Environmental Quality
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

**RE: *Cheniere Creole Trail Pipeline, L.P. – Gillis Compressor Station
Ragley, Beauregard Parish, Louisiana
Title V Permit Renewal and Significant Modification Application
AI Number: 50619
Title V Permit Number 0320-00160-V5***

Dear Ms. Higgins:

Cheniere Creole Trail Pipeline, L.P. (CTPL) owns and operates the Gillis Compressor Station in Ragley, Louisiana. CTPL is submitting the enclosed Title V Permit Renewal and Significant Modification Application to Title V Operating Permit Number 0320-00160-V5. In accordance with Louisiana Administrative Code (LAC) 33:III.507.E.4, CTPL is submitting this renewal application at least six months prior to the permit expiration date of January 23, 2024. Section 1 of the enclosed application provides a comprehensive list of the proposed changes.

Pursuant to LAC 33:III.211.A and LAC 33:III.223.A, Table 1, the calculated permit fee in support of this application is \$12,180.86.

Additionally, CTPL requests an expedited review of the enclosed application. In accordance with LAC 33:I.Chapter 18, the Request for Expedited Permit Processing form is attached to this cover letter.

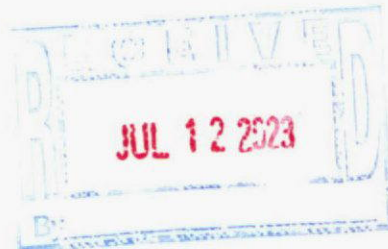
If you have any questions or need additional information, please contact Demeris Giles at (713) 375-5338 or Demeris.Giles@cheniere.com.

Sincerely,

Chris Williams
Vice President, Pipeline Operations

Attachments

cc: EPA Region 6 (electronically)



COPY

PER20230003

original to IOA
9B
copy to Petro/Nguyen, D
PAAR



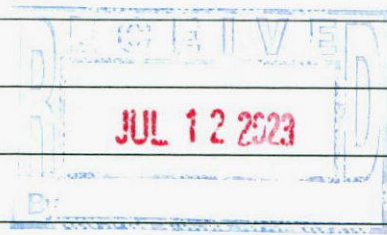
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Office of Environmental Services • Public Participation & Permit Support Division
Post Office Box 4313 • Baton Rouge, LA 70821-4313
Customer Service: 225-219-LDEQ (5337) or Toll Free 1-866-896-LDEQ (5337)

REQUEST FOR EXPEDITED PERMIT PROCESSING

This form is to be submitted when an applicant requests consideration for expedited processing of permits, modifications, licenses, registrations or variances in accordance with LAC 33:1.Chapter 18. Submission of this form shall in no way constitute approval of the expedited permit request. The LDEQ will notify the applicant in writing of the decision to expedite processing of the requested permit application. **ALL INFORMATION MUST BE PROVIDED.** Please submit one form for each activity for which expedited processing is requested.

SECTION I - FACILITY INFORMATION							
Agency Interest (AI) #		50619		Permit # (if permitted)		0320-00160-V5	
Facility Name		Gillis Compressor Station					
Date Associated Permit Application Submitted				July 12, 2023			
Media	<input checked="" type="checkbox"/> Air	Type of Permit Action	<input type="checkbox"/> New Facility	<input type="checkbox"/> Modified Facility			
	<input type="checkbox"/> Water		<input type="checkbox"/> General Permit	<input type="checkbox"/> Registration			
	<input type="checkbox"/> Solid Waste		<input type="checkbox"/> License	<input checked="" type="checkbox"/> Renewal w/ Modification			
	<input type="checkbox"/> Haz. Waste		<input type="checkbox"/> Variance				
Owner / Operator Name		Cheniere Creole Trail Pipeline, L.P.					
Parish Where Facility is Located			Beauregard				
Mailing Address		Street		700 Milam Street, Suite 1900			
		City		Houston	State	TX	Zip
Technical Contact Available After Normal Work Hours		Name		Demeris Giles			
		Phone		(713) 375-5338			
		Cell Phone		(713) 201-1916			
		Fax		N/A			
		E-mail		Demeris.Giles@cheniere.com			
SECTION II - EXPEDITED PERMIT INFORMATION							
1. How many new permanent jobs will result from this permit action?						0	
2. Date requested for final permit decision				12/1/2023	or	<input type="checkbox"/> As soon as possible	
3. Is construction activity proposed in permit application?						<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
4. Does the applicant owe any outstanding fees to the LDEQ?						<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If you answered "Yes" to No. 4, above, attach explanation to this form.							
5. Is there a limit to the amount you are willing to pay to expedite the permit processing?						<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No



If you answered "Yes" to No. 5, above, please read and complete the following:

I understand that if such a maximum amount is requested, the number of overtime hours an LDEQ employee or contractor works processing the permit, modification, license, registration, or variance shall be limited accordingly. If further processing of the document is required, the LDEQ's continued review will not be in accordance with the provisions of this Chapter, and the request will no longer be handled on an expedited basis. I understand that the LDEQ will charge a fee for the expedited processing which was performed. (LAC 33:1.1805).

I wish to limit the expedited permit fee to: \$ 5,000.00

Provide the basis or need for this expedited permit processing request.

The facility requests expedited approval to implement the proposed permit modifications requested in this permit application.

SECTION III - PUBLIC NOTICE

Public notice of all expedited permit processing will be provided in accordance with LAC 33:1.1809.A.

SECTION IV - CERTIFICATIONS

Check the appropriate box regarding pending enforcement actions and lawsuits.

I certify that as owner/operator I am not subject to any pending state or federal enforcement actions, including citizen suits brought under state or federal law for the subject facility or any other facility I own or operate.

or

I am currently subject to pending state or federal enforcement actions, including citizen suits brought under state or federal law for the subject facility or any other facility I own or operate.

Please read and complete the following:

I, as the duly authorized responsible official for the subject facility, certify in accordance with LAC 33:1.1803.C, that should additional information be required to complete the permit process, all requested information will be provided within the timeframes specified by the LDEQ.

I understand that:

- *If the requested information is not provided within the timeframes specified, or if the limit I have indicated as a maximum amount to be paid for expedited processing is reached, the LDEQ reserves the right to cease processing the permit, modification, license, registration, or variance as an expedited permit.*
- *If the LDEQ ceases expedited permit processing, I will be billed for the expedited processing that occurred in accordance with LAC 33: 1.1805.B.*
- *Failure to pay the expedited permit processing fee by the due date specified on the invoice will constitute a violation of these regulations and shall subject the applicant to relevant enforcement action under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the permit, modification, license, registration, or variance.*
- *There is no guarantee that a final permit decision will be issued by the date I have requested.*
- *The submittal of this request does not release me from liability for any violations related to this activity or the Environmental Quality Act.*
- *A permit may be required prior to any construction at the site, operation of the proposed activity or commencement of discharges from this proposed activity, and I should refer to media-specific regulations for this information.*

Signature of Responsible Official		Title	Vice President, Pipeline Operations
Printed Name	Chris Williams	Date	7-10-23

CHENIERE CREOLE TRAIL PIPELINE, L.P.

Gillis Compressor Station

TITLE V PERMIT RENEWAL AND SIGNIFICANT MODIFICATION APPLICATION

AI# 50619

July 2023

Trinity Project No. 221901.0119



TITLE V PERMIT RENEWAL AND SIGNIFICANT MODIFICATION APPLICATION

**Cheniere Creole Trail Pipeline, L.P.
Gillis Compressor Station**

TRINITY CONSULTANTS

8545 United Plaza Blvd, Suite 350
Baton Rouge, LA 70809
(225) 346-4003

July 2023

Project 221901.0119



TABLE OF CONTENTS

1. INTRODUCTION	1-1
1.1 OPERATIONAL OVERVIEW	1-1
1.2 PROPOSED MODIFICATIONS AND RECONCILIATIONS	1-1
1.3 PROPOSED FACILITY WIDE EMISSIONS	1-3
1.4 APPLICATION CONTENTS	1-3
2. REGULATORY APPLICABILITY	2-1
2.1 STATE AND FEDERAL REGULATORY ANALYSIS.....	2-1
2.2 PREVENTION OF SIGNIFICANT DETERIORATION (PSD) REGULATIONS	2-1
2.3 NON-ATTAINMENT NEW SOURCE REVIEW (NNSR).....	2-1
2.4 MACT AND LOUISIANA AIR TOXIC REGULATIONS	2-1
2.5 CHEMICAL ACCIDENT PREVENTION REGULATIONS (40 CFR 68).....	2-1
2.6 STRATOSPHERIC OZONE PROTECTION (40 CFR 82)	2-2
2.7 COMPLIANCE ASSURANCE MONITORING.....	2-2
2.8 TEST METHODS AND PROCEDURES	2-2
2.9 GENERAL CONDITION XVII (GC XVII) ACTIVITIES.....	2-2
2.10 INSIGNIFICANT ACTIVITIES	2-2
3. APPLICATION FOR APPROVAL OF EMISSIONS	3-1
APPENDIX A. AREA MAPS	A
APPENDIX B. EMISSION CALCULATIONS	B
APPENDIX C. CERTIFICATE OF GOOD STANDING	C

LIST OF FIGURES (PROVIDED IN APPENDIX A)

Figure 1-1. Topographical Map
Figure 1-2. Aerial Photograph

LIST OF TABLES

Table 1-1. Proposed Facility-Wide Emissions

1-3

1. INTRODUCTION

Cheniere Creole Trail Pipeline, L.P. (CTPL) owns and operates the Gillis Compressor Station in Ragley, Beauregard Parish, Louisiana. The Gillis Compressor Station currently operates under Title V Permit No. 0320-00160-V5, issued by the Louisiana Department of Environmental Quality (LDEQ) on June 3, 2022. The area maps provided in Appendix A shows the location of the Gillis Compressor Station.

As required by LAC 33:III.507.E.4, CTPL is submitting this renewal application at least six months prior to the date of permit expiration (January 23, 2024). CTPL is also proposing the modifications and reconciliations to its Title V Operating Permit as detailed in Section 1.2.

1.1 OPERATIONAL OVERVIEW

Natural gas is transported onto the Creole Trail Pipeline via the five existing interconnects feeding the Gillis Compressor Station. Condensate and produced water are separated from the natural gas, stored in storage tanks, and periodically loaded into tank trucks and shipped off-site. Four (4) natural gas-fired turbines are used to deliver natural gas to the Creole Trail Pipeline. Three (3) natural gas-fired emergency generators are also located on-site for emergency power.

Air emissions consist primarily of combustion products generated from firing natural gas in the turbines and emergency generators. Emissions also occur from required operational activities associated with turbine blowdowns and maintenance, startup, and shutdown and permitted meter station operations. Volatile organic compound (VOC) emissions are generated during loading operations from the condensate tanks to tank trucks, flash emissions from the condensate tanks, and fugitive emissions from equipment leaks.

1.2 PROPOSED MODIFICATIONS AND RECONCILIATIONS

Via this application, CTPL proposes the following modifications and reconciliations to its Title V permit as detailed below:

- ▶ Via the Regulatory Permit for Storage Vessels authorized by LDEQ on December 15, 2022, replace Condensate Storage Tank No. 5 (Source ID GCTK05) with Condensate Storage Tank No. 7 (Source ID GCTK07).
- ▶ Via the Notification of Case-by-Case Insignificant Activities authorized by LDEQ on June 19, 2023, incorporate the following emission sources into the Title V permit:
 - General Condition XVII (GC XVII) Activities:
 - ◆ Two Station Suction Blowdown Stacks
 - ◆ Two Filter Separators
 - Update fugitive emissions from equipment leaks (Source ID GCFUG11) due to the additional fugitive equipment components.
- ▶ Via the Regulatory Permit for Storage Vessels authorized by LDEQ on July 7, 2023, incorporate Condensate Storage Tank No. 8 (Source ID GCTK08) into the Title V permit.
- ▶ Addition of a Titan 130e natural gas-fired turbine (Source ID GCPLC5) and an associated blowdown stack (Source ID GCBE).

- ▶ Authorize an emission cap (GRP 0002 T-130e BLOWDOWN) for the blowdown stacks associated with the permitted Titan 130e natural gas-fired turbine (GCBD) and the proposed Titan 130e natural gas-fired turbine (GCBE).
- ▶ Update the permitted emissions from turbine maintenance, start-up, and shutdown events (Source ID GCMSS) to account for the proposed Titan 130e natural gas-fired turbine.
- ▶ Addition of two new natural gas-fired emergency generators (Source IDs GCGEN4 and GCGEN5).
- ▶ Addition of two filter separators and one station discharge blowdown stack (GC XVII Activities) and two Chemical Injection Totes (Source IDs GCTOTE07 and GCTOTE08).
- ▶ Update the description of the currently permitted GC XVII Activity "Station Discharge Blowdown Stack" to "Station Discharge Blowdown Stack 1".
- ▶ Authorize the following four meter stations and their respective emission sources:
 - Momentum Meter Station:
 - ◆ Addition of Condensate Storage Tank No. 9 (Source ID GCTK09), Chemical Injection Tote No. 9 (Source ID GCTOTE09), and two filter separators (GC XVII Activity).
 - Meter Station 1:
 - ◆ Addition of Condensate Storage Tank No. 10 (Source ID GCTK10), Chemical Injection Tote No. 10 (Source ID GCTOTE10), and two filter separators (GC XVII Activity).
 - Meter Station 2:
 - ◆ Addition of Condensate Storage Tank No. 11 (Source ID GCTK11), Chemical Injection Tote No. 11 (Source ID GCTOTE11), and two filter separators (GC XVII Activity).
 - Meter Station 3:
 - ◆ Addition of Condensate Storage Tank No. 12 (Source ID GCTK12), Chemical Injection Tote No. 12 (Source ID GCTOTE12), and two filter separators (GC XVII Activity).
- ▶ Increase the throughput of the Gasoline Storage Tank (Source ID GCGST) to 550 gal/yr.
- ▶ Remove all currently permitted Insignificant Activities except for the Wastewater Tank (Source ID ISA-21 and the Portable Diesel Tank (Source ID ISA-23).
- ▶ Addition of the following Insignificant Activities in accordance with LAC 33:III.501.B.5.A.3:
 - One Wastewater Tank (Source ID ISA-24)
 - Five Lube Oil Tanks (Source IDs ISA-25 through ISA-29)
- ▶ Update fugitive emissions from equipment leaks (GCFUG11) due to the additional fugitive equipment components associated with the proposed sources detailed above.
- ▶ Update emissions associated with the currently permitted Truck Loading Operations (GC XVII Activity) to account for additional throughput resulting from the proposed condensate tanks, chemical injection totes, and the wastewater tank.
- ▶ Due to the additional compressor associated with the proposed Titan 130e natural gas-fired turbine (GCPLC5), the collection of fugitive emissions components (i.e., Source ID GCFUG11) will be subject to 40 CFR 60 Subpart OOOOa (NSPS OOOOa) per 40 CFR 60.5365a(j)(1). Section 22 of the Application for

Approval of Emissions of Air Pollutants from Part 70 Sources (AAE) provided in Section 3 of this application provides the applicable NSPS OOOOa requirements for this emissions source.

1.3 PROPOSED FACILITY WIDE EMISSIONS

Table 1-1 shows the proposed potential-to-emit (PTE) emissions from the Gillis Compressor Station.

Table 1-1. Proposed Facility-Wide Emissions

Pollutant	Permitted Emissions (tpy)	Proposed Emissions (tpy)	Change (tpy)
Particulate matter (PM ₁₀)	12.01	17.26	+ 5.25
Particulate matter (PM _{2.5})	11.97	17.21	+ 5.24
Sulfur dioxide	26.02	37.40	+ 11.38
Nitrogen oxides	148.21	192.84	+ 44.63
Carbon monoxide	217.80	283.08	+ 65.28
CO ₂ e	240,154	346,148	+ 105,994
Total VOC (including those listed below)	79.16	131.64	+ 52.48
2,2,4-Trimethylpentane	-	0.01	+ 0.01
Acetaldehyde	0.09	0.14	+ 0.05
Acrolein	0.014	0.021	+ 0.007
Benzene	0.04	0.06	+ 0.02
Ethylbenzene	0.06	0.09	+ 0.03
Formaldehyde	4.93	6.88	+ 1.95
n-Hexane	2.83	4.06	+ 1.23
Naphthalene	1.17	1.98	+ 0.81
PAH	0.005	0.007	+ 0.002
Propylene Oxide	0.05	0.07	+ 0.02
Toluene	0.22	0.33	+ 0.11
Xylene (Mixed Isomers)	0.11	0.16	+ 0.05

1.4 APPLICATION CONTENTS

Section 2 of this application contains a regulatory applicability analysis for the emission sources associated with the Gillis Compressor Station. The required AAE form, which includes the Emission Inventory Questionnaire (EIQ) forms and the regulatory applicability tables (state and federal) are provided in Section 3 of this application. Appendix A contains area maps of the facility, Appendix B contains the detailed emission calculations for all emission sources at the Gillis Compressor Station, and the Certificate of Good Standing is provided in Appendix C.

2. REGULATORY APPLICABILITY

2.1 STATE AND FEDERAL REGULATORY ANALYSIS

Section 22 of the AAE consists of Tables 1 through 4 which provides citations and descriptions of applicable Louisiana and Federal air quality regulations for all sources included in this permit application per LAC 33:III.517.D.10. Table 1 is a matrix identifying applicable, potentially applicable, and non-applicable requirements. Table 2 describes applicable state and federal air quality requirements, including applicable compliance monitoring devices, activities, or methods and compliance testing requirements. Table 3 summarizes regulatory exemptions and statements of non-applicability. Table 4 lists equipment routed to control devices as well as emission caps and their respective emission sources.

2.2 PREVENTION OF SIGNIFICANT DETERIORATION (PSD) REGULATIONS

A "major stationary source" under the PSD regulations is defined as any source that emits or has the potential to emit over 250 tpy of at least one criteria pollutant or 100 tpy if the source belongs to one of the 28 specifically listed industrial source categories. The Gillis Compressor Station does not belong to one of the 28 specifically listed industrial source categories. Prior to this permitting action, the facility was not considered a major stationary source as its potential to emit was less than 250 tpy for each regulated NSR pollutant. As provided in Table 1-1, via this permitting action, the facility will have a potential to emit of greater than 250 tpy for carbon monoxide (CO) and will be considered a major stationary source with respect to PSD regulations for all subsequent permitting actions. However, since the facility is currently permitted as a minor source (with respect to PSD regulations) and the proposed CO emissions increase is not major by itself (i.e., less than 250 tpy), PSD review is not triggered.

2.3 NON-ATTAINMENT NEW SOURCE REVIEW (NNSR)

The Gillis Compressor Station is located in Beauregard Parish, which is in attainment for all criteria pollutants; therefore, NNSR does not apply.

2.4 MACT AND LOUISIANA AIR TOXIC REGULATIONS

Louisiana air toxics regulations are contained in LAC 33:III.Chapter 51 and include both HAPs under Section 112 of the federal Clean Air Act (CAA) and TAPs. The Chapter 51 regulations require major sources of HAPs/TAPs to comply with applicable MACT standards and sources that have the potential to emit Class I and Class II TAPs in excess of their corresponding Minimum Emission Rate (MER) to comply with state MACT standards and applicable Ambient Air Standards (AAS). Because the Gillis Compressor Station is an area source of HAP/TAP emissions, Chapter 51 does not apply.

2.5 CHEMICAL ACCIDENT PREVENTION REGULATIONS (40 CFR 68)

The accidental release prevention program is mandated by Section 112(r) of the CAA and is codified in 40 CFR 68. The Louisiana version of the regulation is found in LAC 33:III.5901. For 40 CFR 68 purposes, stationary sources do not include transportation sources, specifically, those facilities that are already being regulated under U.S. Department of Transportation regulations per 49 CFR Parts 192, 193, and 195. The compressor station is regulated by 49 CFR Part 192. Therefore, the requirements of 40 CFR 68 do not apply to the facility.

2.6 STRATOSPHERIC OZONE PROTECTION (40 CFR 82)

Title VI of the Clean Air Act Amendments requires phase-out of ozone-depleting chemicals. The stratospheric ozone protection provisions have been codified under 40 CFR 82. The Gillis Compressor Station shall comply with the applicable requirements of 40 CFR 82.

2.7 COMPLIANCE ASSURANCE MONITORING

The purpose of the CAM rule is to ensure that operators maintain control device performance at levels that assure compliance. The rule allows operators to design CAM plans based on current requirements and operating practices, to select representative parameters upon which compliance can be assured, to establish indicator ranges (or procedures for setting ranges) for the parameters, to use testing or other operating data to verify the parameters and ranges, and to correct control device performance problems as expeditiously as practicable.

None of the currently permitted emission sources at the facility are subject to CAM requirements and this application does not affect the non-applicability of CAM to any of those sources. Additionally, the proposed emission sources will not be subject to CAM since none meet the CAM applicability criteria.

2.8 TEST METHODS AND PROCEDURES

The test methods and procedures requiring implementation under the applicable regulations are provided in Table 2 in Section 22 of the AAE.

2.9 GENERAL CONDITION XVII (GC XVII) ACTIVITIES

The Gillis Compressor Station is currently permitted for the GC XVII Activities listed below and addressed in Section 19 of the AAE:

- ▶ Truck Loading Operations;
- ▶ Station Suction Blowdown Stacks 1 and 2;
- ▶ Station Discharge Blowdown Stack; and
- ▶ Miscellaneous Venting from Filter Separators/Slug Catchers.

As stated in Section 1.2, via this application, CTPL is proposing two suction blowdown stacks (Station Suction Blowdown Stacks 3 and 4), one discharge blowdown stack (Station Discharge Blowdown Stack 2), and twelve additional filter separators. Refer to Appendix B for the detailed emission calculations for the permitted and proposed GC XVII Activities.

2.10 INSIGNIFICANT ACTIVITIES

There are several activities at the Gillis Compressor Station that are deemed insignificant on the basis of size, activity, type of pollutant, or emission rate. The currently permitted and proposed Insignificant Activities (IAs) are listed in AAE Section 20.

As stated in Section 1.2, via this application, CTPL is proposing to delete all permitted IAs except the Wastewater Tank (Source ID ISA-21) and the Portable Diesel Tank (Source ID ISA-23). Additionally, CTPL is proposing to permit an additional Wastewater Tank (Source ID ISA-24) and five Lube Oil Tanks (Source IDs

ISA-25 through ISA-29) under LAC 33:III.501.B.5.A.3. Refer to Appendix B for the detailed emission calculations for the permitted and proposed IAs.

3. APPLICATION FOR APPROVAL OF EMISSIONS

Department of Environmental Quality Office of Environmental Services Air Permits Division P.O. Box 4313 Baton Rouge, LA 70821-4313 (225) 219-3417	<h1>LOUISIANA</h1> <h2>Application for Approval of Emissions of Air Pollutants from Part 70 Sources</h2>	
--	--	---

PLEASE TYPE OR PRINT

1. Facility Information [LAC 33:III.517.D.1]

Facility Name or Process Unit Name (if any) Gillis Compressor Station		<input checked="" type="checkbox"/> All Process Units <input type="checkbox"/> Process Unit-specific Permit
Agency Interest Number (A.I. Number) 50619	Currently Effective Permit Number(s) 0320-00160-V5	
Company - Name of Owner Cheniere Creole Trail Pipeline, L.P.		
Company - Name of Operator (if different from Owner) Same		
Parent Company (if Company – Name of Owner given above is a division) Cheniere Energy, Inc.		
Federal Tax-ID 95-4352386 (Cheniere Energy, Inc.), 20-4635194 (Cheniere Creole Trail Pipeline, LP)		

- corporation, partnership, or sole proprietorship
 regulated utility
 municipal government
 state government
 federal government
 other, specify _____

2. Physical Location and Process Description [LAC 33:III.517.D.18, unless otherwise stated]

What does this facility produce? Add more rows as necessary.
 This facility is a natural gas compressor station.

What modifications/changes are proposed in this application? Add more rows as necessary.
 Refer to Section 1 of this application.

Nearest town (in the same parish as the facility): Ragley	Parish(es) where facility is located: Beauregard			
Distance To (mi):	~33 Texas	~175 Arkansas	~98 Mississippi	~285 Alabama
Latitude of Facility Front Gate:	30 Deg	26 Min	56 Sec	93 Hundredths
Longitude of Facility Front Gate:	93 Deg	8 Min	52 Sec	10 Hundredths
Distance from nearest Class I Area:	420	kilometers		

Add physical address and description of location of the facility below. If the facility has no address, provide driving directions. Add more rows as necessary.
 From Ragley, Louisiana, head east on Highway 190 for approximately 4.6 miles. Turn right onto Texas Eastern Rd and travel south for approximately 5.1 miles. The site is located on the east side of Texas Eastern Rd.

- Map attached (required per LAC 33:III.517.D.1)
 Description of processes and products attached (required per LAC 33:III.517.D.2)
 Introduction/Description of the proposed project attached (required per LAC 33:III.517.D.5)

3. Confidentiality [LAC 33.I.Chapter 5]

Are you requesting confidentiality for any information except air pollutant emission rates? Yes No

If "yes," list the sections for which confidentiality is requested below. Add rows as necessary. Confidentiality requests require a submittal that is separate from this application. Information for which confidentiality is requested should not be submitted with this application. Consult instructions.

4. Type of Application [LAC 33:III.517.D]

Check all that apply.

<input checked="" type="checkbox"/> Renewal
Select one, if applicable:
<input type="checkbox"/> Entirely new facility
<input checked="" type="checkbox"/> Significant modification of existing facility (may also include reconciliations) [LAC 33:III.527]
<input type="checkbox"/> Minor modification of existing facility (may also include reconciliations) [LAC 33:III.525]
<input type="checkbox"/> Reconciliation only
NSR Analysis:
<input type="checkbox"/> Prevention of Significant Deterioration (PSD)
<input type="checkbox"/> Nonattainment New Source Review (NNSR)

Does this submittal update or replace an application currently under review? Yes No

If yes, provide date that the prior application was submitted: _____

Select one if this application is for an existing facility that does not have an air quality permit:

- Previously Grandfathered (LAC 33:III.501.B.6)
- Previously Exempted (e.g., Small Source Exemption; LAC 33:III.501.B.2.d)
- Previously Unpermitted

5. Fee Information [LAC 33:III.517.D.17]

Fee Parameter: If the fee code is based on an operational parameter (such as number of employees or capital cost), enter that parameter here. _____

Industrial Category: Enter the Standard Industrial Classification (SIC) and North American Industry Classification (NAICS) Codes that apply to the facility.

Primary SICC: 4922 **NAICS Code:** 486210

Secondary SICC(s): _____

Project Fee Calculation: Enter fee code, permit type, production capacity/throughput, and fee amount pursuant to LAC 33:III.Chapter 2. Add rows to this table as needed. Include with the application the amount in the Grand Total blank as the permit application fee.

FEE CODE	TYPE	EXISTING CAPACITY	INCREMENTAL CAPACITY INCREASE	SURCHARGES				TOTAL AMOUNT
				MULTIPLIER	NSPS	PSD	AIR TOXICS	
1430	Major	55,782	23,436	41.58	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$12,180.86
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GRAND TOTAL								\$12,180.86

****Optional** Fee Explanation:** Use the space provided to give an explanation of the fee determination displayed above. Using this area will help to avoid confusion.

In accordance with LAC 33:III.211.B.13.b, the major modification fee applies since the capacity is being increased by ~42% (i.e., from 55,782 hp to 79,218 hp). The major modification application fee of \$12,180.86 was calculated based on the incremental capacity increase (23,436 hp), the new permit application fee (\$41.58 per 100 hp (turbines)), and the 25% NSPS surcharge due to the addition of the turbine (NSPS KKKK), emergency generators (NSPS JJJJ), and fugitives (NSPS OOOOa) per LAC 33:III.211.A.

Major Modification Fee Calculation = (23,436 hp)(\$41.58/100 hp)(1.25) = \$12,180.86.

Electronic Fund Transfer (EFT): If paying the permit application fee using an Electronic Fund Transfer (EFT), please include the EFT Transaction Number, the Date that the EFT was made, and the total dollar amount submitted in the EFT. If not paying the permit application fee using EFT, leave blank.

EFT Transaction Number _____ Date of Submittal _____ Total Dollar Amount \$ _____

6. Key Dates

Estimated date construction will commence: _____ Upon Permit Issuance _____ Estimated date operation will commence: _____ Upon Permit Issuance _____

7. Pending Permit Applications – For Process Unit-Specific Permits Only [LAC 33:III.517.D.18]

List all other process units at this facility for which Part 70 permit applications have been submitted, but have not been acted upon by LDEQ as of the date of submittal of this application. If none, state "none" in the table. ****It is not necessary to update this table during the permit review process, unless requested by LDEQ.****

Process Unit Name	Permit Number	Date Submitted

8. LAC 33:I.1701 Requirements – Answer all below for new sources and permit renewals - Yes No

Does the company or owner have federal or state environmental permits identical to, or of a similar nature to, the permit for which you are applying in Louisiana or other states? (This requirement applies to all individuals, partnerships, corporations, or other entities who own a controlling interest of 50% or more in your company, or who participate in the environmental management of the facility for an entity applying for the permit or an ownership interest in the permit.) Yes No

If yes, list States: _____ Louisiana, Texas _____

Do you owe any outstanding fees or final penalties to the Department? Yes No
If yes, explain below. Add rows if necessary.

Is your company a corporation or limited liability company? Yes No

If yes, attach a copy of your company's Certificate of Registration and/or Certificate of Good Standing from the Secretary of State. The appropriate certificate(s) should be attached to the end of this application as an appendix.

9. Permit Shield Request [LAC 33:III.517.E.7] - Yes No

If yes, check the appropriate boxes to indicate the type of permit shield being sought. Include the specific regulatory citation(s) for which the shield is being requested. Give an explanation of the circumstances that will justify the permit shield request. Attach additional pages if necessary. If additional pages are used, attach them directly behind this page and enter "See Attached Pages" into the Explanation field.

Type of Permit Shield request (check all that apply):

Non-applicability determination for:	Specific Citation(s)	Explanation
<input type="checkbox"/> 40 CFR 60		
<input type="checkbox"/> 40 CFR 61		
<input type="checkbox"/> 40 CFR 63		
<input type="checkbox"/> Prevention of Significant Deterioration		
<input type="checkbox"/> Nonattainment New Source Review		

Interpretation of monitoring, recordkeeping, and/or reporting requirements, and/or means of compliance for:	Specific Citation(s)	Explanation
<input type="checkbox"/> 40 CFR 60		
<input type="checkbox"/> 40 CFR 61		
<input type="checkbox"/> 40 CFR 63		
<input type="checkbox"/> Prevention of Significant Deterioration		
<input type="checkbox"/> Nonattainment New Source Review		
<input type="checkbox"/> State Implementation Plan (SIP) Regulation(s) referenced in 40 CFR 52 Subpart T		

10. Certification of Compliance With Applicable Requirements

Statement for Applicable Requirements for Which the Company and Facility Referenced In This Application Is In Compliance

Based on information and belief, formed after reasonable inquiry, the company and facility referenced in this application is in compliance with and will continue to comply with all applicable requirements pertaining to the sources covered by the permit application, as outlined in Tables 1 and 2 in the permit application. For requirements promulgated as of the date of this certification with compliance dates effective during the permit term, I further certify that the company and facility referenced in this application will comply with such requirements on a timely basis and will continue to comply with such requirements.


For corporations only: By signing this form, I certify that, in accordance with the definition of Responsible Official found in LAC 33:III.502, (1) I am a president, secretary, treasurer, or vice-president in charge of a principal business function, or other person who performs similar policy or decision-making functions; or (2) I am a duly authorized representative of such person; am responsible for the overall operation of one or more manufacturing, production, or operating facilities addressed in this permit application; and either the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or the delegation of authority has been approved by LDEQ prior to this certification.*

CERTIFICATION: I certify, under provisions in Louisiana and United States law which provide criminal penalties for false statements, that based on information and belief formed after reasonable inquiry, the statements and information contained in this Application for Approval of Emissions of Air Pollutants from Part 70 Sources, including all attachments thereto and the compliance statement above, are true, accurate, and complete.

CERTIFICATION: I certify that the engineering calculations, drawings, and design are true and accurate to the best of my knowledge.

a. Responsible Official		
Name Chris Williams		
Title Vice President, Pipeline Operations		
Company Cheniere Energy, Inc.		
Suite, mail drop, or division Suite 1900		
Street or P.O. Box 700 Milam Street		
City Houston	State TX	Zip 77002
Business phone (713) 375-5662		
Email Address chris.williams@cheniere.com		

b. Professional Engineer		
Name Joseph Guy Parent, P.E.		
Title Managing Consultant		
Company Trinity Consultants, Inc.		
Suite, mail drop, or division Suite 350		
Street or P.O. Box 8545 United Plaza Blvd		
City Baton Rouge	State LA	Zip 70809
Business phone (225) 346-4003		
Email Address gparent@trinityconsultants.com		

Signature of responsible official (See 40 CFR 70.2): 		
Date: 7-10-29		

Signature of Professional Engineer:		
Date:		
Louisiana Registration No.	33631	

*Approval of a delegation of authority can be requested by completing a Duly Authorized Representative Designation Form (Form 7218) available on LDEQ's website at <http://deq.louisiana.gov/page/air-permit-applications>

10. Certification of Compliance With Applicable Requirements

Statement for Applicable Requirements for Which the Company and Facility Referenced In This Application Is In Compliance

Based on information and belief, formed after reasonable inquiry, the company and facility referenced in this application is in compliance with and will continue to comply with all applicable requirements pertaining to the sources covered by the permit application, as outlined in Tables 1 and 2 in the permit application. For requirements promulgated as of the date of this certification with compliance dates effective during the permit term, I further certify that the company and facility referenced in this application will comply with such requirements on a timely basis and will continue to comply with such requirements.

For corporations only: By signing this form, I certify that, in accordance with the definition of Responsible Official found in LAC 33:III.502, (1) I am a president, secretary, treasurer, or vice-president in charge of a principal business function, or other person who performs similar policy or decision-making functions; or (2) I am a duly authorized representative of such person; am responsible for the overall operation of one or more manufacturing, production, or operating facilities addressed in this permit application; and either the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or the delegation of authority has been approved by LDEQ prior to this certification.*

CERTIFICATION: I certify, under provisions in Louisiana and United States law which provide criminal penalties for false statements, that based on information and belief formed after reasonable inquiry, the statements and information contained in this Application for Approval of Emissions of Air Pollutants from Part 70 Sources, including all attachments thereto and the compliance statement above, are true, accurate, and complete.

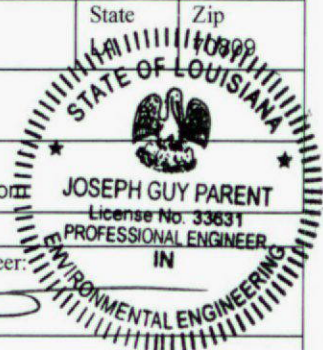
CERTIFICATION: I certify that the engineering calculations, drawings, and design are true and accurate to the best of my knowledge.

a. Responsible Official		
Name Chris Williams		
Title Vice President, Pipeline Operations		
Company Cheniere Energy, Inc.		
Suite, mail drop, or division Suite 1900		
Street or P.O. Box 700 Milam Street		
City Houston	State TX	Zip 77002
Business phone (713) 375-5662		
Email Address chris.williams@cheniere.com		

Signature of responsible official (See 40 CFR 70.2):
Date:

*Approval of a delegation of authority can be requested by completing a Duly Authorized Representative Designation Form (Form 7218) available on LDEQ's website at <http://deq.louisiana.gov/page/air-permit-applications>

b. Professional Engineer		
Name Joseph Guy Parent, P.E.		
Title Managing Consultant		
Company Trinity Consultants, Inc.		
Suite, mail drop, or division Suite 350		
Street or P.O. Box 8545 United Plaza Blvd		
City Baton Rouge	State	Zip 70809
Business phone (225) 346-4003		
Email Address gparent@trinityconsultants.com		
Signature of Professional Engineer: 		
Date: 7-7-23		
Louisiana Registration No.	33631	



11. Personnel [LAC 33:III.517.D.1]

a. Manager of Facility who is located at plant site		
Name Kenneth Guidry	<input checked="" type="checkbox"/> Primary contact	
Title Manager, Pipeline Operations		
Company Cheniere Creole Trail Pipeline, L.P.		
Suite, mail drop, or division		
Street or P.O. Box 6008 Horseman Drive		
City Lake Charles	State LA	Zip 70615
Business phone 337-533-2111		
Email address ken.guidry@cheniere.com		

b. On-site contact regarding air pollution control		
Name Kenneth Guidry	<input type="checkbox"/> Primary contact	
Title Manager, Pipeline Operations		
Company Cheniere Creole Trail Pipeline, L.P.		
Suite, mail drop, or division		
Street or P.O. Box 6008 Horseman Drive		
City Lake Charles	State LA	Zip 70615
Business phone 337-533-2111		
Email address ken.guidry@cheniere.com		

c. Person to contact with written correspondence		
Name Chris Williams	<input type="checkbox"/> Primary contact	
Title Vice President, Pipeline Operations		
Company Cheniere Energy, Inc.		
Suite, mail drop, or division Suite 1900		
Street or P.O. Box 700 Milam Street		
City Houston	State TX	Zip 77002
Business phone 713-375-5662		
Email address chris.williams@cheniere.com		

d. Person who prepared this report		
Name Joseph Guy Parent, P.E.	<input type="checkbox"/> Primary contact	
Title Managing Consultant		
Company Trinity Consultants, Inc.		
Suite, mail drop, or division Suite 350		
Street or P.O. Box 8545 United Plaza Blvd		
City Baton Rouge	State LA	Zip 70809
Business phone 225-346-4003		
Email address gparent@trinityconsultants.com		

e. Person to contact about Annual Maintenance Fees		<input type="checkbox"/> a <input type="checkbox"/> b <input checked="" type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> other (specify below)	
Name	<input type="checkbox"/> Primary contact	Suite, mail drop, or division	
Title		Street or P.O. Box	
Company		City	State Zip
Business Phone		Email Address	

14.a. Enforcement Actions [LAC 33:III.517.D.18] - Yes No

If yes, list all federal and state air quality enforcement actions, settlement agreements, and consent decrees received for this facility and/or process unit (for process unit-specific permits) since the issuance of the currently effective Title V Operating Permit or State Operating Permit. For each action, list the type of action (or its tracking number), the regulatory authority or authorities that issued the action, and the date that the action was issued. Summarize the conditions imposed by the enforcement action, settlement agreement, and consent decree in Section 22, Table 2. It is not necessary to submit a copy of the referenced action. Add rows to table as necessary.

Type of Action or Tracking Number	Issuing Authority	Date Action Issued	Summary of Conditions Included?
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

14.b. Schedule for Compliance [LAC 33:III.517.E.4] Yes No

If the facility or process unit for which application is being made is not in full compliance with all applicable regulations, give a description of how compliance will be achieved, including a schedule for compliance below. Add rows as necessary. See instructions.

15. Letters of Approval for Alternate Methods of Compliance - Yes No

If yes, list all correspondence with LDEQ, EPA, or other regulatory bodies that provides for or supports a request for alternate methods of compliance with any applicable regulations for this facility or process unit (for process unit-specific permits). List the date of issuance of the letter and the regulation referenced by the letter. **Attach as an appendix a copy of all documents referenced in this table.** Letters that are not included may not be incorporated into a final permit. Add rows to table as necessary.

Date Letter Issued	Issuing Authority	Referenced Regulation(s)	Copy of Letter Attached?
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

16. Initial Notifications and Performance Tests [LAC 33:III.517.D.18] - Yes No

If yes, list any initial notifications that have been submitted or one-time performance tests that have been performed for this facility or process unit (for process unit-specific permits) since the issuance of the currently effective Title V Operating Permit or State Operating Permit in order to satisfy regulatory requirements. Any initial notification or one-time performance test requirements that have not been satisfied should be listed in Section 22, Table 2 of this application. Any notifications or performance tests that recur periodically should also be properly noted in Section 22, Table 2 of this application. Add rows to table as necessary.

Initial Notification or One-time Performance Test?	Regulatory Citation Satisfied	Applicable Source(s)	Date Completed/Approved

17. Existing Prevention of Significant Deterioration or Nonattainment New Source Review Limitations [LAC 33:III.517.D.18]

Do one or more emissions sources represented in this permit application currently operate under one or more NSR permits?
 Yes No

If "yes," summarize the limitations from such permit(s) in the following table. Add rows to table as necessary. Be sure to note any annual emissions limitations from such permit(s) in Section 13 of this application.

Permit Number	Date Issued	Emission Point ID No.	Pollutant	BACT/LAER Limit ¹	Averaging Period	Description of Control Technology/Work Practice Standards

¹For example, lb/MM Btu, ppmvd @ 15% O₂, lb/ton, lb/hr

18. Air Quality Dispersion Modeling [LAC 33:III.517.D.15]

Was Air Quality Dispersion Modeling as required by LAC 33:III performed in support of this permit application? (Air Quality Dispersion Modeling is only required when applying for PSD permits and as requested by LDEQ.)
 Yes No

Has Air Quality Dispersion Modeling completed in accordance with LAC 33:III ever been performed for this facility in support of an air permit application previously submitted for this facility or process unit (for process unit-specific permits) or as required by other regulations AND approved by LDEQ?
 Yes No

If yes, enter the date the most recent Air Quality Dispersion Modeling results as required by LAC 33:III were submitted:
 April 27, 2012

If the answer to either question above is "yes," enter a summary of the most recent results in the following table. If the answer to both questions is "no," enter "none" in the table. Add rows to table as necessary.

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Standard or (National Ambient Air Quality Standard {NAAQS})
NO ₂	1-Hour	76.44 µg/m ³	188 µg/m ³
	Annual	4.20 µg/m ³	100 µg/m ³
PM _{2.5}	24-Hour	4.07 µg/m ³	35 µg/m ³
	Annual	0.36 µg/m ³	12 µg/m ³
CO	1-Hour	7,360.30 µg/m ³	40,000 µg/m ³
	8-Hour	7,077.75 µg/m ³	10,000 µg/m ³

19. General Condition XVII Activities- Yes No

Enter all activities that qualify as Louisiana Air Emissions Permit General Condition XVII Activities.

- Expand this table as necessary to include all such activities.
- See instructions to determine what qualifies as a General Condition XVII Activity.
- Do not include emissions from General Condition XVII Activities in the proposed emissions totals for the permit application.

Work Activity	Schedule	Emission Rates – TPY						
		PM ₁₀	SO ₂	NO _x	CO	VOC	Hexane	Naphthalene
Truck Loading Operations	177,472 gal/yr	-	-	-	-	0.30	-	0.02
Station Suction Blowdown Stack 1	2/year	-	-	-	-	0.57	0.08	-
Station Suction Blowdown Stack 2	2/year	-	-	-	-	0.57	0.08	-
Station Suction Blowdown Stack 3	2/year	-	-	-	-	0.57	0.08	-
Station Suction Blowdown Stack 4	2/year	-	-	-	-	0.57	0.08	-
Station Discharge Blowdown Stack 1	2/year	-	-	-	-	0.69	0.09	-
Station Discharge Blowdown Stack 2	2/year	-	-	-	-	0.69	0.09	-
Miscellaneous Venting from Filter Separators/Slug Catchers	8 events/year per filter separator/slug catcher	-	-	-	-	1.16	0.16	0.06

20. Insignificant Activities [LAC 33:III.501.B.5] - Yes No

Enter all activities that qualify as Insignificant Activities.

- Expand this table as necessary to include all such activities.
- For sources claimed to be insignificant based on size or emission rate (LAC 33:III.501.B.5.A), information must be supplied to verify each claim. This may include but is not limited to operating hours, volumes, and heat input ratings.
- If aggregate emissions from all similar pieces of equipment claimed to be insignificant are greater than 5 tons per year for any pollutant, then the activities can not be claimed as insignificant and must be represented as permitted emission sources. Aggregate emissions shall mean the total emissions from a particular insignificant activity or group of similar insignificant activities (e.g., A.1, A.2, etc.) within a permit per year.

Emission Point ID No.	Description	Physical/Operating Data	Citation
ISA-21, ISA-24	Wastewater Tanks (2)	4,200 gallons (each)	LAC 33:III.501.B.5.A.3
ISA-23	Portable Diesel Tank	500 gallons	LAC 33:III.501.B.5.A.8
ISA-25, ISA-26, ISA-27	Lube Oil Tanks (3)	1,500 gallons (each)	LAC 33:III.501.B.5.A.3
ISA-28, ISA-29	Lube Oil Tanks (2)	2,500 gallons (each)	LAC 33:III.501.B.5.A.3

21. Regulatory Applicability for Commonly Applicable Regulations – Answer all below [LAC 33:III.517.D.10]

Does this facility contain asbestos or asbestos containing materials? Yes No

If “yes,” the facility or any portion thereof may be subject to 40 CFR 61, Subpart M, LAC 33:III.Chapter 27, and/or LAC 33:III.5151, and this application must address compliance as stated in Section 22 of this application

Is the facility or process unit represented in this permit subject to 40 CFR 68, or is any other process unit located at the same facility as the process unit represented in this application subject to 40 CFR 68? Yes No

If “yes,” the entire facility is subject to 40 CFR 68 and LAC 33:III.Chapter 59, and this application must address compliance as stated in Section 22 of this application.

Is the facility listed in LAC 33:III.5611?

Table 5 Yes No

Table 6 Yes No

Table 7 Yes No

Does the applicant own or operate commercial refrigeration equipment normally containing more than 50 pounds of refrigerant at this facility or process unit? Yes No

If “yes,” the entire facility is subject to 40 CFR 82, Subpart F, and this application must address compliance as stated in Section 22 of this application.

22. Applicable Regulations, Air Pollution Control Measures, Monitoring, and Recordkeeping

Important points for Table 1 [LAC 33:III.517.D.10]:

- List in Table 1, by Emission Point ID Number and Descriptive Name of the Equipment, state and federal pollution abatement programs and note the applicability or non-applicability of the regulations to each source.
- Adjust the headings for the columns in Table 1 as necessary to reflect all applicable regulations, in addition to any regulations that do not apply but require an explanation to substantiate this fact.
- For each piece of equipment, enter “1” for each regulation that applies. Enter “2” for each regulation that applies to this type of source, but from which this source of emissions is exempt. Enter “3” for equipment that is subject to a regulation, but does not have any applicable requirements. Also, enter “3” for each regulation that has applicable requirements that apply to the particular emission source, but the regulations currently do not apply due to meeting a specific criterion, such as it has not been constructed, modified, or reconstructed since the regulations have been in place.
- Leave the spaces blank when the regulations clearly would not apply under any circumstances to the source. For example, LAC 33:III.2103 – Storage of Volatile Organic Compounds would never apply to a steam generating boiler, no matter the circumstances.
- Consult instructions.

Important points for Table 2 [LAC 33:III.517.D.4; LAC 33:III.517.D.7; LAC 33:III.517.D.10]:

- For each piece of equipment listed in Table 2, include all applicable limitations, recordkeeping, reporting, monitoring, and testing requirements. Also, include any one-time notification or one-time performance test requirements that have not been fulfilled.
- Each of these regulatory aspects (limitations, recordkeeping, reporting, etc.) should be addressed for each regulation that is applicable to each emissions source or emissions point.
- For each regulation that provides a choice regarding the method of compliance, indicate the method of compliance that will be employed. It is not sufficient to state that all compliance options will be employed, though multiple compliance options may be approved as alternative operating scenarios.
- Consult instructions.

Important points for Table 3 [LAC 33:III.517.D.16]:

- Each time a 2 or a 3 is used to describe applicability of a source in Table 1, an entry should be made in Table 3 that explains the exemption or non-applicability status of the regulation to that source.
- Fill in all requested information in the table.
- The exact regulatory citation that provides for the specific exemption or non-applicability determination should be entered into the “Citation Providing for Exemption or Non-applicability” column.
- Consult Instructions.

Important points for Table 4 [LAC 33:III.517.D.18]

- List any single emission source that routes its emissions to another point where these emissions are commingled with the emissions of other sources before being released to the atmosphere. Do not list any single emission source in this table that does not route its emissions in this manner.
- List any and all emission sources that are routed as described above. This includes emission sources that do not otherwise appear in this permit application.
- Consult instructions.

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

Source ID No.:	Descriptive Name of the Source	LAC 33:III								LAC 33:III										
		509	2103	2104	2111	2113	2115	2121	2201	2	5	9	11	13	15	21	29	51	56	59
UNF0001	Gillis Compressor Station					1	3		3	1	1	1	1	1	1			3	1	3
EQT0001	Emergency Generator												2	1	3					
EQT0002	Emergency Generator												2	1	3					
EQT0003	Gas Turbine Driven Compressor Unit A - Taurus 70												2	1	3					
EQT0004	Gas Turbine Driven Compressor Unit B - Taurus 70												2	1	3					
EQT0005	Gas Turbine Driven Compressor Unit C - Taurus 70												2	1	3					
EQT0006	Gas Turbine Driven Compressor Unit D - Titan 130e												2	1	1					
EQT0007	Condensate Storage Tank No. 1		2	3																
EQT0008	Maintenance, Startup, and Shutdown										1									
EQT0009	Taurus 70 Unit A Blowdown Stack										1									
EQT0010	Taurus 70 Unit B Blowdown Stack										1									
EQT0011	Taurus 70 Unit C Blowdown Stack										1									
EQT0012	Titan 130e Unit D Blowdown Stack										1									
EQT0016	Emergency Generator												2	1	3					
EQT0017	Condensate Storage Tank No. 2		2	3																
EQT0018	Condensate Storage Tank No. 3		2	3																
EQT0019	Condensate Storage Tank No. 4		2	3																
EQT0020	Chemical Injection Tote No. 1		3																	
EQT0021	Chemical Injection Tote No. 2		3																	
EQT0022	Chemical Injection Tote No. 3		3																	
EQT0023	Chemical Injection Tote No. 4		3																	
EQT0024	Chemical Injection Tote No. 5		3																	
EQT0025	Chemical Injection Tote No. 6		3																	
EQT0027	Condensate Storage Tank No. 6		2	3																
EQT0028	Gasoline Storage Tank		1																	
TBD	Condensate Storage Tank No. 7		2	3																
TBD	Condensate Storage Tank No. 8		2	3																
TBD	Condensate Storage Tank No. 9		2	3																
TBD	Condensate Storage Tank No. 10		2	3																
TBD	Condensate Storage Tank No. 11		2	3																
TBD	Condensate Storage Tank No. 12		2	3																
TBD	Chemical Injection Tote No. 7		3																	
TBD	Chemical Injection Tote No. 8		3																	
TBD	Chemical Injection Tote No. 9		3																	
TBD	Chemical Injection Tote No. 10		3																	
TBD	Chemical Injection Tote No. 11		3																	
TBD	Chemical Injection Tote No. 12		3																	
TBD	Emergency Generator												2	1	3					
TBD	Emergency Generator												2	1	3					
TBD	Gas Turbine Driven Compressor Unit E - Titan 130e												2	1	1					
TBD	Titan 130e Unit E Blowdown Stack										1									
FUG0001	Fugitive Emissions					1			3											

KEY TO MATRIX

- 1 (Applicable) The regulations have applicable requirements that apply to this particular emissions source. This includes any monitoring, recordkeeping, or reporting requirements.
- 2 (Exempt) The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.
- 3 (Does Not Apply) The regulations do not apply to this emissions source. The regulations may have applicable requirements that could apply to this emissions source but the requirements do not currently apply to the source due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place.

Blank – The regulations clearly do not apply to this type of emission source.

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

Source ID No.:	Descriptive Name of the Source	40 CFR 60 NSPS							40 CFR 63						40 CFR			
		A	Kb	GG	JJJJ	KKKK	OOOO	OOOo	A	HH	HHH	EEEE	YYYY	ZZZZ	6C	64	68	82
UNF0001	Gillis Compressor Station	1								3	3	3					3	
EQT0001	Emergency Generator				1									1				
EQT0002	Emergency Generator				1									1				
EQT0003	Gas Turbine Driven Compressor Unit A - Taurus 70			2		1	3	3					3					
EQT0004	Gas Turbine Driven Compressor Unit B - Taurus 70			2		1	3	3					3					
EQT0005	Gas Turbine Driven Compressor Unit C - Taurus 70			2		1	3	3					3					
EQT0006	Gas Turbine Driven Compressor Unit D - Titan 130e			2		1	3	3					3					
EQT0007	Condensate Storage Tank No. 1		3				3	3										
EQT0008	Maintenance, Startup, and Shutdown																	
EQT0009	Taurus 70 Unit A Blowdown Stack																	
EQT0010	Taurus 70 Unit B Blowdown Stack																	
EQT0011	Taurus 70 Unit C Blowdown Stack																	
EQT0012	Titan 130e Unit D Blowdown Stack																	
EQT0016	Emergency Generator				1									1				
EQT0017	Condensate Storage Tank No. 2		3				3	3										
EQT0018	Condensate Storage Tank No. 3		3				3	3										
EQT0019	Condensate Storage Tank No. 4		3				3	3										
EQT0020	Chemical Injection Tote No. 1		3				3	3										
EQT0021	Chemical Injection Tote No. 2		3				3	3										
EQT0022	Chemical Injection Tote No. 3		3				3	3										
EQT0023	Chemical Injection Tote No. 4		3				3	3										
EQT0024	Chemical Injection Tote No. 5		3				3	3										
EQT0025	Chemical Injection Tote No. 6		3				3	3										
EQT0027	Condensate Storage Tank No. 6		3				3	3										
EQT0028	Gasoline Storage Tank		3												1			
TBD	Condensate Storage Tank No. 7		3				3	3										
TBD	Condensate Storage Tank No. 8		3				3	3										
TBD	Condensate Storage Tank No. 9		3				3	3										
TBD	Condensate Storage Tank No. 10		3				3	3										
TBD	Condensate Storage Tank No. 11		3				3	3										
TBD	Condensate Storage Tank No. 12		3				3	3										
TBD	Chemical Injection Tote No. 7		3				3	3										
TBD	Chemical Injection Tote No. 8		3				3	3										
TBD	Chemical Injection Tote No. 9		3				3	3										
TBD	Chemical Injection Tote No. 10		3				3	3										
TBD	Chemical Injection Tote No. 11		3				3	3										
TBD	Chemical Injection Tote No. 12		3				3	3										
TBD	Emergency Generator				1									1				
TBD	Emergency Generator				1									1				
TBD	Gas Turbine Driven Compressor Unit E - Titan 130e			2		1	3	3					3					
TBD	Titan 130e Unit E Blowdown Stack																	
FUG0001	Fugitive Emissions						3	1										

KEY TO MATRIX

- 1 (Applicable) The regulations have applicable requirements that apply to this particular emissions source. This includes any monitoring, recordkeeping, or reporting requirements.
- 2 (Exempt) The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.
- 3 (Does Not Apply) The regulations do not apply to this emissions source. The regulations may have applicable requirements that could apply to this emissions source but the requirements do not currently apply to the source due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place.

Blank – The regulations clearly do not apply to this type of emission source.

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
CRG 0001 TURBINES - Common Requirements for Turbines EQT 0003, EQT 0004, EQT 0005, EQT 0006, TBD (GCPLC5)	40 CFR 60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines	Requirements that limit emissions or operations-			
		Nitrogen oxides (NO _x) <= 25 ppm at 15% O ₂ or 150 ppm at 15% O ₂ when operating at less than 75% of peak load	40 CFR 60.4320(a)	Hourly	No
		Sulfur dioxide (SO ₂) <= 0.060 lb/MMBTU (26 ng/J) heat input.	40 CFR 60.4330(a)(2)	N/A	No
		Operate and maintain the stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.	40 CFR 60.4333(a)	N/A	No
		Sulfur dioxide (SO ₂) <= 0.060 lb/MMBTU (26 ng/J). Use one of the sources of information specified in 40 CFR 60.4365(a) and (b) to make the required demonstration.	40 CFR 60.4365	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted			
		Submit performance test results: Due in writing before the close of business on the 60th day following the completion of the performance test.	40 CFR 60.4375(b)	N/A	No
		Requirements that specify performance testing -			
		If you are not using water or steam injection to control NO _x emissions, you must perform annual performance tests in accordance with 40 CFR 60.4400 to demonstrate continuous compliance. If the NO _x emission result from the performance test is less than or equal to 75 percent of the NO _x emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO _x emission limit for the turbine, you must resume annual performance tests.	40 CFR 60.4340(a)	Annual	No
Conduct an initial performance test for NO _x , as required in 40 CFR 60.8. Use one of the methodologies specified in 40 CFR 60.4400(a)(1)(i) and (a)(1)(ii). Subsequent NO _x performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).	40 CFR 60.4400	N/A	No		
Conduct initial and annual performance tests for SO ₂ using the methodology set forth in 40 CFR 60.4415(a)(1).	40 CFR 60.4415(a)	Annual	No		

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement	
CRG 0001 TURBINES - Common Requirements for Turbines EQT 0003, EQT 0004, EQT 0005, EQT 0006, TBD (GCPLC5) (continued)	LAC 33-III Chapter 13 - Emission Standards for Particulate Matter	Requirements that limit emissions or operations-				
		Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. (Complies by using sweet natural gas as fuel).	LAC 33-III.1311.C	Six-minute average	No	
		Requirements that specify monitoring -				
		N/A	N/A	N/A	N/A	
		Requirements that specify records to be kept and requirements that specify record retention time -				
		N/A	N/A	N/A	N/A	
		Requirements that specify reports to be submitted				
	N/A	N/A	N/A	N/A		
	Requirements that specify performance testing -					
	N/A	N/A	N/A	N/A		
	LAC 33-III Chapter 15 - Emission Standards for Sulfur Dioxide	Requirements that limit emissions or operations-				
		N/A	N/A	N/A	N/A	
		Requirements that specify monitoring -				
		N/A	N/A	N/A	N/A	
Requirements that specify records to be kept and requirements that specify record retention time -						
EQT0006 & GCPLC5: Equipment/operational data recordkeeping by electronic or hard copy once initially and annually. Record and retain at the site sufficient data to show annual potential sulfur dioxide emissions.		LAC 33-III.1513.C	Annual	No		
Requirements that specify reports to be submitted						
N/A	N/A	N/A	N/A			
Requirements that specify performance testing -						
N/A	N/A	N/A	N/A			
CRG 0002 E-GENS - Common Requirements for Emergency Generators EQT 0001, EQT 0002, EQT 0016, TBD (GCGEN4), TBD (GCGEN5)	40 CFR 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Requirements that limit emissions or operations-				
		(Excluding formaldehyde) VOC, Total <= 1.0 g/BHP-hr (0.0022 lb/HP-hr, 86 ppmv at 15% O2)	40 CFR 60.4233(e)	N/A	N/A	
		Carbon monoxide <= 4.0 g/BHP-hr (0.0088 lb/HP-hr, 540 ppmv at 15% O2).	40 CFR 60.4233(e)	N/A	N/A	
		Nitrogen oxides <= 2.0 g/BHP-hr (0.0044 lb/HP-hr, 160 ppmv at 15% O2).	40 CFR 60.4233(e)	N/A	N/A	
		Operate and maintain stationary SI ICE to achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine.	40 CFR 60.4234	N/A	No	
		Demonstrate compliance according to the emission standards specified in 40 CFR 60.4233(e), the requirements specified in 40 CFR 60.4244, as applicable, and the requirements specified in 40 CFR 60.4243(b)(2)(i) and (b)(2)(ii), as applicable.	40 CFR 60.4243(b)(2)	N/A	No	
		Ensure that the engine is maintained and operated to the extent practicable in a manner consistent with good air pollution control practice for minimizing emissions.	40 CFR 60.4243(b)(2)	N/A	No	
There is no time limit on the use of emergency stationary ICE in emergency situations.	40 CFR 60.4243(d)(1)	N/A	No			

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement	
<p>CRG 0002 E-GENS - Common Requirements for Emergency Generators</p> <p>EQT 0001, EQT 0002, EQT 0016, TBD (GCGEN4), TBD (GCGEN5)</p> <p>(continued)</p>	<p>40 CFR 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines</p>	<p>Operate for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by the federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. LDEQ may be petitioned for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if records are maintained indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.</p>	<p>40 CFR 60.4243(d)(2)(i)</p>	<p>N/A</p>	<p>No</p>	
	<p>(continued)</p>	<p>Operate for up to 50 hours per calendar year in non-emergency situations. Count the 50 hours of operation in non-emergency situations as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4243(d)(2). Do not use the 50 hours per calendar year for non-emergency situations for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except as provided in 40 CFR 60.4243(d)(3)(i).</p>	<p>40 CFR 60.4243(d)(3)</p>	<p>N/A</p>	<p>No</p>	
		<p>Operate according to the requirements in 40 CFR 60.4243(d)(1), (d)(2)(i), and (d)(3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart JJJJ, any operation other than as described in 40 CFR 60.4243(d)(1), (d)(2)(i), and (d)(3) is prohibited. If the engine is not operated according to these requirements, the engine will not be considered an emergency engine under 40 CFR 60 Subpart JJJJ and must meet all requirements for non-emergency engines.</p>	<p>40 CFR 60.4243(d)</p>	<p>N/A</p>	<p>No</p>	
		<p>Operate using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations. Keep records of such use. If propane is used for more than 100 hours per year and the engine is not certified to the emission standards when using propane, conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233.</p>	<p>40 CFR 60.4243(e)</p>	<p>N/A</p>	<p>No</p>	
		<p>Requirements that specify monitoring -</p>				
		<p>Operating time monitored by hour/time monitor continuously during operation, if the engine meets the standards applicable to emergency engines. Install a non-resettable hour meter upon startup of engine.</p>	<p>40 CFR 60.4237</p>	<p>N/A</p>	<p>No</p>	
		<p>Requirements that specify records to be kept and requirements that specify record retention time -</p>				
		<p>Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep records of the information in 40 CFR 60.4245(a)(1) through (a)(4).</p>	<p>40 CFR 60.4245(a)</p>	<p>N/A</p>	<p>No</p>	
	<p>Operating time recordkeeping by electronic or hard copy upon occurrence of event, if the engine meets the standards applicable to emergency engines. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.</p>	<p>40 CFR 60.4245(b)</p>	<p>N/A</p>	<p>No</p>		

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
CRG 0002 E-GENS - Common Requirements for Emergency Generators EQT 0001, EQT 0002, EQT 0016, TBD (GCGEN4), TBD (GCGEN5) (continued)	40 CFR 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (continued)	Requirements that specify reports to be submitted			
	Submit an initial notification as required in 40 CFR 60.7(a)(l) . Include the information in 40 CFR 60.4245(c)(1) through (c)(5).	40 CFR 60.4245(c)	Initial Notification submitted on 3/19/2014 for EQT0001 and EQT0002 and on 8/2/2019 for EQT0016.	No	
	Submit performance test results: Due within 60 days after each test conducted according to 40 CFR 60.4244 has been completed.	40 CFR 60.4245(d)	N/A	No	
	Requirements that specify performance testing -				
	Conduct an initial performance test. For engines greater than 500 HP, conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.	40 CFR 60.4243(b)(2)	8,760 hrs/3 years	No	
	Conduct performance tests by following the procedures in 40 CFR 60.4244 (a) through (g).	40 CFR 60.4244	N/A	No	
	40 CFR 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	Requirements that limit emissions or operations-			
	Meet the requirements of 40 CFR 60 Subpart IIII for compression ignition engines or 40 CFR 60 Subpart JJJJ for spark ignition engines.	40 CFR 63.6590(c)	N/A	No	
	Requirements that specify monitoring -				
	N/A	N/A	N/A	N/A	
	Requirements that specify records to be kept and requirements that specify record retention time -				
	N/A	N/A	N/A	N/A	
	Requirements that specify reports to be submitted				
	N/A	N/A	N/A	N/A	
	Requirements that specify performance testing -				
	N/A	N/A	N/A	N/A	
	LAC 33:III.Chapter 13 - Emission Standards for Particulate Matter	Requirements that limit emissions or operations-			
	Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. (Complies by using sweet natural gas as fuel)	LAC 33:III.1311.C	Six-minute average	No	
	Requirements that specify monitoring -				
	N/A	N/A	N/A	N/A	
Requirements that specify records to be kept and requirements that specify record retention time -					
N/A	N/A	N/A	N/A		
Requirements that specify reports to be submitted					
N/A	N/A	N/A	N/A		
Requirements that specify performance testing -					
N/A	N/A	N/A	N/A		

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
EQT 0008 GCMSS - Maintenance, Startup, and Shutdown	LAC 33.III.Chapter 5 - Permit Procedures	Requirements that limit emissions or operations-			
		N/A	N/A	N/A	N/A
		Requirements that specify monitoring -			
		To demonstrate compliance with permitted limits, permittee shall monitor and record emissions from each startup, shutdown, maintenance activity, and turbine blowdown. The records shall include the quantity of any releases and the date/time and duration of each event. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.	LAC 33.III.501.C.6	N/A	No
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted			
		N/A	N/A	N/A	N/A
EQT 0028 GCGST - Gasoline Storage Tank	40 CFR 63 Subpart CCCCC National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	Requirements that limit emissions or operations-			
		Shall, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.	40 CFR 63.11115(a)	N/A	No
		Do not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, those specified in 40 CFR 63.11116(a)(1) through (a)(4).	40 CFR 63.11116(a)	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		Have records available within 24 hours of a request by DEQ to document gasoline throughput.	40 CFR 63.11116(b)	Within 24 hours	No
		Shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment and records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.	40 CFR 63.11125(d)	N/A	No
		Requirements that specify reports to be submitted			
		N/A	N/A	N/A	N/A
Requirements that specify performance testing -					
N/A	N/A	N/A	N/A		

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement	
EQT 0028 GCGST - Gasoline Storage Tank (continued)	LAC 33:III.Chapter 21 - Control of Emissions of Organic Compounds	Requirements that limit emissions or operations-				
		Equip with a submerged fill pipe.	LAC 33:III.2103.A	N/A	No	
		Requirements that specify monitoring -				
		N/A	N/A	N/A	N/A	
		Requirements that specify records to be kept and requirements that specify record retention time -				
		Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I 1 through I.7, as applicable. Maintain records for at least two years.	LAC 33:III.2103.I	N/A	No	
		Requirements that specify reports to be submitted				
		N/A	N/A	N/A	N/A	
FUG 0001 GCFUG11 - Fugitive Emissions	LAC 33:III.Chapter 21 - Control of Emissions of Organic Compounds	Requirements that limit emissions or operations-				
		Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.	LAC 33:III.2111	N/A	No	
		Requirements that specify monitoring -				
		N/A	N/A	N/A	N/A	
		Requirements that specify records to be kept and requirements that specify record retention time -				
		N/A	N/A	N/A	N/A	
		Requirements that specify reports to be submitted				
		N/A	N/A	N/A	N/A	
	Requirements that specify performance testing -					
	N/A	N/A	N/A	N/A		
	40 CFR Part 60 Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	Requirements that limit emissions or operations-				
		<i>Note: As a result of the Congressional Review Act (CRA) resolution, the Gillis Compressor Station is subject to the methane and VOC requirements published in 40 CFR Part 60, Subpart OOOOa: 81 FR 35898 (June 3, 2016) and as amended at 83 FR 10638 (March 12, 2018) (2016 NSPS OOOOa). Accordingly, Chemiere performed the regulatory review of 40 CFR Part 60 Subpart OOOOa based on the regulatory text as it was published in the 2016 NSPS OOOOa. Therefore, the regulatory text and citations are consistent with the 2016 NSPS OOOOa.</i>				
Include in the fugitive emissions monitoring plan the elements specified in 40 CFR 60.5397a(c)(1) through (c)(8) and (d)(1) through (d)(4) as applicable.		40 CFR 60.5397a(c) 40 CFR 60.5397a(d)	N/A	No		
Develop an emissions monitoring plan that covers the collection of fugitive emissions components within each company-defined area in accordance with 40 CFR 60.5397a(c) and (d).		40 CFR 60.5397a(b)	N/A	No		
	Each monitoring survey must include each fugitive emissions component, as defined in 40 CFR 60.5430a, for fugitive emissions.	40 CFR 60.5397a(e)	N/A	No		

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
FUG 0001 GCFUG11 - Fugitive Emissions (continued) (continued)	40 CFR Part 60 Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	Requirements that specify monitoring -			
		Conduct an initial monitoring survey within 60 days of the modification as specified.	40 CFR 60.5397a(f)(2)	Within 60 days of modification	No
		A monitoring survey of the collection of fugitive emissions components must be conducted at least quarterly after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 days apart.	40 CFR 60.5397a(g)(2)	Quarterly	No
		Difficult to monitor components: Fugitive emissions components that are designated difficult-to-monitor must meet the specifications of 40 CFR 60.5397a(g)(3)(i) through (iv).	40 CFR 60.5397a(g)(3)	N/A	No
		Unsafe to monitor components: Fugitive emissions components that are designated unsafe-to-monitor must meet the specifications of 40 CFR 60.5397a(g)(4)(i) through (iv).	40 CFR 60.5397a(g)(4)	N/A	No
		Repair or replace each identified source of fugitive emissions as soon as practicable but no later than 30 calendar days after detection of the fugitive emissions.	40 CFR 60.5397a(h)(1)	Within 30 calendar days after detection	No
		If the repair or replacement is technically infeasible, would require a compressor station shutdown or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next scheduled compressor station shutdown or within 2 years, whichever is earlier.	40 CFR 60.5397a(h)(2)	N/A	No
		Resurvey the repaired or replaced fugitive emissions component as soon as practicable, but no later than 30 days after being repaired to ensure that there are no fugitive emissions.	40 CFR 60.5397a(h)(3)	Within 30 calendar days after repair	No
		Requirements that specify records to be kept and requirements that specify record retention time -			
		Maintain records as specified in 40 CFR 60.5420a(c)(15).	40 CFR 60.5397a(i)	N/A	No
		Requirements that specify reports to be submitted -			
		Annual reports shall be submitted for each collection of fugitive emissions components that include the information specified in 40 CFR 60.5420a(b)(7).	40 CFR 60.5397a(j)	N/A	No
		Submit annual report: Due initially no later than 90 days after the end of the initial compliance period, as determined according to 40 CFR 60.5410a. Submit subsequent annual reports no later than the same date each year as the initial annual report. Include the general information specified in 40 CFR 60.5420a(b)(1)(i) through (b)(1)(iv) and the monitoring survey records information specified in 40 CFR 60.5420a(b)(7)(i) through (b)(7)(xii).	40 CFR 60.5420a(b)	N/A	No
Requirements that specify performance testing -					
N/A	N/A	N/A	N/A		

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement	
GRP 0001 T-70 BLOWDOWN - Taurus 70 Blowdown Emissions EQT 0009, EQT 0010, EQT 0011	LAC 33:III.Chapter 5 - Permit Procedures	Requirements that limit emissions or operations-				
		N/A	N/A	N/A	N/A	
		Requirements that specify monitoring -				
		To demonstrate compliance with permitted limits, permittee shall monitor and record emissions from each startup, shutdown, maintenance activity, and turbine blowdown. The records shall include the quantity of any releases and the date/time and duration of each event. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.	LAC 33:III.501.C.6	N/A	No	
		Requirements that specify records to be kept and requirements that specify record retention time -				
		N/A	N/A	N/A	N/A	
		Requirements that specify reports to be submitted				
		N/A	N/A	N/A	N/A	
GRP 0002 T-130e BLOWDOWN - Titan 130e Blowdown Emissions EQT 0012, TBD (GCBE)	LAC 33:III.Chapter 5 - Permit Procedures	Requirements that limit emissions or operations-				
		N/A	N/A	N/A	N/A	
		Requirements that specify monitoring -				
		To demonstrate compliance with permitted limits, permittee shall monitor and record emissions from each startup, shutdown, maintenance activity, and turbine blowdown. The records shall include the quantity of any releases and the date/time and duration of each event. These records shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.	LAC 33:III.501.C.6	N/A	No	
		Requirements that specify records to be kept and requirements that specify record retention time -				
		N/A	N/A	N/A	N/A	
		Requirements that specify reports to be submitted				
		N/A	N/A	N/A	N/A	
UNF 0001 Gillis Compressor Station	40 CFR Part 60 Subpart A - General Provisions	Requirements that limit emissions or operations-				
		All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A.	40 CFR 60 Subpart A	N/A	No	
		Requirements that specify monitoring -				
		N/A	N/A	N/A	N/A	
		Requirements that specify records to be kept and requirements that specify record retention time -				
		N/A	N/A	N/A	N/A	
		Requirements that specify reports to be submitted				
		N/A	N/A	N/A	N/A	
Requirements that specify performance testing -						
N/A	N/A	N/A	N/A			

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
UNF 0001 Gillis Compressor Station (continued)	LAC 33:III.Chapter 2 - Rules and Regulations for the Fee System of the Air Quality Control Programs	Requirements that limit emissions or operations- Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.	LAC 33:III.219.A	90 days after due date	No
		Requirements that specify monitoring - N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time - N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted N/A	N/A	N/A	N/A
		Requirements that specify performance testing - N/A	N/A	N/A	N/A
		LAC 33:III.Chapter 5 - Permit Procedures	Requirements that limit emissions or operations- Shall comply with the Part 70 General Conditions as set forth in LAC 33:III.535 and the Louisiana General Conditions as set forth in LAC 33:III.537.	LAC 33:III.535; LAC 33:III.537	N/A
	Requirements that specify monitoring - N/A		N/A	N/A	N/A
	Requirements that specify records to be kept and requirements that specify record retention time - N/A		N/A	N/A	N/A
	Requirements that specify reports to be submitted N/A		N/A	N/A	N/A
	Requirements that specify performance testing - N/A		N/A	N/A	N/A
	LAC 33:III.Chapter 9 - General Regulations on Control of Emissions and Emission Standards		Requirements that limit emissions or operations- N/A	N/A	N/A
		Requirements that specify monitoring - N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time - N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted Submit Emission Inventory (EI)/Annual Emissions Statement. Due annually, by the 30th of April to the Office of Environmental Services, for the reporting period of the previous calendar year that coincides with period of ownership or operatorship, unless otherwise directed by DEQ. Submit both an emissions inventory and the certification statement required by LAC 33:III.919.F.1 c, separately for each AI, in a format specified by DEQ. Include the information specified in LAC 33:III.919.F.1 a through F.1.d.	LAC 33:III.919.F	Annual	No
		Requirements that specify performance testing - N/A	N/A	N/A	N/A
			N/A	N/A	N/A

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
UNF 0001 Gillis Compressor Station (continued)	LAC 33:III Chapter 11 - Control of Emissions of Smoke	Requirements that limit emissions or operations-			
		Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensifies an existing traffic hazard condition are prohibited.	LAC 33:III.1103.A	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted			
	N/A	N/A	N/A	N/A	
	Requirements that specify performance testing -				
	N/A	N/A	N/A	N/A	
	LAC 33:III Chapter 13 - Emission Standards for Particulate Matter (Including Standards for Some Specific Facilities)	Requirements that limit emissions or operations-			
		Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.	LAC 33:III.1303.B	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted			
	N/A	N/A	N/A	N/A	
	Requirements that specify performance testing -				
	N/A	N/A	N/A	N/A	
	LAC 33:III Chapter 21 - Control of Emissions of Organic Compounds	Requirements that limit emissions or operations-			
Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5.		LAC 33:III.2113.A	N/A	No	
Requirements that specify monitoring -					
N/A		N/A	N/A	N/A	
Requirements that specify records to be kept and requirements that specify record retention time -					
N/A		N/A	N/A	N/A	
Requirements that specify reports to be submitted					
N/A	N/A	N/A	N/A		
Requirements that specify performance testing -					
N/A	N/A	N/A	N/A		

TABLE 2: STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
UNF 0001 Gillis Compressor Station (continued)	LAC 33:III Chapter 56 - Prevention of Air Pollution Emergency Episodes	Requirements that limit emissions or operations-			
		During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by DEQ to enforce these regulations.	LAC 33:III.5611.B	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted			
Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency: Due within 30 days after requested by the administrative authority.	LAC 33:III.5611.A	Within 30 days after requested by LDEQ	No		
Requirements that specify performance testing -					
N/A	N/A	N/A	N/A		

TABLE 3: EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non-applicability
UNF 0001 Gillis Compressor Station	LAC 33:III.2115 - Waste Gas Disposal	Does not apply	The Gillis Compressor Station does not generate any "waste gas stream" as defined under LAC 33:III.2115.N.	LAC 33:III.2115.N
	LAC 33:III. Chapter 22 - Affected Facilities in the Baton Rouge Nonattainment Area and the Region of Influence	Does not apply	The Gillis Compressor Station is not located in the defined Baton Rouge Nonattainment Area or Region of Influence.	LAC 33:III.2201
	LAC 33:III. Chapter 51 - Comprehensive Toxic Air Pollutant Emission Control Program	Does not apply	The Gillis Compressor Station is not a major source of toxic air pollutants.	LAC 33:III.5101
	LAC 33:III. Chapter 59 - Chemical Accident Prevention and Minimization of Consequences	Does not apply	The Gillis Compressor Station does not produce, process, handle, or store substances listed in Table 59.0. or 59.1 of Chapter 59 or in 40 CFR 68.130 in quantities greater than the threshold quantities listed in those respective places.	LAC 33:III.5907.A
	40 CFR Part 63 Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities	Does not apply	The Gillis Compressor Station is not a natural gas production facility; therefore, it does not meet the applicability criteria specified in 40 CFR 63.760.	40 CFR 63.760
	40 CFR Part 63 Subpart HHH - National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities	Does not apply	The Gillis Compressor Station is not a major source of hazardous air pollutants.	40 CFR 63.1270
	40 CFR Part 63 Subpart EEEE - National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)	Does not apply	The Gillis Compressor Station is not a major source of hazardous air pollutants.	40 CFR 63.2330
	40 CFR Part 68 - Chemical Accident Prevention Provisions	Does not apply	40 CFR Part 68 applies to stationary sources. In 40 CFR Part 68, stationary sources do not include transportation sources, such as those regulated by USDOT regulations (49 CFR Parts 192, 193, and 195). The facility is subject to 49 CFR Part 192, so 40 CFR Part 68 does not apply.	40 CFR 68.3

TABLE 3: EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non-applicability
EQT 0001, EQT 0002, EQT 0016, TBD (GCGEN4), & TBD (GCGEN5) Emergency Generators	LAC 33:III.Chapter 11 - Control of Emissions of Smoke	Exempt	All combustion units at the Gillis Compressor Station will burn only natural gas and are exempt from the requirements of LAC 33:III.1101.	LAC 33:III.1107.B.1
	LAC 33:III.Chapter 15 - Emission Standards for Sulfur Dioxide	Does not apply	The ICE will not emit 5 tons per year or more of SO ₂ to the atmosphere.	LAC 33:III.1502.A.3
EQT 0003, EQT 0004, & EQT 0005 Taurus 70 Turbines Gas Turbine Driven Compressor Units A, B, and C	LAC 33:III.Chapter 11 - Control of Emissions of Smoke	Exempt	All combustion units at the Gillis Compressor Station will burn only natural gas and are exempt from the requirements of LAC 33:III.1101.	LAC 33:III.1107.B.1
	LAC 33:III.Chapter 15 - Emission Standards for Sulfur Dioxide	Does not apply	The turbines will not emit 5 tons per year or more of SO ₂ to the atmosphere.	LAC 33:III.1502.A.3
	40 CFR Part 60 Subpart GG - Standards of Performance for Stationary Gas Turbines	Exempt	The stationary combustion turbines are regulated under 40 CFR 60 Subpart KKKK. Hence, turbines are exempt from 40 CFR Subpart GG.	40 CFR 60.4305(b)
	40 CFR Part 63 Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	Does not apply	The stationary combustion turbines are not located at a major source of HAP emissions.	40 CFR 63.6080
	40 CFR 60 Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015	Does not apply	The centrifugal compressors associated with the turbines have dry seals.	40 CFR 60.5365(b)
	40 CFR Part 60 Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015	Does not apply	The centrifugal compressors associated with the turbines have dry seals and were constructed prior to September 18, 2015 and have not been modified or reconstructed.	40 CFR 60.5365a(b)

TABLE 3: EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non-applicability
EQT 0006 Gas Turbine Driven Compressor Unit D - Titan 130e	LAC 33:III.Chapter 11 - Control of Emissions of Smoke	Exempt	All combustion units at the Gillis Compressor Station will burn only natural gas and are exempt from the requirements of LAC 33:III.1101.	LAC 33:III.1107.B.1
	LAC 33:III.Chapter 15 - Emission Standards for Sulfur Dioxide	Exempt	SO ₂ emissions < 250 tons/year. Thus, CTPL requests exemption from the 2,000 ppm(v) limitation via this application.	LAC 33:III.1503.C
	40 CFR Part 60 - Subpart GG - Standards of Performance for Stationary Gas Turbines	Exempt	The stationary combustion turbine is regulated under 40 CFR 60 Subpart KKKK. Hence, the turbine is exempt from 40 CFR Subpart GG.	40 CFR 60.4305(b)
	40 CFR Part 63 - Subpart YYYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	Does not apply	The stationary combustion turbine is not located at a major source of HAP emissions.	40 CFR 63.6080
	40 CFR 60 Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015	Does not apply	The centrifugal compressor associated with this turbine has dry seals.	40 CFR 60.5365(b)
	40 CFR Part 60 Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015	Does not apply	The centrifugal compressor associated with this turbine has dry seals and was constructed prior to September 18, 2015 and has not been modified or reconstructed.	40 CFR 60.5365a(b)

TABLE 3: EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non-applicability
GCPLC5 Gas Turbine Driven Compressor Unit E - Titan 130e	LAC 33:III.Chapter 11 - Control of Emissions of Smoke	Exempt	All combustion units at the Gillis Compressor Station will burn only natural gas and are exempt from the requirements of LAC 33:III.1101.	LAC 33:III.1107.B.1
	LAC 33:III.Chapter 15 - Emission Standards for Sulfur Dioxide	Exempt	SO ₂ emissions < 250 tons/year. Thus, CTPL requests exemption from the 2,000 ppm(v) limitation via this application.	LAC 33:III.1503.C
	40 CFR Part 60 - Subpart GG - Standards of Performance for Stationary Gas Turbines	Exempt	The stationary combustion turbine is regulated under 40 CFR 60 Subpart KKKK. Hence, the turbine is exempt from 40 CFR Subpart GG.	40 CFR 60.4305(b)
	40 CFR Part 63 - Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	Does not apply	The stationary combustion turbine is not located at a major source of HAP emissions.	40 CFR 63.6080
	40 CFR 60 Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015	Does not apply	The centrifugal compressor associated with this turbine commenced construction after September 18, 2015.	40 CFR 60.5365(b)
	40 CFR Part 60 Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015	Does not apply	The centrifugal compressor associated with this turbine has dry seals.	40 CFR 60.5365a(b)

TABLE 3: EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non-applicability
EQT 0007 Condensate Storage Tank No. 1	LAC 33:III.2103 - Storage of Volatile Organic Compounds	Exempt	The tank has a nominal storage capacity of less than 420,000 gallons and stores condensate.	LAC 33:III.2103.G.1
	LAC 33:III.2104 - Crude Oil and Condensate	Does not apply	The requirements do not apply because the potential to emit flash gas emissions is less than 100 tons per year.	LAC 33:III.2104
	40 CFR Part 60 - Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Does not apply	The storage capacity is less than 75 cubic meters.	40 CFR 60.110b
	40 CFR 60 Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015	Does not apply	The potential to emit emissions for this storage vessel is less than 6 TPY.	40 CFR 60.5365(e)
	40 CFR Part 60 Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015	Does not apply	This storage vessel commenced construction prior to September 18, 2015 and has not been modified or reconstructed.	40 CFR 60.5365a(e)

TABLE 3: EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non-applicability
EQT 0017, EQT 0018, EQT 0019, EQT 0027, GCTK07, GCTK08, GCTK09, GCTK10, GCTK11, & GCTK12 Condensate Tanks	LAC 33:III.2103 - Storage of Volatile Organic Compounds	Exempt	Each tank has a nominal storage capacity of less than 420,000 gallons and stores condensate.	LAC 33:III.2103.G.1
	LAC 33:III.2104 - Crude Oil and Condensate	Does not apply	The requirements do not apply because the potential to emit flash gas emissions is less than 100 tons per year.	LAC 33:III.2104
	40 CFR Part 60 - Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Does not apply	The storage capacity of each tank is less than 75 cubic meters.	40 CFR 60.110b
	40 CFR 60 Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015	Does not apply	Each condensate storage tank commenced construction after September 18, 2015.	40 CFR 60.5365(e)
	40 CFR Part 60 Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015	Does not apply	The potential to emit emissions for each storage vessel is less than 6 TPY.	40 CFR 60.5365a(e)

TABLE 3: EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non-applicability
EQT 0020 - EQT 0025 & GCTOTE07, GCTOTE08, GCTOTE09, GCTOTE10, GCTOTE11, & GCTOTE12 Chemical Injection Totes	LAC 33:III.2103 - Storage of Volatile Organic Compounds	Does not apply	The nominal storage capacity of each tote will not exceed 250 gallons.	LAC 33:III.2103.A
	40 CFR Part 60 - Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Does not apply	The storage capacity of each tote is less than 75 cubic meters.	40 CFR 60.110b
	40 CFR 60 Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015	Does not apply	Each tote commenced construction after September 18, 2015.	40 CFR 60.5365(e)
	40 CFR Part 60 Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015	Does not apply	The potential to emit emissions for each storage vessel is less than 6 TPY.	40 CFR 60.5365a(e)
EQT 0028 Gasoline Storage Tank	40 CFR Part 60 - Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Does not apply	The storage capacity is less than 75 cubic meters.	40 CFR 60.110b

TABLE 3: EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non-applicability
FUG 0001	LAC 33:III.2121 - Fugitive Emission Control	Does not apply	Not an affected facility.	LAC 33:III.2121.A
Fugitive Emissions	40 CFR 60 Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015	Does not apply	Facility is not a natural gas processing plant.	40 CFR 60.5365

The above table provides explanation for either the exemption status or non-applicability of a source cited by 2 or 3 in the matrix presented in Table 1 of this application.

TABLE 4: EQUIPMENT LIST

Enter each single emission point that routes its emissions to another source (i.e., a control device) or a common stack, or is part of an Emissions Cap. List the emissions source to which each single emission point is routed or the Cap of which the source is a member, if applicable. Consult instructions.

Emission Point ID No:	Description	Construction Date	Routes to:	Operating Rate/Volume	Applicable Requirement(s)?
EQT0009	Taurus 70 Unit A Blowdown Stack	February 10, 2014	GRP0001, T-70 BLOWDOWN - Taurus 70 Blowdown Emissions	Refer to Emissions Calculations in Appendix B	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
EQT0010	Taurus 70 Unit B Blowdown Stack	February 10, 2014			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
EQT0011	Taurus 70 Unit C Blowdown Stack	February 10, 2014			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
EQT0012	Titan 130e Unit D Blowdown Stack	February 10, 2014	T-130e BLOWDOWN - Titan 130e Blowdown Emissions	Refer to Emissions Calculations in Appendix B	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
TBD	Titan 130e Unit E Blowdown Stack	Proposed			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No

23. Emissions Inventory Questionnaire (EIQ) Forms [LAC 33:III.517.D.3; 517.D.6]

Complete one (1) EIQ for:

- Each emission source. If two emission sources have a common stack, the applicant may submit one EIQ sheet for the common emissions point. Note any emissions sources that route to this common point in Table 4 of the application.
- Each emissions CAP that is proposed, including each source that is part of the CAP.
- Each alternate operating scenario that a source may operate under. Some common scenarios are:
 1. Sources that combust multiple fuels
 2. Sources that have startup/shutdown max lb/hr emission rates higher than the max lb/hr for normal operating conditions would need a separate EIQ addressing the startup/shutdown emission rates
- Fugitive emissions releases. One (1) EIQ should be completed for each of the following types of fugitive emissions sources or emissions points:
 1. Equipment leaks.
 2. Non-equipment leaks (i.e., road dust, settling ponds, etc).

For each EIQ:

- Fill in all requested information.
- Speciate all Toxic Air Pollutants and Hazardous Air Pollutants emitted by the source.
- Use appropriate significant figures.
- Consult instructions.

The EIQ is in Microsoft Word Excel. Visit the following website to get to the EIQ form.
<http://deq.louisiana.gov/page/air-permit-applications>

State of Louisiana Emissions Inventory Questionnaire (EIQ) for Air Pollutants Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station								Date of submittal				
								July	2023			
Emission Point ID No. (Designation) GCGEN1		Descriptive Name of the Emissions Source (Alt. Name) Emergency Generator			Approximate Location of Stack or Vent (see instructions)							
Tempo Subject Item ID No. EQT 0001					Method	27, "Unknown"		Datum NAD83				
					UTM Zone	15	Horizontal	485970.9	mE	Vertical	3368519.5	mN
					Latitude	30 "		26 '		55 "	44	hundredths
					Longitude	93 "		8 '		46 "	3	hundredths
Stack and Discharge Physical Characteristics Change? (yes or no) no	Diameter (ft) or Stack Discharge Area (ft ²) 0.83 ft ft ²	Height of Stack Above Grade (ft) 25 ft	Stack Gas Exit Velocity 95.00 ft/sec	Stack Gas Flow at Process Conditions, <u>not</u> at Standard (ft ³ /min) 3,112 ft ³ /min	Stack Gas Exit Temperature (°F) 844 °F	Normal Operating Time (hours per year) 100 hr/yr	Date of Construction or Modification		Percent of Annual Throughput Through This Emission Point			
							Feb	10	2014	constructed	Jan-Mar	Apr-Jun
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)								
Fuel	Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput		Parameter		Description			
	a	Natural Gas	3.72		543 hp		543 hp					
	b											
Notes				Design Capacity/Volume/Cylinder Displacement		Shell Height (ft)		Tank Diameter (ft)		Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal		
				Date Engine Ordered		>2012		Engine Model Year		>2012		
				Date Engine Was Built by Manufacturer		>2012						
				SI Engines: <input type="checkbox"/> Rich Burn <input checked="" type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input checked="" type="checkbox"/> 4 Stroke								
Emission Point ID No. (Designation) GCGEN1		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current) Annual (tons/yr)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack	
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)					
Particulate matter (PM _{2.5})					0.04	0.04	< 0.01	<0.01	U	gr/std ft3		
Particulate matter (PM ₁₀)					0.04	0.04	< 0.01	<0.01	U	gr/std ft3		
Sulfur dioxide					0.05	0.05	< 0.01	<0.01	U	ppm by vol		
Nitrogen oxides					2.39	2.39	0.12	0.12	U	ppm by vol		
Carbon monoxide					4.79	4.79	0.24	0.24	U	ppm by vol		
Total VOC (including those listed below)					1.20	1.20	0.06	0.06	U	ppm by vol		
Acetaldehyde				75-07-0	0.03	0.03	< 0.01	<0.01	U	ppm by vol		
Acrolein				107-02-8	0.019	0.019	0.001	0.001	C	ppm by vol		
Formaldehyde				50-00-0	0.20	0.20	0.01	0.01	U	ppm by vol		

State of Louisiana Emissions Inventory Questionnaire (EIQ) for Air Pollutants Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station								Date of submittal				
								July	2023			
Emission Point ID No. (Designation) GCGEN2		Descriptive Name of the Emissions Source (Alt. Name) Emergency Generator			Approximate Location of Stack or Vent (see instructions)							
Tempo Subject Item ID No. EQT 0002					Method _____ 27, "Unknown"		Datum NAD83					
					UTM Zone _____ 15		Horizontal _____ 485967.14 mE		Vertical _____ 3368528.64 mN			
					Latitude _____ 30 °		_____ 26 ' _____ 55 "		_____ 74 hundredths			
					Longitude _____ 93 °		_____ 8 ' _____ 46 "		_____ 17 hundredths			
Stack and Discharge Physical Characteristics Change? (yes or no) no	Diameter (ft) or Stack Discharge Area (ft ²) 0.83 ft _____ ft ²	Height of Stack Above Grade (ft) 25 ft	Stack Gas Exit Velocity 95.00 ft/sec	Stack Gas Flow at Conditions, <u>not</u> at Standard (ft ³ /min) 3,112 ft ³ /min	Stack Gas Exit Temperature (°F) 844 °F	Normal Operating Time (hours per year) 100 hr/yr	Date of Construction or Modification Feb 10 2014 constructed		Percent of Annual Throughput Through This Emission Point			
									Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
									25%	25%	25%	25%
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)								
		Type of Fuel	Heat Input (MMBTU/hr)	Normal Operating Rate/Throughput		Parameter		Description				
a	Natural Gas	3.72	543 hp		543 hp							
b												
c												
Notes				Shell Height (ft)		Tank Diameter (ft)		Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal				
				Date Engine Ordered >2012		Engine Model Year >2012						
				Date Engine Was Built by Manufacturer >2012								
				SI Engines: <input type="checkbox"/> Rich Burn <input checked="" type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input checked="" type="checkbox"/> 4 Stroke								
Emission Point ID No. (Designation) GCGEN2	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack		
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)					
Particulate matter (PM _{2.5})				0.04	0.04	< 0.01	< 0.01	U		gr/std ft ³		
Particulate matter (PM ₁₀)				0.04	0.04	< 0.01	< 0.01	U		gr/std ft ³		
Sulfur dioxide				0.05	0.05	< 0.01	< 0.01	U		ppm by vol		
Nitrogen oxides				2.39	2.39	0.12	0.12	U		ppm by vol		
Carbon monoxide				4.79	4.79	0.24	0.24	U		ppm by vol		
Total VOC (including those listed below)				1.20	1.20	0.06	0.06	U		ppm by vol		
Acetaldehyde			75-07-0	0.03	0.03	< 0.01	< 0.01	U		ppm by vol		
Acrolein			107-02-8	0.019	0.019	0.001	0.001	C		ppm by vol		
Formaldehyde			50-00-0	0.20	0.20	0.01	0.01	U		ppm by vol		

State of Louisiana							Date of submittal							
Emissions Inventory Questionnaire (EIQ) for Air Pollutants							July	2023						
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station														
Emission Point ID No. (Designation)	Descriptive Name of the Emissions Source (Alt. Name)			Approximate Location of Stack or Vent (see instructions)										
GCPLC1	Gas Turbine Driven Compressor Unit A - Taurus 70			27,"Unknown" Datum NAD83										
Tempo Subject Item ID No.				UTM Zone	15	Horizontal	485980.22	mE	Vertical	3368537.47	mN			
EQT 0003				Latitude	30 °	26 °	56 "	3	hundredths					
				Longitude	93 °	8 '	45 "	68	hundredths					
Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft ²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification		Percent of Annual Throughput Through This Emission Point					
no	56.25 ft ²	45 ft	38.19 ft/sec	128,890 ft ³ /min	933 °F	8,760 hr/yr	Feb	10	2014	constructed	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
							25%	25%	25%	25%				
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)										
	Type of Fuel	Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput			Parameter		Description					
a	Natural Gas	78.50 (Avg)		78.50			MMBTU/hr							
b	Natural Gas	93.78 (Max)		93.78			MMBTU/hr							
c														
Notes				Design Capacity/Volume/Cylinder Displacement Shell Height (ft) Tank Diameter (ft) Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal Date Engine Ordered _____ Engine Model Year _____ Date Engine Was Built by Manufacturer _____ SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke										
Emission Point ID No. (Designation)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack				
GCPLC1				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)							
Pollutant														
Particulate matter (PM _{2.5})				0.51	0.61	2.23	2.23	U		gr/std ft ³				
Particulate matter (PM ₁₀)				0.51	0.61	2.24	2.24	U		gr/std ft ³				
Sulfur dioxide				1.11	1.32	4.86	4.86	U		ppm by vol				
Nitrogen oxides				7.85	9.38	34.38	34.38	U		ppm by vol				
Carbon monoxide				9.50	11.35	41.60	41.60	U		ppm by vol				
Total VOC (including those listed below)				0.55	0.66	2.41	2.41	U		ppm by vol				
Acetaldehyde			75-07-0	0.003	0.004	0.01	0.01	U		ppm by vol				
Acrolein			107-02-8	0.001	0.001	0.002	0.002	U		ppm by vol				
Benzene			71-43-2	0.001	0.001	<0.01	<0.01	U		ppm by vol				
Ethylbenzene			100-41-4	0.003	0.003	0.01	0.01	U		ppm by vol				
Formaldehyde			50-00-0	0.23	0.27	0.99	0.99	U		ppm by vol				
PAH			206-44-0	<0.001	<0.001	0.001	0.001	U		ppm by vol				
Propylene Oxide			75-56-9	0.002	0.003	0.01	0.01	U		ppm by vol				
Toluene			108-88-3	0.01	0.01	0.04	0.04	U		ppm by vol				
Xylene (Mixed Isomers)			1330-20-7	0.01	0.01	0.02	0.02	U		ppm by vol				

State of Louisiana										Date of submittal							
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023						
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station																	
Emission Point ID No. (Designation)	Descriptive Name of the Emissions Source (Alt. Name)				Approximate Location of Stack or Vent (see instructions)												
GCPLC2	Gas Turbine Driven Compressor Unit B - Taurus 70				27, "Unknown" Datum NAD83												
Tempo Subject Item ID No.					UTM Zone	15	Horizontal	485995.98	mE	Vertical	3368540.66	mN					
EQT 0004					Latitude	30 °	26'	56"		13	hundredths						
					Longitude	93 °	8'	45"		9	hundredths						
Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft ²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification			Percent of Annual Throughput Through This Emission Point							
							no	ft	45 ft	38.19 ft/sec	128,890 ft ³ /min	933 °F	8,760 hr/yr	Feb	10	2014	Jan-Mar
										constructed				25%	25%	25%	25%
Type of Fuel Used and Heat Input (see instructions)					Operating Parameters (include units)												
Fuel	Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput			Parameter		Description							
	a	Natural Gas	78.50 (Avg)		78.50			MMBTU/hr									
	b	Natural Gas	93.78 (Max)		93.78			MMBTU/hr									
	c																
Notes					Design Capacity/Volume/Cylinder Displacement			Shell Height (ft)		Tank Diameter (ft)							
					Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal			Date Engine Ordered		Engine Model Year							
					Date Engine Was Built by Manufacturer			SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke									
Emission Point ID No. (Designation)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack							
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)										
Particulate matter (PM _{2.5})				0.51	0.61	2.23	2.23	U		gr/std ft ³							
Particulate matter (PM ₁₀)				0.51	0.61	2.24	2.24	U		gr/std ft ³							
Sulfur dioxide				1.11	1.32	4.86	4.86	U		ppm by vol							
Nitrogen oxides				7.85	9.38	34.38	34.38	U		ppm by vol							
Carbon monoxide				9.50	11.35	41.60	41.60	U		ppm by vol							
Total VOC (including those listed below)				0.55	0.66	2.41	2.41	U		ppm by vol							
Acetaldehyde			75-07-0	0.003	0.004	0.01	0.01	U		ppm by vol							
Acrolein			107-02-8	0.001	0.001	0.002	0.002	U		ppm by vol							
Benzene			71-43-2	0.001	0.001	<0.01	<0.01	U		ppm by vol							
Ethylbenzene			100-41-4	0.003	0.003	0.01	0.01	U		ppm by vol							
Formaldehyde			50-00-0	0.23	0.27	0.99	0.99	U		ppm by vol							
PAH			206-44-0	<0.001	<0.001	0.001	0.001	U		ppm by vol							
Propylene Oxide			75-56-9	0.002	0.003	0.01	0.01	U		ppm by vol							
Toluene			108-88-3	0.01	0.01	0.04	0.04	U		ppm by vol							
Xylene (Mixed Isomers)			1330-20-7	0.01	0.01	0.02	0.02	U		ppm by vol							

State of Louisiana								Date of submittal			
Emissions Inventory Questionnaire (EIQ) for Air Pollutants								July	2023		
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station											
Emission Point ID No. (Designation) GCPLC3	Descriptive Name of the Emissions Source (Alt. Name) Gas Turbine Driven Compressor Unit C - Taurus 70			Approximate Location of Stack or Vent (see instructions)							
Tempo Subject Item ID No. EQT 0005				UTM Zone 15		27,"Unknown" Horizontal 486011.39 mE		Datum NAD83			
				Latitude 30 ° 26 ' 56 "		Vertical 3368544.13 mN					
				Longitude 93 ° 8 ' 44 "				24 hundredths			
								51 hundredths			
Stack and Discharge Physical Characteristics Change? (yes or no) no	Diameter (ft) or Stack Discharge Area (ft ²) ft 56.25 ft ²	Height of Stack Above Grade (ft) 45 ft	Stack Gas Exit Velocity 38.19 ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) 128,890 ft ³ /min	Stack Gas Exit Temperature (°F) 933 °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification Feb 10 2014 constructed	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
								25%	25%	25%	25%
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)							
	a	Type of Fuel	Heat Input (MMBTU/hr)				Parameter	Description			
	b	Natural Gas	78.50 (Avg)	Normal Operating Rate/Throughput			78.50	MMBTU/hr			
	c	Natural Gas	93.78 (Max)	Maximum Operating Rate/Throughput			93.78	MMBTU/hr			
Notes				Design Capacity/Volume/Cylinder Displacement							
				Shell Height (ft)							
				Tank Diameter (ft)							
				Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal							
				Date Engine Ordered			Engine Model Year				
				Date Engine Was Built by Manufacturer							
				SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke							
Emission Point ID No. (Designation) GCPLC3	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack	
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)				
Particulate matter (PM _{2.5})				0.51	0.61	2.23	2.23	U		gr/std ft ³	
Particulate matter (PM ₁₀)				0.51	0.61	2.24	2.24	U		gr/std ft ³	
Sulfur dioxide				1.11	1.32	4.86	4.86	U		ppm by vol	
Nitrogen oxides				7.85	9.38	34.38	34.38	U		ppm by vol	
Carbon monoxide				9.50	11.35	41.60	41.60	U		ppm by vol	
Total VOC (including those listed below)				0.55	0.66	2.41	2.41	U		ppm by vol	
Acetaldehyde			75-07-0	0.003	0.004	0.01	0.01	U		ppm by vol	
Acrolein			107-02-8	0.001	0.001	0.002	0.002	U		ppm by vol	
Benzene			71-43-2	0.001	0.001	<0.01	<0.01	U		ppm by vol	
Ethylbenzene			100-41-4	0.003	0.003	0.01	0.01	U		ppm by vol	
Formaldehyde			50-00-0	0.23	0.27	0.99	0.99	U		ppm by vol	
PAH			206-44-0	<0.001	<0.001	0.001	0.001	U		ppm by vol	
Propylene Oxide			75-56-9	0.002	0.003	0.01	0.01	U		ppm by vol	
Toluene			108-88-3	0.01	0.01	0.04	0.04	U		ppm by vol	
Xylene (Mixed Isomers)			1330-20-7	0.01	0.01	0.02	0.02	U		ppm by vol	

State of Louisiana Emissions Inventory Questionnaire (EIQ) for Air Pollutants Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station								Date of submittal					
								July	2023				
Emission Point ID No. (Designation) GCPLC4	Descriptive Name of the Emissions Source (Alt. Name) Gas Turbine Driven Compressor Unit D - Titan 130e			Approximate Location of Stack or Vent (see instructions)									
Tempo Subject Item ID No. EQT 0006				UTM Zone <u>15</u> Horizontal <u>27,"Unknown"</u> Datum <u>NAD83</u>		Vertical <u>486036.35</u> mE <u>3368548.46</u> mN							
				Latitude <u>30°</u> <u>26'</u> <u>56"</u> <u>39</u> hundredths		Longitude <u>93°</u> <u>8'</u> <u>43"</u> <u>58</u> hundredths							
Stack and Discharge Physical Characteristics Change? (yes or no) no	Diameter (ft) or Stack Discharge Area (ft ²) ft 75.11 ft ²	Height of Stack Above Grade (ft) 45 ft	Stack Gas Exit Velocity 52.87 ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) 238,264 ft ³ /min	Stack Gas Exit Temperature (°F) 933 °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification Feb 10 2014 constructed			Percent of Annual Throughput Through This Emission Point			
							Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	25%	25%	25%
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)									
	Type of Fuel	Heat Input (MMBTU/hr)		Parameter		Description							
a	Natural Gas	182.50 (Avg)		Normal Operating Rate/Throughput		182.50 MMBtu/hr							
b	Natural Gas	215.68 (Max)		Maximum Operating Rate/Throughput		215.68 MMBtu/hr							
c				Design Capacity/Volume/Cylinder Displacement									
Notes				Shell Height (ft)									
				Tank Diameter (ft)									
				Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal									
				Date Engine Ordered		Engine Model Year							
				Date Engine Was Built by Manufacturer									
				SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke									
Emission Point ID No. (Designation) GCPLC4	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current) Annual (tons/yr)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack			
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)							
Pollutant													
Particulate matter (PM _{2.5})				1.18	1.54	5.19	5.19	U		gr/std ft ³			
Particulate matter (PM ₁₀)				1.19	1.54	5.20	5.20	U		gr/std ft ³			
Sulfur dioxide				2.58	3.35	11.29	11.29	U		ppm by vol			
Nitrogen oxides				10.08	13.11	44.17	44.17	U		ppm by vol			
Carbon monoxide				10.23	13.30	44.81	44.81	U		ppm by vol			
Total VOC (including those listed below)				1.17	1.52	5.12	5.12	U		ppm by vol			
Acetaldehyde			75-07-0	0.01	0.01	0.03	0.03	U		ppm by vol			
Acrolein			107-02-8	0.001	0.002	0.005	0.005	U		ppm by vol			
Benzene			71-43-2	0.002	0.003	0.01	0.01	U		ppm by vol			
Ethylbenzene			100-41-4	0.01	0.01	0.03	0.03	U		ppm by vol			
Formaldehyde			50-00-0	0.44	0.57	1.93	1.93	U		ppm by vol			
Naphthalene			91-20-3	<0.001	<0.001	<0.01	<0.01	U		ppm by vol			
PAH			206-44-0	<0.001	0.001	0.002	0.002	U		ppm by vol			
Propylene Oxide			75-56-9	0.01	0.01	0.02	0.02	U		ppm by vol			
Toluene			108-88-3	0.02	0.03	0.10	0.10	U		ppm by vol			
Xylene (Mixed Isomers)			1330-20-7	0.01	0.02	0.05	0.05	U		ppm by vol			

State of Louisiana											Date of submittal		
Emissions Inventory Questionnaire (EIQ) for Air Pollutants											July	2023	
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station													
Emission Point ID No. (Designation) GCTK01		Descriptive Name of the Emissions Source (Alt. Name) Condensate Storage Tank No. 1				Approximate Location of Stack or Vent (see instructions)							
Tempo Subject Item ID No. EQT0007						Method 27, "Unknown" Datum NAD83							
						UTM Zone 15 Horizontal 485924 mE Vertical 336854.01 mN		Latitude 30 ° 26 ' 56 "		Longitude 93 ° 8 ' 47 "		11 hundredths 79 hundredths	
Stack and Discharge Physical Characteristics Change? (yes or no) no	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification Feb 10 2014 constructed	Percent of Annual Throughput Through This Emission Point					
								Jan-Mar 25%	Apr-Jun 25%	Jul-Sep 25%	Oct-Dec 25%		
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)									
Fuel	Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput			Parameter		Description			
	a	N/A	N/A		Maximum Operating Rate/Throughput			12,568.30		gal/yr			
	b				Design Capacity/Volume/Cylinder Displacement			4,324.15		gallons			
c				Shell Height (ft)			12						
Notes				Tank Diameter (ft)			8						
				Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal			Date Engine Ordered		Engine Model Year				
				Date Engine Was Built by Manufacturer									
				SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke									
Emission Point ID No. (Designation) GCTK01		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack		
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)						Annual (tons/yr)
Total VOC (including those listed below)					1.35	1.35	5.94	5.94	U		ppm by vol		
Naphthalene				91-20-3	0.02	0.02	0.07	0.07	U		ppm by vol		

State of Louisiana										Date of submittal													
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023												
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station																							
Emission Point ID No. (Designation) GCMSS		Descriptive Name of the Emissions Source (Alt. Name) Maintenance, Startup, and Shutdown				Approximate Location of Stack or Vent (see instructions)																	
Tempo Subject Item ID No. EQT 0008						Method 27, "Unknown"		Datum NAD83															
						UTM Zone 15		Horizontal 486055 mE		Vertical 3368539 mN													
						Latitude 30°		26'		56"													
						Longitude 93°		8'		42"													
Stack and Discharge Physical Characteristics Change? (yes or no) no		Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²		Height of Stack Above Grade (ft) N/A ft		Stack Gas Exit Velocity N/A ft/sec		Stack Gas Flow at Process Conditions, <u>not</u> at Standard (ft ³ /min) N/A ft ³ /min		Stack Gas Exit Temperature (°F) N/A °F		Normal Operating Time (hours per year) 179.33 hr/yr		Date of Construction or Modification Feb 10 2014 constructed		Percent of Annual Throughput Through This Emission Point							
														Jan-Mar 25%		Apr-Jun 25%		Jul-Sep 25%		Oct-Dec 25%			
Type of Fuel Used and Heat Input (see instructions)										Operating Parameters (include units)													
Fuel		Type of Fuel				Heat Input (MMBTU/hr)				Parameter		Description											
a		N/A				N/A				Normal Operating Rate/Throughput													
b										Maximum Operating Rate/Throughput													
c										Design Capacity/Volume/Cylinder Displacement													
Notes										Shell Height (ft)													
										Tank Diameter (ft)													
										Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal													
										Date Engine Ordered		Engine Model Year											
										Date Engine Was Built by Manufacturer													
										SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke													
Emission Point ID No. (Designation) GCMSS		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack												
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)															
Particulate matter (PM _{2.5})					0.97	1.54	0.09	0.06	C		gr/std ft ³												
Particulate matter (PM ₁₀)					0.97	1.54	0.09	0.06	C		gr/std ft ³												
Sulfur dioxide					2.11	3.35	0.19	0.12	C		ppm by vol												
Carbon monoxide					752.35	1,245.60	67.46	47.47	C		ppm by vol												
Nitrogen oxides					8.48	14.40	0.76	0.54	C		ppm by vol												
Total VOC					8.60	14.28	0.77	0.54	C		ppm by vol												

State of Louisiana										Date of submittal									
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023								
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station																			
Emission Point ID No. (Designation) GCBA		Descriptive Name of the Emissions Source (Alt. Name) Taurus 70 Unit A Blowdown Stack				Approximate Location of Stack or Vent (see instructions)													
Tempo Subject Item ID No. EQT0009						UTM Zone		27, "Unknown"		Datum		NAD83							
						Latitude		30 °		Horizontal		486068.48 mE		Vertical		3368665.14 mN			
						Longitude		93 °		8'		0"		18 hundredths					
						Vertical		42"		38 hundredths									
Stack and Discharge Physical Characteristics Change? (yes or no)		Diameter (ft) or Stack Discharge Area (ft ²)		Height of Stack Above Grade (ft)		Stack Gas Exit Velocity		Stack Gas Flow at Process Conditions, <u>not</u> at Standard (ft ³ /min)		Stack Gas Exit Temperature (°F)		Normal Operating Time (hours per year)		Date of Construction or Modification		Percent of Annual Throughput Through This Emission Point			
no		4.5 ft ft ²		12 ft		74.00 ft/sec		70,537 ft ³ /min		80 °F		* hr/yr		Feb 10 2014 constructed		Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
														25%	25%	25%	25%		
Type of Fuel Used and Heat Input (see instructions)					Operating Parameters (include units)														
Fuel	Type of Fuel		Heat Input (MMBTU/hr)			Normal Operating Rate/Throughput		Parameter		Description									
	a		N/A					Maximum Operating Rate/Throughput		Design Capacity/Volume/Cylinder Displacement		Shell Height (ft)							
	b																		
	c																		
Notes					Tank Diameter (ft)		Tanks:		External										
*Blowdowns occur in a matter of minutes. Total blowdown duration will not exceed 330 hours in any twelve consecutive month period. Average hourly and annual emissions from GCBA are permitted under T-70 BLOWDOWN - Taurus 70 Blowdown Emissions (GRP 0001).					Date Engine Ordered		Date Engine Was Built by Manufacturer		Engine Model Year										
					<input type="checkbox"/> Fixed Roof		<input type="checkbox"/> Floating Roof		<input type="checkbox"/> External		<input type="checkbox"/> Internal								
					SI Engines:		<input type="checkbox"/> Rich Burn		<input type="checkbox"/> Lean Burn		<input type="checkbox"/> 2 Stroke		<input type="checkbox"/> 4 Stroke						
Emission Point ID No. (Designation) GCBA		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack								
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)											
Total VOC (including those listed below)					*	70.79	*	*	U		ppm by vol								
n-Hexane				110-54-3	*	9.63	*	*	U		ppm by vol								

State of Louisiana										Date of submittal		
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023	
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station												
Emission Point ID No. (Designation) GCBB		Descriptive Name of the Emissions Source (Alt. Name) Taurus 70 Unit B Blowdown Stack				Approximate Location of Stack or Vent (see instructions)						
Tempo Subject Item ID No. EQT0010						UTM Zone 15		Horizontal 27, "Unknown" 486068.48 mE		Datum NAD83		
						Latitude 30 °		27 °		0 "		
						Longitude 93 °		8 '		42 "		
Stack and Discharge Physical Characteristics Change? (yes or no) no		Diameter (ft) or Stack Discharge Area (ft ²) 4.5 ft		Height of Stack Above Grade (ft) 12 ft		Stack Gas Exit Velocity 74.00 ft/sec		Stack Gas Flow at Process Conditions, <u>not</u> at Standard (ft ³ /min) 70,537 ft ³ /min		Stack Gas Exit Temperature (°F) 80 °F		
										Normal Operating Time (hours per year) * hr/yr		
										Date of Construction or Modification Feb 10 2014 constructed		
										Percent of Annual Throughput Through This Emission Point		
										Jan-Mar 25%		
										Apr-Jun 25%		
										Jul-Sep 25%		
										Oct-Dec 25%		
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)								
Fuel		Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput		Parameter		Description		
a		N/A				Maximum Operating Rate/Throughput						
b						Design Capacity/Volume/Cylinder Displacement						
c						Shell Height (ft)						
						Tank Diameter (ft)						
						Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal						
						Date Engine Ordered		Engine Model Year				
						Date Engine Was Built by Manufacturer						
						SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke						
Emission Point ID No. (Designation) GCBB		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack	
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)				
Total VOC (including those listed below)					*	70.79	*	*	U		ppm by vol	
n-Hexane				110-54-3	*	9.63	*	*	U		ppm by vol	

State of Louisiana										Date of submittal													
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023												
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station																							
Emission Point ID No. (Designation) GCBC		Descriptive Name of the Emissions Source (Alt. Name) Taurus 70 Unit C Blowdown Stack				Approximate Location of Stack or Vent (see instructions)																	
Tempo Subject Item ID No. EQT0011						UTM Zone 15 Horizontal 27, "Unknown" Datum NAD83			Vertical 3368665.14 mN														
						Latitude 30 ° 27 ' 0 "			Longitude 93 ° 8 ' 42 "														
Stack and Discharge Physical Characteristics Change? (yes or no) no		Diameter (ft) or Stack Discharge Area (ft ²) 4.5 ft ft ²		Height of Stack Above Grade (ft) 12 ft		Stack Gas Exit Velocity 74.00 ft/sec		Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) 70,537 ft ³ /min		Stack Gas Exit Temperature (°F) 80 °F		Normal Operating Time (hours per year) * hr/yr		Date of Construction or Modification Feb 10 2014 constructed		Percent of Annual Throughput Through This Emission Point							
														Jan-Mar		Apr-Jun		Jul-Sep		Oct-Dec			
														25%		25%		25%		25%			
Type of Fuel Used and Heat Input (see instructions)										Operating Parameters (include units)													
Fuel		Type of Fuel				Heat Input (MMBTU/hr)				Normal Operating Rate/Throughput		Parameter		Description									
a		N/A								Maximum Operating Rate/Throughput													
b										Design Capacity/Volume/Cylinder Displacement													
c										Shell Height (ft)													
										Tank Diameter (ft)													
										Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal													
										Date Engine Ordered		Engine Model Year											
										Date Engine Was Built by Manufacturer													
										SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke													
Emission Point ID No. (Designation) GCBC		Control Equipment Code		Control Equipment Efficiency		HAP / TAP CAS Number		Proposed Emission Rates			Permitted Emission Rate (Current)		Add, Change, Delete, or Unchanged		Continuous Compliance Method		Concentration in Gases Exiting at Stack						
Pollutant								Average (lb/hr)			Maximum (lbs/hr)			Annual (tons/yr)									
Total VOC (including those listed below)						110-54-3		*			70.79			*		*		U		ppm by vol			
n-Hexane						110-54-3		*			9.63			*		*		U		ppm by vol			

State of Louisiana										Date of submittal		
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July 2023		
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station												
Emission Point ID No. (Designation) G CBD		Descriptive Name of the Emissions Source (Alt. Name) Titan 130e Unit D Blowdown Stack				Approximate Location of Stack or Vent (see instructions)						
Tempo Subject Item ID No. EQT0012						UTM Zone 15		Horizontal 27, "Unknown"		Datum NAD83		
						Latitude 30 °		Vertical 486068.48 mE		3368665.14 mN		
						Longitude 93 °		0 °		18 hundredths		
						8 °		42 °		38 hundredths		
Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft ²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification		Percent of Annual Throughput Through This Emission Point			
no	6.5 ft ft ²	12 ft	84.00 ft/sec	166,330 ft ³ /min	80 °F	* hr/yr	Feb 10 2014 constructed		Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
									25%	25%	25%	25%
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)								
Fuel	Type of Fuel	Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput		Parameter		Description				
a	N/A			Maximum Operating Rate/Throughput								
b				Design Capacity/Volume/Cylinder Displacement								
c				Shell Height (ft)								
Notes				Tank Diameter (ft)								
*Blowdowns occur in a matter of minutes. Total blowdown duration will not exceed 208 hours in any twelve consecutive month period. Average hourly and annual emissions from G CBD are permitted under T-130e BLOWDOWN - Titan 130e Blowdown Emissions (GRP 0002).				Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal								
				Date Engine Ordered		Engine Model Year						
				Date Engine Was Built by Manufacturer								
				SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke								
Emission Point ID No. (Designation)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack		
G CBD				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)					
Pollutant												
Total VOC (including those listed below)				*	173.72	*	9.03	C		ppm by vol		
n-Hexane			110-54-3	*	23.64	*	1.23	C		ppm by vol		

State of Louisiana								Date of submittal					
Emissions Inventory Questionnaire (EIQ) for Air Pollutants								July	2023				
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station													
Emission Point ID No. (Designation) GCGEN3		Descriptive Name of the Emissions Source (Alt. Name) Emergency Generator			Approximate Location of Stack or Vent (see instructions)								
Tempo Subject Item ID No. EQT 0016					Method _____ 27, "Unknown" _____ Datum NAD83		UTM Zone _____ 15 _____ Horizontal 485980 mE _____ Vertical 3368537 mN		Latitude _____ 30 " _____ 26 " _____ 56 " _____ 1 hundredths	Longitude _____ 93 " _____ 8 " _____ 45 " _____ 69 hundredths			
					Stack and Discharge Physical Characteristics Change? (yes or no) no _____		Diameter (ft) or Stack Discharge Area (ft ²) 0.83 ft _____ ft ²	Height of Stack Above Grade (ft) 25 ft	Stack Gas Exit Velocity 95.00 ft/sec	Stack Gas Flow at Conditions, not at Standard (ft ³ /min) 3,112 ft ³ /min	Stack Gas Exit Temperature (°F) 844 °F	Normal Operating Time (hours per year) 100 hr/yr	Date of Construction or Modification 2018 Constructed
										Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
										25%	25%	25%	25%
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)									
Fuel		Type of Fuel		Heat Input (MMBTU/hr)		Parameter		Description					
	a	Natural Gas		3.72		Normal Operating Rate/Throughput		543 hp					
	b					Maximum Operating Rate/Throughput		543 hp					
c					Design Capacity/Volume/Cylinder Displacement								
Notes				Shell Height (ft)		Tank Diameter (ft)		Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal		Date Engine Ordered		>2012	
				Date Engine Was Built by Manufacturer		>2012		SI Engines: <input type="checkbox"/> Rich Burn <input checked="" type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input checked="" type="checkbox"/> 4 Stroke					
Emission Point ID No. (Designation) GCGEN3		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack		
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)					
Particulate matter (PM _{2.5})					0.04	0.04	< 0.01	<0.01	U				gr/std ft ³
Particulate matter (PM ₁₀)					0.04	0.04	< 0.01	<0.01	U				gr/std ft ³
Sulfur dioxide					0.05	0.05	< 0.01	<0.01	U				ppm by vol
Nitrogen oxides					2.39	2.39	0.12	0.12	U				ppm by vol
Carbon monoxide					4.79	4.79	0.24	0.24	U				ppm by vol
Total VOC (including those listed below)					1.20	1.20	0.06	0.06	U				ppm by vol
Acetaldehyde				75-07-0	0.03	0.03	< 0.01	<0.01	U				ppm by vol
Acrolein				107-02-8	0.019	0.019	0.001	0.001	C				ppm by vol
Formaldehyde				50-00-0	0.20	0.20	0.01	0.01	U				ppm by vol

State of Louisiana										Date of submittal											
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023										
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station																					
Emission Point ID No. (Designation) GCTK02		Descriptive Name of the Emissions Source (Alt. Name) Condensate Storage Tank No. 2				Approximate Location of Stack or Vent (see instructions)															
Tempo Subject Item ID No. EQT0017						Method <u>27, "Unknown"</u> Datum <u>NAD83</u>		UTM Zone <u>15</u> Horizontal <u>485912</u> mE Vertical <u>3368523</u> mN		Latitude <u>30 °</u> <u>26 "</u> <u>55 "</u> <u>57</u> hundredths		Longitude <u>93 °</u> <u>8 '</u> <u>48 "</u> <u>23</u> hundredths									
Stack and Discharge Physical Characteristics Change? (yes or no) no		Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²		Height of Stack Above Grade (ft) N/A ft		Stack Gas Exit Velocity N/A ft/sec		Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min		Stack Gas Exit Temperature (°F) N/A °F		Normal Operating Time (hours per year) 8,760 hr/yr		Date of Construction or Modification May 19 2020 Constructed		Percent of Annual Throughput Through This Emission Point					
Type of Fuel Used and Heat Input (see instructions)										Operating Parameters (include units)											
Fuel		Type of Fuel				Heat Input (MMBTU/hr)						Parameter		Description							
		N/A				N/A						12,685.00		gal/yr							
												2,100.00		gallons							
												12									
												5.33									
														<input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal							
														Date Engine Ordered Engine Model Year							
														Date Engine Was Built by Manufacturer							
														SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke							
Emission Point ID No. (Designation) GCTK02		Control Equipment Code		Control Equipment Efficiency		HAP / TAP CAS Number		Proposed Emission Rates				Permitted Emission Rate (Current)		Add, Change, Delete, or Unchanged		Continuous Compliance Method		Concentration in Gases Exiting at Stack			
Pollutant								Average (lb/hr)		Maximum (lbs/hr)		Annual (tons/yr)		Annual (tons/yr)							
Total VOC (including those listed below)								1.34		1.34		5.87		5.87		U		ppm by vol			
Naphthalene						91-20-3		0.02		0.02		0.08		0.08		U		ppm by vol			

State of Louisiana										Date of submittal		
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023	
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station												
Emission Point ID No. (Designation) GCTK03		Descriptive Name of the Emissions Source (Alt. Name) Condensate Storage Tank No. 3				Approximate Location of Stack or Vent (see instructions)						
Tempo Subject Item ID No. EQT0018						Method 27, "Unknown"		Datum NAD83				
						UTM Zone 15		Horizontal 485897 mE		Vertical 3368593 mN		
						Latitude 30 °		26 °		57 "		
						Longitude 93 °		8 '		48 "		
Stack and Discharge Physical Characteristics Change? (yes or no) no		Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²		Height of Stack Above Grade (ft) N/A ft		Stack Gas Exit Velocity N/A ft/sec		Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min		Stack Gas Exit Temperature (°F) N/A °F		
								Normal Operating Time (hours per year) 8,760 hr/yr		Date of Construction or Modification May 19 2020 Constructed		
										Percent of Annual Throughput Through This Emission Point		
										Jan-Mar 25%		
										Apr-Jun 25%		
										Jul-Sep 25%		
										Oct-Dec 25%		
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)								
Fuel		Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput		Parameter		Description		
a		N/A		N/A		Maximum Operating Rate/Throughput		12,685.00		gal/yr		
b						Design Capacity/Volume/Cylinder Displacement		2,100.00		gallons		
c						Shell Height (ft)		12				
						Tank Diameter (ft)		5.33				
						Tanks: <input checked="" type="checkbox"/> Fixed Roof		<input type="checkbox"/> Floating Roof		<input type="checkbox"/> External <input type="checkbox"/> Internal		
						Date Engine Ordered		Engine Model Year				
						Date Engine Was Built by Manufacturer						
						SI Engines: <input type="checkbox"/> Rich Burn		<input type="checkbox"/> Lean Burn		<input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke		
Emission Point ID No. (Designation) GCTK03		Control Equipment Code		Control Equipment Efficiency		HAP / TAP CAS Number		Proposed Emission Rates			Permitted Emission Rate (Current)	
Pollutant								Average (lb/hr)			Add, Change, Delete, or Unchanged	
								Maximum (lbs/hr)			Continuous Compliance Method	
								Annual (tons/yr)			Concentration in Gases Exiting at Stack	
Total VOC (including those listed below)						91-20-3		1.34			U	
Naphthalene						91-20-3		0.02			U	

State of Louisiana										Date of submittal			
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023		
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station													
Emission Point ID No. (Designation) GCTK04		Descriptive Name of the Emissions Source (Alt. Name) Condensate Storage Tank No. 4				Approximate Location of Stack or Vent (see instructions)							
Tempo Subject Item ID No. EQT0019						Method _____ 27, "Unknown"		Datum _____ NAD83					
		UTM Zone _____ 15		Horizontal _____ 485900		mE _____		Vertical _____		3368647 mN			
		Latitude _____ 30 °		_____ 26 °		_____ 59 "		_____ 57		hundredths			
		Longitude _____ 93 °		_____ 8 '		_____ 48 "		_____ 70		hundredths			
Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft ²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point					
no	N/A ft ft ²	N/A ft	N/A ft/sec	N/A ft ³ /min	N/A °F	8,760 hr/yr	Jul 22 2020 Constructed	Jan-Mar 25%	Apr-Jun 25%	Jul-Sep 25%	Oct-Dec 25%		
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)									
Fuel	Type of Fuel	Heat Input (MMBTU/hr)						Parameter	Description				
a	N/A	N/A						Normal Operating Rate/Throughput	12,685.00 gal/yr				
b								Maximum Operating Rate/Throughput					
c								Design Capacity/Volume/Cylinder Displacement	2,100.00 gallons				
Notes								Shell Height (ft)	12				
								Tank Diameter (ft)	5.33				
								Tanks: <input checked="" type="checkbox"/> Fixed Roof		<input type="checkbox"/> Floating Roof		<input type="checkbox"/> External <input type="checkbox"/> Internal	
								Date Engine Ordered	Engine Model Year				
								Date Engine Was Built by Manufacturer					
								SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke					
Emission Point ID No. (Designation) GCTK04		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack		
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)					
Total VOC (including those listed below)					1.34	1.34	5.87	5.87	U		ppm by vol		
Naphthalene				91-20-3	0.02	0.02	0.08	0.08	U		ppm by vol		

State of Louisiana										Date of submittal	
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station											
Emission Point ID No. (Designation) GCTOTE01		Descriptive Name of the Emissions Source (Alt. Name) Chemical Injection Tote No. 1				Approximate Location of Stack or Vent (see instructions)					
Tempo Subject Item ID No. EQT0020						Method 27, "Unknown"		Datum NAD83			
						UTM Zone 15		Horizontal 485933		Vertical mE	
						Latitude 30 °		Longitude 26 °		57 °	
						Longitude 93 °				84 hundredths	
										47 hundredths	
Stack and Discharge Physical Characteristics Change? (yes or no) no	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2020 Constructed	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar 25%	Apr-Jun 25%	Jul-Sep 25%	Oct-Dec 25%
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)							
Fuel	Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput		Parameter		Description		
	a	N/A	N/A		Maximum Operating Rate/Throughput		2,920.00		gal/yr		
	b				Design Capacity/Volume/Cylinder Displacement		250.00		gallons		
c				Shell Height (ft)		5					
Notes				Tank Diameter (ft)		3					
				Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal							
				Date Engine Ordered				Engine Model Year			
				Date Engine Was Built by Manufacturer							
				SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke							
Emission Point ID No. (Designation) GCTOTE01		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant					Average (lb/hr)	Maximum (lb/hr)	Annual (tons/yr)				
Total VOC					0.003	0.003	0.01	0.01	U		ppm by vol

State of Louisiana										Date of submittal		
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023	
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station												
Emission Point ID No. (Designation) GCTOTE02	Descriptive Name of the Emissions Source (All Name) Chemical Injection Tote No. 2				Approximate Location of Stack or Vent (see instructions)							
Tempo Subject Item ID No. EQT0021					Method	27, "Unknown"			Datum	NAD83		
					UTM Zone	15	Horizontal	485935	mE	Vertical	3368586	mN
					Latitude	30 °		26 °		57 "	60	hundredths
					Longitude	93 °		8 '		47 "	38	hundredths
Stack and Discharge Physical Characteristics Change? (yes or no) no	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2020 Constructed	Percent of Annual Throughput Through This Emission Point				
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	
								25%	25%	25%	25%	
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)								
		Type of Fuel	Heat Input (MMBTU/hr)			Parameter		Description				
a		N/A	N/A			Normal Operating Rate/Throughput		2,920.00		gal/yr		
b						Maximum Operating Rate/Throughput						
c						Design Capacity/Volume/Cylinder Displacement		250.00		gallons		
Notes						Shell Height (ft)		5				
						Tank Diameter (ft)		3				
						Tanks:		<input checked="" type="checkbox"/> Fixed Roof		<input type="checkbox"/> Floating Roof		
								<input type="checkbox"/> External		<input type="checkbox"/> Internal		
						Date Engine Ordered				Engine Model Year		
						Date Engine Was Built by Manufacturer						
						SI Engines:		<input type="checkbox"/> Rich Burn		<input type="checkbox"/> Lean Burn		
								<input type="checkbox"/> 2 Stroke		<input type="checkbox"/> 4 Stroke		
Emission Point ID No. (Designation) GCTOTE02	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack		
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)					
Total VOC				0.003	0.003	0.01	0.01	U		ppm by vol		

State of Louisiana										Date of submittal	
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station											
Emission Point ID No. (Designation) GCTOTE03		Descriptive Name of the Emissions Source (Alt. Name) Chemical Injection Tote No. 3				Approximate Location of Stack or Vent (see instructions)					
Tempo Subject Item ID No. EQT0022						Method 27, "Unknown"		Datum NAD83		3368508 mN	
						UTM Zone 15		Horizontal 485888		Vertical mE	
						Latitude 30 °		26 °		55 "	
						Longitude 93 °		8 °		49 "	
Stack and Discharge Physical Characteristics Change? (yes or no) no	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2020 Constructed	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar 25%	Apr-Jun 25%	Jul-Sep 25%	Oct-Dec 25%
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)							
Fuel	Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput		Parameter		Description		
	a	N/A	N/A		Maximum Operating Rate/Throughput		3,285.00		gal/yr		
	b				Design Capacity/Volume/Cylinder Displacement		250.00		gallons		
c				Shell Height (ft)		5					
Notes				Tank Diameter (ft)		3					
				Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal		Date Engine Ordered		Engine Model Year			
				Date Engine Was Built by Manufacturer							
				SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke							
Emission Point ID No. (Designation) GCTOTE03	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack	
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)				
Total VOC				0.003	0.003	0.01	0.01	U		ppm by vol	

State of Louisiana											Date of submittal	
Emissions Inventory Questionnaire (EIQ) for Air Pollutants											July	2023
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station												
Emission Point ID No. (Designation) GCTOTE04	Descriptive Name of the Emissions Source (All Name) Chemical Injection Tote No. 4				Approximate Location of Stack or Vent (see instructions)							
Tempo Subject Item ID No. EQT0023					Method UTM Zone Latitude Longitude	27, "Unknown"		Datum 3368589 mN				
					Horizontal	485871	mE	Vertical				
					15	26	59			70	hundredths	
					93	8	49			78	hundredths	
Stack and Discharge Physical Characteristics Change? (yes or no) no	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2020 Constructed	Percent of Annual Throughput Through This Emission Point				
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	
								25%	25%	25%	25%	
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)								
	Type of Fuel	Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput			Parameter	Description				
a	N/A	N/A		Maximum Operating Rate/Throughput			3,285.00	gal/yr				
b				Design Capacity/Volume/Cylinder Displacement			250.00	gallons				
c				Shell Height (ft)			5					
Notes				Tank Diameter (ft)			3					
				Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal			Date Engine Ordered		Engine Model Year			
				Date Engine Was Built by Manufacturer								
				SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke								
Emission Point ID No. (Designation) GCTOTE04	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack		
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)						Annual (tons/yr)
Total VOC				0.003	0.003	0.01	0.01	U		ppm by vol		

State of Louisiana										Date of submittal	
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station											
Emission Point ID No. (Designation) GCTOTE05		Descriptive Name of the Emissions Source (Alt. Name) Chemical Injection Tote No. 5				Approximate Location of Stack or Vent (see instructions)					
Tempo Subject Item ID No. EQT0024						Method 27, "Unknown"		Datum NAD83			
						UTM Zone 15		Horizontal 485917		Vertical mE	
						Latitude 30 °		Longitude 26 °		59 "	
						Longitude 93 °				8 "	
										3368648 mN	
										60 hundredths	
										5 hundredths	
Stack and Discharge Physical Characteristics Change? (yes or no) no	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2020 Constructed	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
								25%	25%	25%	25%
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)							
		Type of Fuel	Heat Input (MMBTU/hr)	Normal Operating Rate/Throughput		Parameter		Description			
	a	N/A	N/A	Maximum Operating Rate/Throughput		3,285.00		gal/yr			
	b			Design Capacity/Volume/Cylinder Displacement		250.00		gallons			
c			Shell Height (ft)		5						
Notes			Tank Diameter (ft)		3						
			Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal								
			Date Engine Ordered				Engine Model Year				
			Date Engine Was Built by Manufacturer								
			SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke								
Emission Point ID No. (Designation) GCTOTE05	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack	
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)				
Total VOC				0.003	0.003	0.01	0.01	U		ppm by vol	

State of Louisiana										Date of submittal													
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023												
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station																							
Emission Point ID No. (Designation) GCTOTE06		Descriptive Name of the Emissions Source (Alt. Name) Chemical Injection Tote No. 6				Approximate Location of Stack or Vent (see instructions)																	
Tempo Subject Item ID No. EQT0025						Method 27, "Unknown"		Datum NAD83															
						UTM Zone 15		Horizontal 485865 mE		Vertical 3368739 mN													
						Latitude 30 °		Longitude 27 °		2 °													
						Longitude 93 °		8 °		50 °													
Stack and Discharge Physical Characteristics Change? (yes or no) no		Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²		Height of Stack Above Grade (ft) N/A ft		Stack Gas Exit Velocity N/A ft/sec		Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min		Stack Gas Exit Temperature (°F) N/A °F		Normal Operating Time (hours per year) 8,760 hr/yr		Date of Construction or Modification 2021 Constructed		Percent of Annual Throughput Through This Emission Point							
																Jan-Mar 25%		Apr-Jun 25%		Jul-Sep 25%		Oct-Dec 25%	
Type of Fuel Used and Heat Input (see instructions)										Operating Parameters (include units)													
Fuel		Type of Fuel N/A				Heat Input (MMBTU/hr) N/A						Parameter		Description									
a										Normal Operating Rate/Throughput		13,140.00		gal/yr									
b										Maximum Operating Rate/Throughput													
c										Design Capacity/Volume/Cylinder Displacement		250.00		gallons									
		Notes								Shell Height (ft)		5											
										Tank Diameter (ft)		3											
										Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal													
										Date Engine Ordered				Engine Model Year									
										Date Engine Was Built by Manufacturer													
										SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke													
Emission Point ID No. (Designation) GCTOTE06		Control Equipment Code		Control Equipment Efficiency		HAP / TAP CAS Number		Proposed Emission Rates			Permitted Emission Rate (Current)		Add, Change, Delete, or Unchanged		Continuous Compliance Method		Concentration in Gases Exiting at Stack						
Pollutant								Average (lb/hr)			Annual (tons/yr)												
Total VOC								0.01			0.03		C				ppm by vol						

State of Louisiana										Date of submittal			
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023		
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station													
Emission Point ID No. (Designation) GCTK06		Descriptive Name of the Emissions Source (Alt. Name) Condensate Storage Tank No. 6				Approximate Location of Stack or Vent (see instructions)							
Tempo Subject Item ID No. EQT0027						Method 27, "Unknown"		Datum NAD83					
		UTM Zone 15		Horizontal 485851 mE		Vertical 3368736 mN							
		Latitude 30 °		Longitude 93 °		Latitude 27 °		Longitude 8 °		Longitude 50 °			
Stack and Discharge Physical Characteristics Change? (yes or no) no		Diameter (ft) or Stack Discharge Area (ft ²) N/A ft		Height of Stack Above Grade (ft) N/A ft		Stack Gas Exit Velocity N/A ft/sec		Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min		Stack Gas Exit Temperature (°F) N/A °F			
										Normal Operating Time (hours per year) 8,760 hr/yr			
										Date of Construction or Modification 2021 Constructed			
										Percent of Annual Throughput Through This Emission Point			
										Jan-Mar 25%			
										Apr-Jun 25%			
										Jul-Sep 25%			
										Oct-Dec 25%			
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)									
Fuel		Type of Fuel		Heat Input (MMBTU/hr)		Parameter		Description					
a		N/A		N/A		Normal Operating Rate/Throughput		11,770.00 gal/yr					
b						Maximum Operating Rate/Throughput							
c						Design Capacity/Volume/Cylinder Displacement		441.00 gallons					
						Shell Height (ft)		5					
						Tank Diameter (ft)		4					
						Tanks:		<input checked="" type="checkbox"/> Fixed Roof		<input type="checkbox"/> Floating Roof			
								<input type="checkbox"/> External		<input type="checkbox"/> Internal			
						Date Engine Ordered				Engine Model Year			
						Date Engine Was Built by Manufacturer							
						SI Engines:		<input type="checkbox"/> Rich Burn		<input type="checkbox"/> Lean Burn			
								<input type="checkbox"/> 2 Stroke		<input type="checkbox"/> 4 Stroke			
Emission Point ID No. (Designation) GCTK06		Control Equipment Code		Control Equipment Efficiency		HAP / TAP CAS Number		Proposed Emission Rates			Permitted Emission Rate (Current)		
Pollutant								Average (lb/hr)		Maximum (lbs/hr)		Annual (tons/yr)	
								Annual (tons/yr)		Add, Change, Delete, or Unchanged		Continuous Compliance Method	
Total VOC (including those listed below)						91-20-3		1.23		1.23		5.39	
Naphthalene						91-20-3		0.03		0.03		0.15	
								0.15		U		Concentration in Gases Exiting at Stack ppm by vol	
										U		ppm by vol	

State of Louisiana										Date of submittal													
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023												
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station																							
Emission Point ID No. (Designation) GCGST		Descriptive Name of the Emissions Source (Alt. Name) Gasoline Storage Tank				Approximate Location of Stack or Vent (see instructions)																	
Tempo Subject Item ID No. EQT 0028						Method 27, "Unknown"		Datum NAD83															
						UTM Zone 15		Horizontal 485851 mE		Vertical 3368736 mN													
						Latitude 30 °		27 °		2 °													
						Longitude 93 °		8 '		50 °													
Stack and Discharge Physical Characteristics Change? (yes or no) yes		Diameter (ft) or Stack Discharge Area (ft ²) N/A ft		Height of Stack Above Grade (ft) N/A ft		Stack Gas Exit Velocity N/A ft/sec		Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min		Stack Gas Exit Temperature (°F) N/A °F		Normal Operating Time (hours per year) 8,760 hr/yr		Date of Construction or Modification 2023 Constructed		Percent of Annual Throughput Through This Emission Point							
																Jan-Mar 25%		Apr-Jun 25%		Jul-Sep 25%		Oct-Dec 25%	
Type of Fuel Used and Heat Input (see instructions)										Operating Parameters (include units)													
Fuel		Type of Fuel				Heat Input (MMBTU/hr)				Parameter		Description											
a		N/A				N/A				Normal Operating Rate/Throughput		550.00 gal/yr											
b										Maximum Operating Rate/Throughput													
c										Design Capacity/Volume/Cylinder Displacement		550.00 gallons											
		Notes								Shell Height (ft)		6											
										Tank Diameter (ft)		4											
										Tanks:		<input checked="" type="checkbox"/> Fixed Roof		<input type="checkbox"/> Floating Roof		<input type="checkbox"/> External		<input type="checkbox"/> Internal					
										Date Engine Ordered				Engine Model Year									
										Date Engine Was Built by Manufacturer													
										SI Engines:		<input type="checkbox"/> Rich Burn		<input type="checkbox"/> Lean Burn		<input type="checkbox"/> 2 Stroke		<input type="checkbox"/> 4 Stroke					
Emission Point ID No. (Designation) GCGST		Control Equipment Code		Control Equipment Efficiency		HAP / TAP CAS Number		Proposed Emission Rates			Permitted Emission Rate (Current)		Add, Change, Delete, or Unchanged		Continuous Compliance Method		Concentration in Gases Exiting at Stack						
Pollutant								Average (lb/hr)			Maximum (lbs/hr)			Annual (tons/yr)			Annual (tons/yr)						
Total VOC (including those listed below)								0.01			0.01			0.05			0.05		C				
2,2,4-Trimethylpentane						00540-84-1		<0.001			<0.001			<0.01			-		A		ppm by vol		
Benzene						71-43-2		<0.001			<0.001			<0.01			-		A		ppm by vol		
Toluene						108-88-3		<0.001			<0.001			<0.01			-		A		ppm by vol		

State of Louisiana										Date of submittal			
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023		
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station													
Emission Point ID No. (Designation) GCFUG11	Descriptive Name of the Emissions Source (Alt. Name) Fugitive Emissions				Approximate Location of Stack or Vent (see instructions) Method _____ 27, "Unknown" UTM Zone _____ 15 Horizontal _____ 485877 mE Vertical _____ Datum NAD83 Latitude _____ 30 ° _____ 26 ' _____ 59 " _____ 8 hundredths Longitude _____ 93 ° _____ 8 ' _____ 49 " _____ 6 hundredths								
Tempo Subject Item ID No. FUG0001													
Stack and Discharge Physical Characteristics Change? (yes or no) No _____	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft _____ ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, <u>not</u> at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) 70 °F	Normal Operating Time (hours per year) 8760 hr/yr	Date of Construction or Modification Feb 10 2014 Constructed			Percent of Annual Throughput Through This Emission Point			
							Jan-Mar 25%	Apr-Jun 25%	Jul-Sep 25%	Oct-Dec 25%			
Fuel	Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)								
	Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput		Parameter		Description				
	N/A		N/A		Maximum Operating Rate/Throughput								
					Design Capacity/Volume/Cylinder Displacement								
Notes					Shell Height (ft)		Tank Diameter (ft)						
					Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal		Date Engine Ordered		Engine Model Year				
					Date Engine Was Built by Manufacturer		SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke						
Emission Point ID No. (Designation) GCFUG11	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack			
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)						
Total VOC (including those listed below)				4.40	4.40	19.27	10.92	C		ppm by vol			
n-Hexane			00110-54-3	0.001	0.001	<0.01	<0.01	C		ppm by vol			
Naphthalene			91-20-3	0.22	0.22	0.96	0.55	C		ppm by vol			

State of Louisiana										Date of submittal		
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023	
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station												
Emission Point ID No. (Designation) T-70 BLOWDOWN		Descriptive Name of the Emissions Source (Alt. Name) Taurus 70 Blowdown Emissions				Approximate Location of Stack or Vent (see instructions) Datum _____ UTM Zone _____ Horizontal _____ mE Vertical _____ mN Latitude _____ ° _____ ' _____ " _____ hundredths Longitude _____ ° _____ ' _____ " _____ hundredths						
Tempo Subject Item ID No. GRP0001												
Stack and Discharge Physical Characteristics Change? (yes or no) no _____	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft _____ ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) * _____ hr/yr	Date of Construction or Modification N/A	Percent of Annual Throughput Through This Emission Point				
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	
								25%	25%	25%	25%	
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)								
		Type of Fuel	Heat Input (MMBTU/hr)	Normal Operating Rate/Throughput				Parameter	Description			
	a	N/A		Maximum Operating Rate/Throughput								
b			Design Capacity/Volume/Cylinder Displacement									
c			Shell Height (ft)									
			Tank Diameter (ft)									
			Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal									
			Date Engine Ordered _____				Engine Model Year					
			Date Engine Was Built by Manufacturer _____									
			SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke									
Emission Point ID No. (Designation) T-70 BLOWDOWN		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack	
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)					Annual (tons/yr)
Total VOC (including those listed below)					70.79	*	11.68	11.68	U		ppm by vol	
n-Hexane				00110-54-3	9.63	*	1.59	1.59	U		ppm by vol	

State of Louisiana										Date of submittal	
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station											
Emission Point ID No. (Designation) GCPLC5		Descriptive Name of the Emissions Source (Alt. Name) Gas Turbine Driven Compressor Unit E - Titan 130e				Approximate Location of Stack or Vent (see instructions)					
Tempo Subject Item ID No. New 33						UTM Zone <u>15</u> Horizontal <u>27,"Unknown"</u> Datum <u>NAD83</u> Latitude <u>30°</u> <u>26'</u> <u>56"</u> Vertical <u>3368567.57</u> mN Longitude <u>93°</u> <u>8'</u> <u>40"</u> <u>78</u> hundredths					
Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft ²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Process Conditions, <u>not</u> at Standard (ft ³ /min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	ft <u>75.11 ft²</u>	45 ft	52.87 ft/sec	238,264 ft ³ /min	933 °F	8,760 hr/yr	2023 Proposed	25%	25%	25%	25%
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)							
Fuel	Type of Fuel		Heat Input (MMBTU/hr)					Parameter		Description	
	a	Natural Gas	182.50 (Avg)					182.50	MMBTU/hr		
	b	Natural Gas	215.68 (Max)					215.68	MMBTU/hr		
Notes				Normal Operating Rate/Throughput Maximum Operating Rate/Throughput Design Capacity/Volume/Cylinder Displacement Shell Height (ft) Tank Diameter (ft) Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal Date Engine Ordered _____ Engine Model Year _____ Date Engine Was Built by Manufacturer _____ SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke							
Emission Point ID No. (Designation) GCPLC5		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)				
Particulate matter (PM _{2.5})					1.18	1.54	5.19	-	A		gr/std ft ³
Particulate matter (PM ₁₀)					1.19	1.54	5.20	-	A		gr/std ft ³
Sulfur dioxide					2.58	3.35	11.29	-	A		ppm by vol
Nitrogen oxides					10.08	13.11	44.17	-	A		ppm by vol
Carbon monoxide					10.23	13.30	44.81	-	A		ppm by vol
Total VOC (including those listed below)					1.17	1.52	5.12	-	A		ppm by vol
Acetaldehyde				75-07-0	0.01	0.01	0.03	-	A		ppm by vol
Acrolein				107-02-8	0.001	0.002	0.005	-	A		ppm by vol
Benzene				71-43-2	0.002	0.003	0.01	-	A		ppm by vol
Ethylbenzene				100-41-4	0.01	0.01	0.03	-	A		ppm by vol
Formaldehyde				50-00-0	0.44	0.57	1.93	-	A		ppm by vol
Naphthalene				91-20-3	<0.001	<0.001	<0.01	-	A		ppm by vol
PAH				206-44-0	<0.001	0.001	0.002	-	A		ppm by vol
Propylene Oxide				75-56-9	0.01	0.01	0.02	-	A		ppm by vol
Toluene				108-88-3	0.02	0.03	0.10	-	A		ppm by vol
Xylene (Mixed Isomers)				1330-20-7	0.01	0.02	0.05	-	A		ppm by vol

State of Louisiana Emissions Inventory Questionnaire (EIQ) for Air Pollutants Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station								Date of submittal			
								July	2023		
Emission Point ID No. (Designation) GCGEN4		Descriptive Name of the Emissions Source (Alt. Name) Emergency Generator			Approximate Location of Stack or Vent (see instructions)						
Tempo Subject Item ID No. New 34					Method	27, "Unknown"		Datum NAD83			
					UTM Zone	15	Horizontal	486154.71 mE	Vertical	3368579.30 mN	
					Latitude	30 "	26 "	57 "	38 hundredths		
					Longitude	93 "	8 "	39 "	17 hundredths		
Stack and Discharge Physical Characteristics Change? (yes or no) yes	Diameter (ft) or Stack Discharge Area (ft ²) 0.83 ft ft ²	Height of Stack Above Grade (ft) 25 ft	Stack Gas Exit Velocity 95.00 ft/sec	Stack Gas Flow at Conditions, not at Standard (ft ³ /min) 3,112 ft ³ /min	Stack Gas Exit Temperature (°F) 844 °F	Normal Operating Time (hours per year) 100 hr/yr	Date of Construction or Modification 2023 Proposed	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
								25%	25%	25%	25%
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)							
Fuel	Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput			Parameter	Description		
	a	Natural Gas	3.72		543 hp						
	b				543 hp						
c				Design Capacity/Volume/Cylinder Displacement							
Notes				Shell Height (ft)							
				Tank Diameter (ft)							
				Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal							
				Date Engine Ordered		>2012	Engine Model Year		>2012		
				Date Engine Was Built by Manufacturer			>2012				
				SI Engines: <input type="checkbox"/> Rich Burn <input checked="" type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input checked="" type="checkbox"/> 4 Stroke							
Emission Point ID No. (Designation) GCGEN4		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current) Annual (tons/yr)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)				
Particulate matter (PM _{2.5})					0.04	0.04	< 0.01	-	A	gr/std ft ³	
Particulate matter (PM ₁₀)					0.04	0.04	< 0.01	-	A	gr/std ft ³	
Sulfur dioxide					0.05	0.05	< 0.01	-	A	ppm by vol	
Nitrogen oxides					2.39	2.39	0.12	-	A	ppm by vol	
Carbon monoxide					4.79	4.79	0.24	-	A	ppm by vol	
Total VOC (including those listed below)					1.20	1.20	0.06	-	A	ppm by vol	
Acetaldehyde				75-07-0	0.03	0.03	< 0.01	-	A	ppm by vol	
Acrolein				107-02-8	0.019	0.019	0.001	-	A	ppm by vol	
Formaldehyde				50-00-0	0.20	0.20	0.01	-	A	ppm by vol	

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station

Date of submittal
 July 2023

Emission Point ID No. (Designation) GCGEN5	Descriptive Name of the Emissions Source (Alt. Name) Emergency Generator	Approximate Location of Stack or Vent (see instructions)		
Tempo Subject Item ID No. New 35		Method	27, "Unknown" Datum NAD83	
		UTM Zone	15	Horizontal 486154.63 mE Vertical 3368577.29 mN
		Latitude	30°	26' 57" 33 hundredths
		Longitude	93°	8' 39" 15 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft ²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, <u>not</u> at Standard (ft ³ /min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.83 ft ft ²	25 ft	95.00 ft/sec	3,112 ft ³ /min	844 °F	100 hr/yr	2023 Proposed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)		
Fuel	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas	3.72
b		
c		
Notes		

Operating Parameters (include units)		
Parameter	Description	
Normal Operating Rate/Throughput	543 hp	
Maximum Operating Rate/Throughput	543 hp	
Design Capacity/Volume/Cylinder Displacement		
Shell Height (ft)		
Tank Diameter (ft)		
Tanks:	<input type="checkbox"/> Fixed Roof	<input type="checkbox"/> Floating Roof
	<input type="checkbox"/> External	<input type="checkbox"/> Internal
Date Engine Ordered	>2012	Engine Model Year >2012
Date Engine Was Built by Manufacturer	>2012	
SI Engines:	<input type="checkbox"/> Rich Burn	<input checked="" type="checkbox"/> Lean Burn
	<input type="checkbox"/> 2 Stroke	<input checked="" type="checkbox"/> 4 Stroke

Emission Point ID No. (Designation)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)				
GCGEN5										
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM _{2.5})				0.04	0.04	< 0.01	-	A		gr/std ft ³
Particulate matter (PM ₁₀)				0.04	0.04	< 0.01	-	A		gr/std ft ³
Sulfur dioxide				0.05	0.05	< 0.01	-	A		ppm by vol
Nitrogen oxides				2.39	2.39	0.12	-	A		ppm by vol
Carbon monoxide				4.79	4.79	0.24	-	A		ppm by vol
Total VOC (including those listed below)				1.20	1.20	0.06	-	A		ppm by vol
Acetaldehyde			75-07-0	0.03	0.03	< 0.01	-	A		ppm by vol
Acrolein			107-02-8	0.019	0.019	0.001	-	A		ppm by vol
Formaldehyde			50-00-0	0.20	0.20	0.01	-	A		ppm by vol

State of Louisiana										Date of submittal	
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station											
Emission Point ID No. (Designation) GCTK07		Descriptive Name of the Emissions Source (Alt. Name) Condensate Storage Tank No. 7				Approximate Location of Stack or Vent (see instructions)					
Tempo Subject Item ID No. New 36						Method UTM Zone 15 Horizontal 27, "Unknown" 485851 mE Vertical Datum NAD83		3368739 mN			
						Latitude 30 " 27 " 2 "		56 hundredths			
						Longitude 93 " 8 " 50 "		53 hundredths			
Stack and Discharge Physical Characteristics Change? (yes or no) yes	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2023 Constructed	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar 25%	Apr-Jun 25%	Jul-Sep 25%	Oct-Dec 25%
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)							
Fuel	Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput		Parameter		Description		
	N/A		N/A		11,770.00				gal/yr		
					Maximum Operating Rate/Throughput						
Notes				Design Capacity/Volume/Cylinder Displacement		2,100.00				gallons	
				Shell Height (ft)		12					
				Tank Diameter (ft)		5.33					
				Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal							
				Date Engine Ordered				Engine Model Year			
				Date Engine Was Built by Manufacturer							
				SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke							
Emission Point ID No. (Designation) GCTK07		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)				
Total VOC (including those listed below)					1.24	1.24	5.45	-	A		ppm by vol
Naphthalene				91-20-3	0.03	0.03	0.15	-	A		ppm by vol

State of Louisiana										Date of submittal		
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023	
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station												
Emission Point ID No. (Designation) GCTK08	Descriptive Name of the Emissions Source (Alt. Name) Condensate Storage Tank No. 8				Approximate Location of Stack or Vent (see instructions)							
Tempo Subject Item ID No. New 37					Method	27, "Unknown"			Datum	NAD83		
					UTM Zone	15	Horizontal	486188.62	mE	Vertical	3368602.63	mN
					Latitude	30 °		26 °		58 "	13 hundredths	
					Longitude	93 °		8 '		37 "	90 hundredths	
Stack and Discharge Physical Characteristics Change? (yes or no) yes	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2023 Proposed	Percent of Annual Throughput Through This Emission Point				
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	
								25%	25%	25%	25%	
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)								
		Type of Fuel	Heat Input (MMBTU/hr)	Normal Operating Rate/Throughput		Parameter		Description				
	a	N/A	N/A	Maximum Operating Rate/Throughput		12,568.30		gal/yr				
b			Design Capacity/Volume/Cylinder Displacement		4,324.15		gallons					
c			Shell Height (ft)		12							
Notes			Tank Diameter (ft)		8							
			Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal									
			Date Engine Ordered				Engine Model Year					
			Date Engine Was Built by Manufacturer									
			SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke									
Emission Point ID No. (Designation) GCTK08	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack		
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)					
Total VOC (including those listed below)				1.35	1.35	5.94	-	A		ppm by vol		
Naphthalene			91-20-3	0.02	0.02	0.07	-	A		ppm by vol		

State of Louisiana Emissions Inventory Questionnaire (EIQ) for Air Pollutants Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station								Date of submittal			
								July	2023		
Emission Point ID No. (Designation) GCTK09		Descriptive Name of the Emissions Source (Alt. Name) Condensate Storage Tank No. 9			Approximate Location of Stack or Vent (see instructions)						
Tempo Subject Item ID No. New 38					Method 27, "Unknown"		Datum NAD83				
					UTM Zone 15		Horizontal 486209 mE		Vertical 3368643.57 mN		
					Latitude 30 °		26 °		59 °		
					Longitude 93 °		8 '		37 °		
Stack and Discharge Physical Characteristics Change? (yes or no) yes	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2023 Proposed	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar 25%	Apr-Jun 25%		
								Jul-Sep 25%	Oct-Dec 25%		
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)							
Fuel	Type of Fuel	Heat Input (MMBTU/hr)			Parameter	Description					
a	N/A	N/A			Normal Operating Rate/Throughput	12,685.00	gal/yr				
b					Maximum Operating Rate/Throughput						
c					Design Capacity/Volume/Cylinder Displacement	2,100.00	gallons				
					Shell Height (ft)	12					
					Tank Diameter (ft)	5.33					
					Tanks:	<input checked="" type="checkbox"/> Fixed Roof	<input type="checkbox"/> Floating Roof	<input type="checkbox"/> External	<input type="checkbox"/> Internal		
					Date Engine Ordered		Engine Model Year				
					Date Engine Was Built by Manufacturer						
					SI Engines:	<input type="checkbox"/> Rich Burn	<input type="checkbox"/> Lean Burn	<input type="checkbox"/> 2 Stroke	<input type="checkbox"/> 4 Stroke		
Emission Point ID No. (Designation) GCTK09		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)					1.34	1.34	5.87	-	A	ppm by vol	
Naphthalene				91-20-3	0.02	0.02	0.08	-	A	ppm by vol	

State of Louisiana										Date of submittal	
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station											
Emission Point ID No. (Designation) GCTK10	Descriptive Name of the Emissions Source (Alt. Name) Condensate Storage Tank No. 10				Approximate Location of Stack or Vent (see instructions)						
Tempo Subject Item ID No. New 39					Method <u>27, "Unknown"</u>		Datum <u>NAD83</u>				
					UTM Zone <u>15</u>	Horizontal <u>486188.90</u> mE	Vertical <u>3368449.44</u> mN				
					Latitude <u>30 °</u>	<u>26 "</u>	<u>53 "</u>	<u>16</u> hundredths			
					Longitude <u>93 °</u>	<u>8 '</u>	<u>37 "</u>	<u>89</u> hundredths			
Stack and Discharge Physical Characteristics Change? (yes or no) yes	Diameter (ft) or Stack Discharge Area (ft ²) <u>N/A</u> ft <u> </u> ft ²	Height of Stack Above Grade (ft) <u>N/A</u> ft	Stack Gas Exit Velocity <u>N/A</u> ft/sec	Stack Gas Flow at Process Conditions, <u>not</u> at Standard (ft ³ /min) <u>N/A</u> ft ³ /min	Stack Gas Exit Temperature (°F) <u>N/A</u> °F	Normal Operating Time (hours per year) <u>8,760</u> hr/yr	Date of Construction or Modification <u> </u> <u> </u> 2023 Proposed	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
								25%	25%	25%	25%
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)							
		Type of Fuel	Heat Input (MMBTU/hr)	Normal Operating Rate/Throughput		Parameter		Description			
a	<u>N/A</u>	<u>N/A</u>		Maximum Operating Rate/Throughput		<u>12,685.00</u>		<u>gal/yr</u>			
b				Design Capacity/Volume/Cylinder Displacement		<u>2,100.00</u>		<u>gallons</u>			
c				Shell Height (ft)		<u>12</u>					
Notes				Tank Diameter (ft)		<u>5.33</u>					
				Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal							
				Date Engine Ordered				Engine Model Year			
				Date Engine Was Built by Manufacturer							
				SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke							
Emission Point ID No. (Designation) GCTK10	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack	
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)					Annual (tons/yr)
Total VOC (including those listed below)				<u>1.34</u>	<u>1.34</u>	<u>5.87</u>	<u>-</u>	<u>A</u>		<u>ppm by vol</u>	
Naphthalene			<u>91-20-3</u>	<u>0.02</u>	<u>0.02</u>	<u>0.08</u>	<u>-</u>	<u>A</u>		<u>ppm by vol</u>	

State of Louisiana										Date of submittal	
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station											
Emission Point ID No. (Designation) GCTK11		Descriptive Name of the Emissions Source (Alt. Name) Condensate Storage Tank No. 11				Approximate Location of Stack or Vent (see instructions)					
Tempo Subject Item ID No. New 40						Method 27, "Unknown"		Datum NAD83			
		UTM Zone 15		Horizontal 486074.04		mE		Vertical 3368421.96		mN	
		Latitude 30 °		26 °		52 °		25		hundredths	
		Longitude 93 °		8 °		42 °		16		hundredths	
Stack and Discharge Physical Characteristics Change? (yes or no) yes	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2023 Proposed	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar 25%	Apr-Jun 25%	Jul-Sep 25%	Oct-Dec 25%
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)							
	Type of Fuel	Heat Input (MMBTU/hr)		Parameter		Description					
	N/A	N/A		Normal Operating Rate/Throughput 12,685.00		gal/yr					
a				Maximum Operating Rate/Throughput							
b				Design Capacity/Volume/Cylinder Displacement 2,100.00		gallons					
c				Shell Height (ft) 12							
Notes				Tank Diameter (ft) 5.33							
				Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal							
				Date Engine Ordered		Engine Model Year					
				Date Engine Was Built by Manufacturer							
				SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke							
Emission Point ID No. (Designation) GCTK11		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current) Annual (tons/yr)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)				
Total VOC (including those listed below)					1.34	1.34	5.87	-	A		ppm by vol
Naphthalene				91-20-3	0.02	0.02	0.08	-	A		ppm by vol

State of Louisiana										Date of submittal	
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station											
Emission Point ID No. (Designation) GCTK12		Descriptive Name of the Emissions Source (Alt. Name) Condensate Storage Tank No. 12				Approximate Location of Stack or Vent (see instructions)					
Tempo Subject Item ID No. New 41						Method UTM Zone 15 Horizontal 27, "Unknown" 486032.46 mE Vertical Datum NAD83		Latitude 30 ° 27 ' 4 " 64 hundredths Longitude 93 ° 8 ' 43 " 74 hundredths			
Stack and Discharge Physical Characteristics Change? (yes or no) yes	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2023 Proposed	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar 25%	Apr-Jun 25%	Jul-Sep 25%	Oct-Dec 25%
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)							
	Type of Fuel N/A		Heat Input (MMBTU/hr) N/A		Parameter		Description				
					Normal Operating Rate/Throughput 12,685.00		gal/yr				
				Maximum Operating Rate/Throughput							
				Design Capacity/Volume/Cylinder Displacement 2,100.00		gallons					
				Shell Height (ft) 12							
				Tank Diameter (ft) 5.33							
				Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal							
				Date Engine Ordered		Engine Model Year					
				Date Engine Was Built by Manufacturer							
				SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke							
Emission Point ID No. (Designation) GCTK12		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current) Annual (tons/yr)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant					Average (lb/hr)	Maximum (lb/hr)	Annual (tons/yr)				
Total VOC (including those listed below)					1.34	1.34	5.87	-	A	ppm by vol	
Naphthalene				91-20-3	0.02	0.02	0.08	-	A	ppm by vol	

State of Louisiana										Date of submittal									
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023								
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station																			
Emission Point ID No. (Designation) GCTOTE07		Descriptive Name of the Emissions Source (Alt. Name) Chemical Injection Tote No. 7				Approximate Location of Stack or Vent (see instructions)													
Tempo Subject Item ID No. New						Method 27, "Unknown"		Datum NAD83											
		Diameter (ft) or Stack Discharge Area (ft ²) N/A ft		Height of Stack Above Grade (ft) N/A ft		Stack Gas Exit Velocity N/A ft/sec		Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min		Stack Gas Exit Temperature (°F) N/A °F									
Stack and Discharge Physical Characteristics Change? (yes or no) yes								Normal Operating Time (hours per year) 8,760 hr/yr		Date of Construction or Modification 2023									
										Percent of Annual Throughput Through This Emission Point									
										<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Jan-Mar</th> <th>Apr-Jun</th> <th>Jul-Sep</th> <th>Oct-Dec</th> </tr> <tr> <td>25%</td> <td>25%</td> <td>25%</td> <td>25%</td> </tr> </table>		Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	25%	25%	25%	25%
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec																
25%	25%	25%	25%																
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)															
Fuel		Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput		Parameter		Description									
		N/A		N/A		2,920.00				gal/yr									
						Maximum Operating Rate/Throughput													
						Design Capacity/Volume/Cylinder Displacement		250.00		gallons									
						Shell Height (ft)		5											
						Tank Diameter (ft)		3											
						Tanks: <input checked="" type="checkbox"/> Fixed Roof		<input type="checkbox"/> Floating Roof		<input type="checkbox"/> External <input type="checkbox"/> Internal									
						Date Engine Ordered				Engine Model Year									
						Date Engine Was Built by Manufacturer													
						SI Engines: <input type="checkbox"/> Rich Burn		<input type="checkbox"/> Lean Burn		<input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke									
Emission Point ID No. (Designation) GCTOTE07		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack								
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)											
Total VOC					0.003	0.003	0.01	-	A		ppm by vol								

State of Louisiana										Date of submittal									
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023								
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station																			
Emission Point ID No. (Designation) GCTOTE08		Descriptive Name of the Emissions Source (Alt. Name) Chemical Injection Tote No. 8				Approximate Location of Stack or Vent (see instructions)													
Tempo Subject Item ID No. New 43						Method <u>27, "Unknown"</u>		Datum <u>NAD83</u>											
						UTM Zone <u>15</u> Horizontal <u>486182</u> mE Vertical <u>3368616</u> mN													
		Latitude <u>30 °</u>		Longitude <u>93 °</u>		Latitude <u>26 °</u>		Longitude <u>58 °</u>		Vertical <u>12</u> hundredths									
		Latitude <u>30 °</u>		Longitude <u>93 °</u>		Latitude <u>26 °</u>		Longitude <u>58 °</u>		Vertical <u>12</u> hundredths									
Stack and Discharge Physical Characteristics Change? (yes or no) yes		Diameter (ft) or Stack Discharge Area (ft ²) N/A ft		Height of Stack Above Grade (ft) N/A ft		Stack Gas Exit Velocity N/A ft/sec		Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min		Stack Gas Exit Temperature (°F) N/A °F		Normal Operating Time (hours per year) 8,760 hr/yr		Date of Construction or Modification 2023		Percent of Annual Throughput Through This Emission Point			
																<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Jan-Mar</th> <th>Apr-Jun</th> <th>Jul-Sep</th> <th>Oct-Dec</th> </tr> <tr> <td>25%</td> <td>25%</td> <td>25%</td> <td>25%</td> </tr> </table>			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec																
25%	25%	25%	25%																
												Proposed							
Type of Fuel Used and Heat Input (see instructions)										Operating Parameters (include units)									
Fuel		Type of Fuel		Heat Input (MMBTU/hr)				Parameter		Description									
		N/A		N/A				Normal Operating Rate/Throughput		2,920.00		gal/yr							
								Maximum Operating Rate/Throughput											
								Design Capacity/Volume/Cylinder Displacement		250.00		gallons							
Notes										Shell Height (ft)		5							
										Tank Diameter (ft)		3							
										Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal									
										Date Engine Ordered				Engine Model Year					
										Date Engine Was Built by Manufacturer									
										SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke									
Emission Point ID No. (Designation) GCTOTE08		Control Equipment Code		Control Equipment Efficiency		HAP / TAP CAS Number		Proposed Emission Rates			Permitted Emission Rate (Current)		Add, Change, Delete, or Unchanged		Continuous Compliance Method		Concentration in Gases Exiting at Stack		
Pollutant								Average (lb/hr)			Annual (tons/yr)								
Total VOC								0.003			0.01		-		A		ppm by vol		

State of Louisiana										Date of submittal		
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023	
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station												
Emission Point ID No. (Designation) GCTOTE09		Descriptive Name of the Emissions Source (Alt. Name) Chemical Injection Tote No. 9				Approximate Location of Stack or Vent (see instructions)						
Tempo Subject Item ID No. New						Method 27, "Unknown"		Datum NAD83				
						UTM Zone 15		Horizontal 486227.60		mE Vertical 3368634.56		
						Latitude 30 °		26 °		59 "		
						Longitude 93 °		8 '		36 "		
Stack and Discharge Physical Characteristics Change? (yes or no) yes		Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²		Height of Stack Above Grade (ft) N/A ft		Stack Gas Exit Velocity N/A ft/sec		Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min		Stack Gas Exit Temperature (°F) N/A °F		
								Normal Operating Time (hours per year) 8,760 hr/yr		Date of Construction or Modification 2023 Proposed		
										Percent of Annual Throughput Through This Emission Point		
										Jan-Mar 25%		
										Apr-Jun 25%		
										Jul-Sep 25%		
										Oct-Dec 25%		
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)								
Fuel		Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput		Parameter		Description		
a		N/A		N/A		13,140.00				gal/yr		
b						Maximum Operating Rate/Throughput						
c						Design Capacity/Volume/Cylinder Displacement		250.00		gallons		
						Shell Height (ft)		5				
						Tank Diameter (ft)		3				
						Tanks: <input checked="" type="checkbox"/> Fixed Roof		<input type="checkbox"/> Floating Roof		<input type="checkbox"/> External <input type="checkbox"/> Internal		
						Date Engine Ordered				Engine Model Year		
						Date Engine Was Built by Manufacturer						
						SI Engines: <input type="checkbox"/> Rich Burn		<input type="checkbox"/> Lean Burn		<input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke		
Emission Point ID No. (Designation) GCTOTE09		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack	
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)				
Total VOC					0.01	0.01	0.03	-	A		ppm by vol	

State of Louisiana										Date of submittal	
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station											
Emission Point ID No. (Designation) GCTOTE10		Descriptive Name of the Emissions Source (Alt. Name) Chemical Injection Tote No. 10				Approximate Location of Stack or Vent (see instructions)					
Tempo Subject Item ID No. New						Method 27, "Unknown"		Datum NAD83			
						UTM Zone 15		Horizontal 486173.59 mE		Vertical 3368444.92 mN	
						Latitude 30 °		Longitude 26 °		53 °	
						Longitude 93 °				0 hundredths	
										45 hundredths	
Stack and Discharge Physical Characteristics Change? (yes or no) yes	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2023 Proposed	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar 25%	Apr-Jun 25%	Jul-Sep 25%	Oct-Dec 25%
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)							
Fuel	Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput		Parameter		Description		
	N/A		N/A		Maximum Operating Rate/Throughput		13,140.00		gal/yr		
					Design Capacity/Volume/Cylinder Displacement		250.00		gallons		
Notes				Shell Height (ft)		5					
				Tank Diameter (ft)		3					
				Tanks: <input checked="" type="checkbox"/> Fixed Roof		<input type="checkbox"/> Floating Roof		<input type="checkbox"/> External		<input type="checkbox"/> Internal	
				Date Engine Ordered				Engine Model Year			
				Date Engine Was Built by Manufacturer							
				SI Engines: <input type="checkbox"/> Rich Burn		<input type="checkbox"/> Lean Burn		<input type="checkbox"/> 2 Stroke		<input type="checkbox"/> 4 Stroke	
Emission Point ID No. (Designation) GCTOTE10	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack	
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)				
Total VOC				0.01	0.01	0.03	-	A		ppm by vol	

State of Louisiana										Date of submittal		
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023	
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station												
Emission Point ID No. (Designation) GCTOTE11		Descriptive Name of the Emissions Source (Alt. Name) Chemical Injection Tote No. 11				Approximate Location of Stack or Vent (see instructions) Method <u>27, "Unknown"</u> Datum <u>NAD83</u> UTM Zone <u>15</u> Horizontal <u>486059</u> mE Vertical <u>3368416</u> mN Latitude <u>30 °</u> <u>26 "</u> <u>52 "</u> <u>8</u> hundredths Longitude <u>93 °</u> <u>8 '</u> <u>42 "</u> <u>72</u> hundredths						
Tempo Subject Item ID No. New												
Stack and Discharge Physical Characteristics Change? (yes or no) yes	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2023 Proposed	Percent of Annual Throughput Through This Emission Point				
								Jan-Mar 25%	Apr-Jun 25%	Jul-Sep 25%	Oct-Dec 25%	
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)								
Fuel		Type of Fuel		Heat Input (MMBTU/hr)		Parameter		Description				
		N/A		N/A		Normal Operating Rate/Throughput		13,140.00 gal/yr				
a						Maximum Operating Rate/Throughput						
b						Design Capacity/Volume/Cylinder Displacement		250.00 gallons				
c						Shell Height (ft)		5				
						Tank Diameter (ft)		3				
						Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal						
						Date Engine Ordered		Engine Model Year				
						Date Engine Was Built by Manufacturer						
						SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke						
Emission Point ID No. (Designation) GCTOTE11		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack	
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)				
Total VOC					0.01	0.01	0.03	-	A		ppm by vol	

State of Louisiana										Date of submittal				
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023			
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station														
Emission Point ID No. (Designation) GCTOTE12		Descriptive Name of the Emissions Source (Alt. Name) Chemical Injection Tote No. 12				Approximate Location of Stack or Vent (see instructions)								
Tempo Subject Item ID No. New		47				Method 27 "Unknown"		Datum NAD83						
						UTM Zone 15		Horizontal 486036		mE		Vertical 3368818		mN
						Latitude 30 °		Longitude 27 °		5 "		15		hundredths
		Longitude 93 °		8 '		43 "		58		hundredths				
Stack and Discharge Physical Characteristics Change? (yes or no) yes	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2023 Proposed	Percent of Annual Throughput Through This Emission Point						
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec			
								25%	25%	25%	25%			
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)										
Fuel	Type of Fuel	Heat Input (MMBTU/hr)					Parameter	Description						
	a	N/A	N/A				13,140.00	gal/yr						
	b						250.00	gallons						
c							5	Shell Height (ft)						
							3	Tank Diameter (ft)						
								<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
								Date Engine Ordered		Engine Model Year				
								Date Engine Was Built by Manufacturer						
								SI Engines:	<input type="checkbox"/>	Rich Burn	<input type="checkbox"/>			
									<input type="checkbox"/>	Lean Burn	<input type="checkbox"/>			
									<input type="checkbox"/>	2 Stroke	<input type="checkbox"/>			
									<input type="checkbox"/>	4 Stroke				
Emission Point ID No. (Designation) GCTOTE12		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack			
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)						
Total VOC					0.01	0.01	0.03	-	A		ppm by vol			

State of Louisiana										Date of submittal		
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023	
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station												
Emission Point ID No. (Designation) GCBE		Descriptive Name of the Emissions Source (Alt. Name) Titan 130e Unit E Blowdown Stack				Approximate Location of Stack or Vent (see instructions) 27, "Unknown" Datum NAD83						
Tempo Subject Item ID No. New 48						UTM Zone 15		Horizontal 486096.56 mE		Vertical 3368674.88 mN		
						Latitude 30°		Longitude 93°		27' 0" 41" 33 hundredths		
Stack and Discharge Physical Characteristics Change? (yes or no) yes	Diameter (ft) or Stack Discharge Area (ft ²) 6.5 ft	Height of Stack Above Grade (ft) 12 ft	Stack Gas Exit Velocity 84.00 ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) 166,330 ft ³ /min	Stack Gas Exit Temperature (°F) 80 °F	Normal Operating Time (hours per year) * hr/yr	Date of Construction or Modification 2023	Percent of Annual Throughput Through This Emission Point				
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	
							Proposed	25%	25%	25%	25%	
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)								
		Type of Fuel	Heat Input (MMBTU/hr)					Parameter	Description			
	a	N/A		Normal Operating Rate/Throughput								
	b			Maximum Operating Rate/Throughput								
c			Design Capacity/Volume/Cylinder Displacement									
Notes												
*Blowdowns occur in a matter of minutes. Total blowdown duration will not exceed 208 hours in any twelve consecutive month period. Average hourly and annual emissions from GCBE are permitted under T-130e BLOWDOWN - Titan 130e Blowdown Emissions (GRP 0002).												
		Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal		Date Engine Ordered		Engine Model Year		Date Engine Was Built by Manufacturer				
		SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke										
Emission Point ID No. (Designation) GCBE		Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack	
Pollutant					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)				
Total VOC (including those listed below)				110-54-3	*	173.72	*	-	A		ppm by vol	
n-Hexane					*	23.64	*	-	A		ppm by vol	

State of Louisiana										Date of submittal			
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023		
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station													
Emission Point ID No. (Designation) T-130e BLOWDOWN		Descriptive Name of the Emissions Source (Alt. Name) Titan 130e Blowdown Emissions				Approximate Location of Stack or Vent (see instructions)							
Tempo Subject Item ID No. New		GPP2				UTM Zone _____ N/A		Datum _____		Horizontal _____ mE		Vertical _____ mN	
						Latitude _____ hundredths		Longitude _____ hundredths					
Stack and Discharge Physical Characteristics Change? (yes or no) yes _____	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft _____ ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) * _____ hr/yr	Date of Construction or Modification N/A	Percent of Annual Throughput Through This Emission Point					
							Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec			
							25%	25%	25%	25%			
Type of Fuel Used and Heat Input (see instructions)				Operating Parameters (include units)									
Fuel	Type of Fuel		Heat Input (MMBTU/hr)		Normal Operating Rate/Throughput			Parameter		Description			
	a	N/A			Maximum Operating Rate/Throughput								
	b				Design Capacity/Volume/Cylinder Displacement								
c					Shell Height (ft)								
Notes				Tank Diameter (ft)			Tanks: <input type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal						
*Blowdowns occur in a matter of minutes. Total blowdown duration will not exceed 208 hours in any twelve consecutive month period for the two blowdown stacks (Titan 130e Unit D Blowdown Stack, Titan 130e Unit E Blowdown Stack).				Date Engine Ordered _____			Engine Model Year _____						
				Date Engine Was Built by Manufacturer _____			SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke						
Emission Point ID No. (Designation) T-130e BLOWDOWN	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack			
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)						
Total VOC (including those listed below)				173.72	*	18.07	-	A		ppm by vol			
n-Hexane			00110-54-3	23.64	*	2.46	-	A		ppm by vol			

State of Louisiana										Date of submittal	
Emissions Inventory Questionnaire (EIQ) for Air Pollutants										July	2023
Cheniere Creole Trail Pipeline, L.P. - Gillis Compressor Station											
Emission Point ID No. (Designation) GCTK05	Descriptive Name of the Emissions Source (Alt. Name) Condensate Storage Tank No. 5				Approximate Location of Stack or Vent (see instructions)						
Tempo Subject Item ID No. EQT0026					Method 27, "Unknown"		Datum NAD83				
		UTM Zone 15		Horizontal 485851		mE		Vertical 3368739		mN	
		Latitude 30 °		27 °		2 °		56		hundredths	
		Longitude 93 °		8 '		50 °		53		hundredths	
Stack and Discharge Physical Characteristics Change? (yes or no) no	Diameter (ft) or Stack Discharge Area (ft ²) N/A ft ft ²	Height of Stack Above Grade (ft) N/A ft	Stack Gas Exit Velocity N/A ft/sec	Stack Gas Flow at Process Conditions, not at Standard (ft ³ /min) N/A ft ³ /min	Stack Gas Exit Temperature (°F) N/A °F	Normal Operating Time (hours per year) 8,760 hr/yr	Date of Construction or Modification 2021 Constructed	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar 25%	Apr-Jun 25%	Jul-Sep 25%	Oct-Dec 25%
Fuel	Type of Fuel Used and Heat Input (see instructions)			Operating Parameters (include units)							
	Type of Fuel N/A		Heat Input (MMBTU/hr) N/A					Parameter		Description	
								11,770.00		gal/yr	
								441.00		gallons	
								5			
								4			
				Tanks: <input checked="" type="checkbox"/> Fixed Roof <input type="checkbox"/> Floating Roof <input type="checkbox"/> External <input type="checkbox"/> Internal							
				Date Engine Ordered				Engine Model Year			
				Date Engine Was Built by Manufacturer							
				SI Engines: <input type="checkbox"/> Rich Burn <input type="checkbox"/> Lean Burn <input type="checkbox"/> 2 Stroke <input type="checkbox"/> 4 Stroke							
Emission Point ID No. (Designation) GCTK05	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack	
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)				
Total VOC (including those listed below)				-	-	-	5.39	D		ppm by vol	
Naphthalene			91-20-3	-	-	-	0.15	D		ppm by vol	

24. NSR Applicability Summary [LAC 33:III.504 and LAC 33:III.509] N/A

This section consists of seven subsections, A-G, and is applicable only to new and existing major stationary sources (as defined in LAC 33:III.504 or in LAC 33:III.509) proposing to permit a physical change or change in the method of operation. It would also apply to existing minor stationary sources proposing a physical change or change in the method of operation where the change would be a major source in and of itself. Add rows to each table as necessary. Provide a written explanation of the information summarized in these tables. Consult instructions.

24.A. Project Summary

Emission Point ID	Description	A New, Modified, Affected, or Unaffected*	B Pre-Project Allowables (TPY)	C Baseline Actual Emissions (over 24-month period)	D Projected Actual Emissions (TPY)	E Post-Project Potential to Emit (TPY)	F Change
PM _{2.5}	24-Month Period: MM/DD/YYYY – MM/DD/YYYY						
							PM_{2.5} Change:
PM ₁₀	24-Month Period: MM/DD/YYYY – MM/DD/YYYY						
							PM₁₀ Change:
SO ₂	24-Month Period: MM/DD/YYYY – MM/DD/YYYY						
							SO₂ Change:
NO _x	24-Month Period: MM/DD/YYYY – MM/DD/YYYY						
							NO_x Change:

CO	24-Month Period: MM/DD/YYYY – MM/DD/YYYY						
						CO Change:	

VOC	24-Month Period: MM/DD/YYYY – MM/DD/YYYY						
						VOC Change:	

CO₂e	24-Month Period: MM/DD/YYYY – MM/DD/YYYY						
						CO₂e Change:	

* Unaffected emissions units are not required to be listed individually. By choosing not to list unaffected emissions units, the applicant asserts that all emissions units not listed in Table 24.A will not be modified or experience an increase in actual annual emissions as part of the proposed project.

24.B. Creditable Contemporaneous Changes

Contemporaneous Period: MM/DD/YYYY – MM/DD/YYYY							
		A	B	C	D	E	F
Emission Point ID	Description	Date of Modification	Pre-Project Allowables (TPY)	Baseline Actual Emissions (over 24-month period)	24-Month Period	Post-Project Potential to Emit (TPY)	Change
PM_{2.5}							
						PM_{2.5} Change:	

24.B. Creditable Contemporaneous Changes

PM₁₀								
							PM₁₀ Change:	
SO₂								
							SO₂ Change:	
NO_x								
							NO_x Change:	
CO								
							CO Change:	
VOC								
							VOC Change:	

24.B. Creditable Contemporaneous Changes

CO₂e								
							CO₂e Change:	

For each source identified as "New" or "Modified" in Section 24.A, complete the following table for each pollutant that will trigger NSR. If LAER is not required per LAC 33:III.504.D.3, indicate such.

24.C. BACT/LAER Summary

Emission Point ID	Pollutant	BACT/LAER	Limitation	Averaging Period	Description of Control Technology/Work Practice Standard(s)

24.D. PSD Air Quality Analyses Summary

	A	B	C	D	E	F	G	H	I	
Pollutant	Averaging Period	Preliminary Screening Concentration (µg/m ³)	Level of Significant Impact (µg/m ³)	Significant Monitoring Concentration (µg/m ³)	Background (µg/m ³)	Maximum Modeled Concentration (µg/m ³)	Modeled + Background Concentration (µg/m ³)	NAAQS (µg/m ³)	Modeled PSD Increment Consumption (µg/m ³)	Allowable Class II PSD Increment (µg/m ³)
PM _{2.5}	24-hour		-	-				35		9
	Annual		-	-				12		4
PM ₁₀	24-hour		5	10				150		30
	Annual		1	-				-		17
SO ₂	1-hour		7.8	-				195		-
	3-hour		25	-				1300		512
	24-hour		5	13				365		91
	Annual		1	-				80		20
NO _x	1-hour		7.5	-				189		-
	Annual		1	14				100		25
CO	1-hour		2000	-				40,000	-	-
	8-hour		500	575				10,000	-	-
Lead	3-month		-	0.1				1.5	-	-

24.E Nonattainment New Source Review Offsets [LAC 33:III.517.D.16, LAC 33:III.504.D.4 & 5] N/A

Complete this section only if the proposed project triggers Nonattainment New Source Review (NNSR).

This project triggers NNSR review for: NO_x VOC SO₂

NO_x:

Is the applicant proposing to use internal offsets? Yes No

If not, identify the source of the offsets. **Company:** _____

Facility/Unit: _____

Permit No.: _____

Is an ERC Bank Application included with this application, or has an application already been submitted to LDEQ?

Yes No

If the ERC application has already been submitted, give the date: _____

Identify the emissions units from which the offsets will be obtained (reference specific Emission Point ID numbers).

VOC:

Is the applicant proposing to use internal offsets? Yes No

If not, identify the source of the offsets. **Company:** _____

Facility/Unit: _____

Permit No.: _____

Is an ERC Bank Application included with this application, or has an application already been submitted to LDEQ?

Yes No

If the ERC application has already been submitted, give the date: _____

Identify the emissions units from which the offsets will be obtained (reference specific Emission Point ID numbers).

SO₂:

Is the applicant proposing to use internal offsets? Yes No

If not, identify the source of the offsets. **Company:** _____

Facility/Unit: _____

Permit No.: _____

Is an ERC Bank Application included with this application, or has an application already been submitted to LDEQ?

Yes No

If the ERC application has already been submitted, give the date: _____

Identify the emissions units from which the offsets will be obtained (reference specific Emission Point ID numbers).

In order to expedite processing, please be sure the ERC Bank Application is completed properly. In the case of NO_x, the document should clearly differentiate between ozone season and non-ozone season actual emissions during the baseline period. Be sure to indicate if a portion of the reductions are no longer surplus (e.g., due to new or revised federal or state regulations, use in a netting analysis, etc.).

24.F. Economic Impact

Answer the following questions.

How many temporary jobs will be added as a result of this project? _____

How many permanent jobs will be added as a result of this project? _____

24.G Notification of Federal Land Manager [LAC 33:III.504.E.1, LAC 33:III.509.P.1]

Complete this section only if the proposed project triggers NNSR or PSD.

a. Is the proposed facility or modification located within 100 kilometers of a Class I Area? Yes No

If Yes, determination of Q/d is not required; skip to the next question. If No, complete the Q/d equation below:

$$Q/d = \frac{PM_{10(NEI)} + SO_{2(NEI)} + NO_{X(NEI)} + H_2SO_{4(NEI)}}{\text{Class I km}}$$

where:

- $PM_{10(NEI)}$ = net emissions increase of $PM_{10}^{1,2}$
- $SO_{2(NEI)}$ = net emissions increase of $SO_2^{1,2}$
- $NO_{X(NEI)}$ = net emissions increase of $NO_X^{1,2}$
- $H_2SO_{4(NEI)}$ = net emissions increase of $H_2SO_4^{1,2}$
- Class I km = distance to nearest Class I Area³

$$Q/d = \frac{\underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}}{\underline{\hspace{2cm}}} = \underline{\hspace{2cm}}$$

Per Federal Land Manager guidance, Q values should reflect annual emissions (in tons per year, based on 24-hour maximum allowable emissions). If $Q/d < 10$, proceed to Section 25. If $Q/d \geq 10$, complete the remainder of this Section.

b. Has the applicant provided a copy of the application to the Federal Land Manager? Yes No

c. Does the application contain modeling that demonstrates no adverse impact on Air Quality Related Values (AQRVs) in the Class I Area? Yes No

d. If Yes, indicate the model used: VISCREEN PLUVUE II CALPUFF Other:⁴ _____

e. Has the Federal Land Manager concurred that the proposed project will not adversely impact any AQRVs?
 Yes No If Yes, please attach correspondence.

¹If the net emissions increase of any pollutant is negative, enter "0."

²If the project did not trigger a netting analysis, use the project increase. In this case, the value will be less than the pollutant's significance level.

³In kilometers.

⁴Model must be approved by LDEQ and the Federal Land Manager.

25. Environmental Assessment Statement (EAS or “IT” Question Responses)

[La. R.S. 30:2018] Yes No

*** This section is required when applying for new Part 70 operating permits and/or major modifications. Any applications for these permit types that do not include answers to these questions will not be considered to be administratively complete. ***

For new Part 70 operating permits and/or major modifications, answers to these questions must be provided by the applicant to the local governmental authority and the designated public library at no additional costs to these entities. Consult instructions to determine what is considered to be a “local governmental authority” and a “designated public library.” Indicate the name and address of the local governmental authority and the designated public library to which the answers to these questions were sent:

Name of Local Governing Authority			Name of Designated Public Library		
Street or P.O. Box			Street or P.O. Box		
City	State	ZIP	City	State	ZIP

Answer the following five questions on separate pages using full and complete answers. Include as many pages as necessary in order to provide full and complete answers. This information is required per Louisiana Revised Statutes 30:2018 (La. R.S. 30:2018).

Question 1: Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?

Question 2: Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?

Question 3: Are there alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing non-environmental benefits?

Question 4: Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits?

Question 5: Are there mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits?

PART 70 OPERATING PERMIT APPLICATION COMPLETENESS CHECKLIST

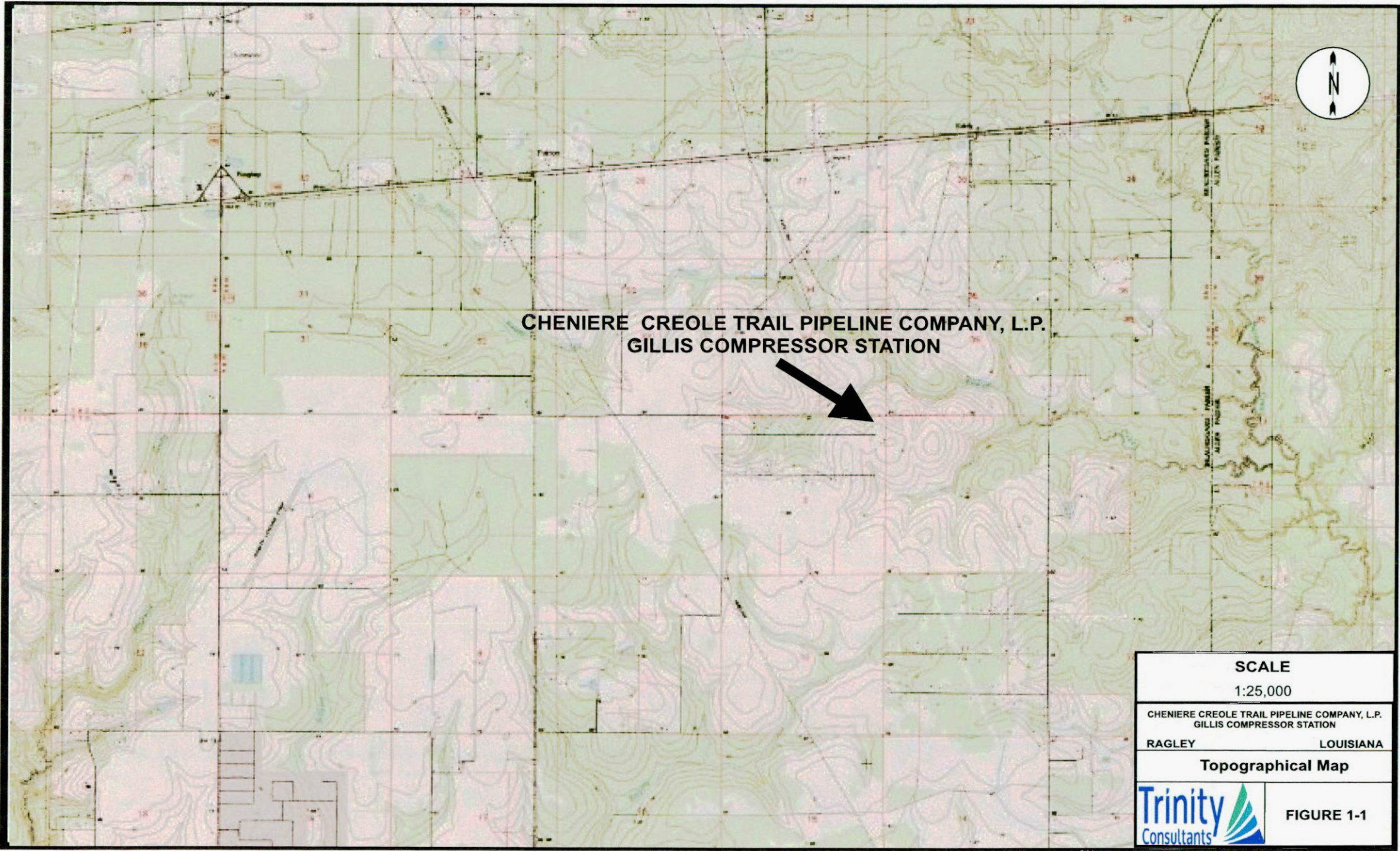
Instructions: Complete this checklist and submit with the completed air permit application.

LAC 33:III.	Completeness Questions Relative to the Part 70 Permit Application	Yes	No	NA	Location Within the Permit Application
517.A Timely Submittal	Was a Copy of the Application Also Submitted to EPA?	X			
517.B.1,2 Certification	Does the Application include a Certification by a Responsible Official?	X			AAE Section 10
517.B.3 Certification	Does the Application Include Certification by a Professional Engineer or their Designee:	X			AAE Section 10
517.D.1 Identifying Information	Does the Application Include:				
	1. Company Name, Physical and Mailing Address of Facility?	X			AAE Section 1, 2
	2. Map showing Location of the Facility?	X			Appendix A
	3. Owner and Operator Names and Agent?	X			AAE Section 11
	4. Name and Telephone Number of Plant Manager or Contact?	X			AAE Section 11
517.D.2 SIC Codes, Source Categories	Does the Application Include a Description of the Source's Processes and Products?	X			Introduction
	Does the Application Include the Source's SIC Code?	X			AAE Section 5
	Does the Application Include EPA Source Category of HAPs if applicable?			X	
517.D.3,6 EIQ Sheets	Has an EIQ Sheet been Completed for each Emission Point whether an Area or Point Source?	X			AAE Section 23
517.D.4 Monitoring Devices	Does the Application Include Identification and Description of Compliance Monitoring Devices or Activities?	X			AAE Section 22
517.D.5 Revisions and Modifications Only	For Revisions or Modifications, Does the Application include a Description of the Proposed Change and any Resulting Change in Emissions?	X			Section 1, Appendix B
517.D.7 General Information	Does the Application Include Information Regarding Fuels, Fuel Use, Raw Materials, Production Rates, and Operating Schedules as necessary to substantiate emission rates?	X			AAE Section 23, Appendix B
517 D.8 Operating Limitations	Has Information Regarding any Limitations on Source Operation or any Applicable Work Practice Standards been Identified?	X			AAE Section 22
517.D.9 Calculations	Are Emission Calculations Provided?	X			Appendix B
517.D.10 Regulatory Review	Does the Application Include a Citation and Description of Applicable Louisiana and Federal Air Quality Requirements and Standards?	X			AAE Section 22

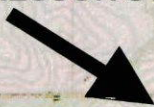
LAC 33:III.	Completeness Questions Relative to the Part 70 Permit Application	Yes	No	NA	Location Within the Permit Application
517.D.11 Test Methods	Has a Description of or a Reference to Applicable Test Methods Used to Determine Compliance with Standards been Provided?	X			AAE Section 22
517.D.12 Major Sources of TAPs	Does the Application include Information Regarding the Compliance History of Sources Owned or Operated by the Applicant (per LAC 33.III.5111)?			X	
517.D.13 Major Sources of TAPs	Does the Application include a Demonstration to show that the Source Meets all Applicable MACT and Ambient Air Standard Requirements?			X	
517.D.14 PSD Sources Only	If Required by DEQ, Does the Application Include Information Regarding the Ambient Air Impact for Criteria Pollutants as Required for the Source Impact Analysis per LAC 33:III.509.K, L, and M?			X	
517 D.15 PSD Sources Only	If Required by DEQ, Does the Application Include a Detailed Ambient Air Analysis?			X	
517.D.16, 18	Has any Additional Information been Provided?			X	
517.D.17 Fees	Has the Fee Code been Identified?	X			AAE Section 5
	Is the Applicable Fee Included with the Application?	X			Attachment to Cover Letter
517.E.1 Additional Part 70 Requirements	Does the Certification Statement Include a Description of the Compliance Status of Each Emission Point in the Source with All Applicable Requirements?	X			AAE Section 10
517E.2 Additional Part 70 Requirements	Does the Certification Statement Include a Statement that the Source will continue to Comply with All Applicable Requirements with which the Source is in Compliance?	X			AAE Section 10
517.E.3 Additional Part 70 Requirements	Does the Certification Statement Include a Statement that the Source will, on a timely basis, meet All Applicable Requirements that will Become Effective During the Permit Term?	X			AAE Section 10
517.E.4 Additional Part 70 Requirements	Are there Applicable Requirements for which the Source is not in Compliance at the Time of Submittal?		X		
	Does the Application include a Compliance Plan Schedule?		X		
	Does the Schedule Include Milestone Dates for which Significant Actions will occur?		X		
	Does the Schedule Include Submittal Dates for Certified Progress Reports?		X		
517.E.5 Additional Part 70 Requirements Acid Rain	Is this Source Covered by the Federal Acid Rain Program?		X		
	Are the Requirements of LAC 33.III.517.E 1-4 included in the Acid Rain Portion of the Compliance Plan?		X		


LAC 33:III.	Completeness Questions Relative to the Part 70 Permit Application	Yes	No	NA	Location Within the Permit Application
517.E.6 Additional Part 70 Requirements	Have any Exemptions from any Applicable Requirements been Requested?	X			AAE Section 22
	Is the List and explanations Provided?	X			AAE Section 22
517.E.7 Additional Part 70 Requirements	Does the Application Include a Request for a Permit Shield?		X		
	Does the Request List those Federally Applicable Requirements for which the Shield is Requested along with the Corresponding Draft Permit Terms and conditions which are Proposed to Maintain Compliance?			X	
517.E.8 Additional Part 70 Requirements	Does the Application Identify and Reasonably Anticipated Alternative Operating Scenarios?			X	
	Does the Application include Sufficient Information to Develop permit Terms and Conditions for Each Scenario, Including Source Process and Emissions Data?			X	
517.F Confidentiality	Does the Application Include a Request for Non-Disclosure (Confidentiality)?		X		
525.B. Minor Permit Modifications	Does the Application Include a Listing of New Requirements Resulting for the Change?			X	
	Does the Application Include Certification by the Responsible Official that the Proposed Action Fits the Definition of a Minor Modification as per LAC 33:III.525.A.			X	
	Does the Certification also Request that Minor Modification Procedures be Used?			X	
	Does the Application, for Part 70 Sources, Include the Owner's Suggested Draft Permit and Completed Forms for the Permitting Authority to Use to Notify Affected States?			X	
La. R.S. 30:2018 – PSD/NNSR only	Has a copy of the answers to the questions posed in the Environmental Assessment Statement (Section 25) been sent to the local governing authority at no cost to the local governing authority?			X	
	Has a copy of the answers to the questions posed in the Environmental Assessment Statement (Section 25) been sent to the designated public library at no cost to the designated public library?			X	

APPENDIX A. AREA MAPS



**CHENIERE CREOLE TRAIL PIPELINE COMPANY, L.P.
GILLIS COMPRESSOR STATION**



SCALE	
1:25,000	
CHENIERE CREOLE TRAIL PIPELINE COMPANY, L.P. GILLIS COMPRESSOR STATION	
RAGLEY	LOUISIANA
Topographical Map	
	FIGURE 1-1



CHENIERE CREOLE TRAIL PIPELINE COMPANY, L.P.
GILLIS COMPRESSOR STATION

CHENIERE CREOLE TRAIL PIPELINE COMPANY, L.P.
GILLIS COMPRESSOR STATION
RAGLEY LOUISIANA
Aerial Photograph



FIGURE 1-2

APPENDIX B. EMISSION CALCULATIONS

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Emergency Generator	TEMPO Subject Item ID EQT 0001	Emission Point ID No. GCGEN1

Operating Specifications	
Manufacturer	Dresser Waukesha
Model	VG24GL/GLD
Rating	543 hp 6,846 Btu/hp-hr 3.72 MMBtu/hr
Fuel Type	Natural Gas
Hours of Operations	1,010.7 Btu/scf 100 hrs/year

Pollutant	Emission Factor		Reference	Emission Rates ^{(4), (5)}		
				Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)
PM ₁₀	9.84E-03	lb/MMBtu	AP-42 Table 3.2-2, SCAQMD ⁽¹⁾	0.04	0.04	<0.01
PM _{2.5}	9.82E-03	lb/MMBtu		0.04	0.04	<0.01
SO ₂	14.27	lb/MMScf	Client Provided based on (5 grains sulfur/100 SCF)	0.05	0.05	<0.01
NO _x	2.00	g/bhp-hr	Manufacturer Specification	2.39	2.39	0.12
CO	4.00	g/bhp-hr	40 CFR 60 Part 60 Subpart JJJJ, Table 1	4.79	4.79	0.24
VOC Total	1.00	g/bhp-hr	40 CFR 60 Part 60 Subpart JJJJ, Table 1	1.20	1.20	0.06
Acetaldehyde	8.36E-03	lb/MMBtu	AP-42 Table 3.2-2	0.03	0.03	<0.01
Acrolein	5.14E-03	lb/MMBtu	AP-42 Table 3.2-2	0.019	0.019	0.001
Formaldehyde	5.28E-02	lb/MMBtu	AP-42 Table 3.2-2	0.20	0.20	0.01
CO ₂	116.98	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-1 ⁽²⁾	434.93	434.93	21.75
N ₂ O	2.20E-04	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽²⁾	0.001	0.001	4.10E-05
CH ₄	2.20E-03	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽²⁾	0.01	0.01	4.10E-04
CO ₂ e ⁽³⁾	-	-	40 CFR 60 Part 98 Subpart C, Table A-1	-	-	21.77

(1) AP-42 PM Condensable Emission Factors specified for PM₁₀ and PM_{2.5} using the South Coast Air Quality Management District Guidance for internal combustion sources burning gaseous fuel. Both the condensable and filterable emission factors were converted using actual HHV.

(2) Emission factors converted from kg/MMBtu to lb/MMBtu.

(3) Global Warming Potentials (GWP) taken from 40 CFR 60 Part 98 Subpart A, Table A-1.

(4) Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

(5) Emission rates calculated as follows:

Example 1: $\text{Emission rate (lb/hr)} = \text{Fuel Consumption (MMBtu/hr)} * \text{Emission Factor (lb/MMBtu)}$

Example 2: $\text{Emission rate (lb/hr)} = \text{Operating Rate (bhp)} * \text{Emission Factor (g/bhp-hr)} / 453.6 \text{ (g/lb)}$

Example 3: $\text{Emission Rate (lb/hr)} = \text{Fuel Consumption (MMBtu/hr)} / \text{Fuel Heating Value (Btu/scf)} * \text{Emission Factor (lb/MMScf)}$

Example 4: $\text{CO}_2 \text{ e Emission rate (TPY)} = \text{CO}_2 \text{ ER (TPY)} * \text{GWP} + \text{N}_2\text{O ER (TPY)} * \text{GWP} + \text{CH}_4 \text{ ER (TPY)} * \text{GWP}$

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Emergency Generator	TEMPO Subject Item ID EQT 0002	Emission Point ID No. GCGEN2

Operating Specifications	
Manufacturer	Dresser Waukesha
Model	VG24GL/GLD
Rating	543 hp
	6,846 Btu/hp-hr
	3.72 MMBtu/hr
Fuel Type	Natural Gas
	1,010.7 Btu/scf
Hours of Operations	100 hrs/year

Pollutant	Emission Factor		Reference	Emission Rates ^{(4), (5)}		
				Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)
PM ₁₀	9.84E-03	lb/MMBtu	AP-42 Table 3.2-2, SCAQMD ⁽¹⁾	0.04	0.04	<0.01
PM _{2.5}	9.82E-03	lb/MMBtu		0.04	0.04	<0.01
SO ₂	14.27	lb/MMScf	Client Provided based on (5 grains sulfur/100 SCF)	0.05	0.05	<0.01
NO _x	2.00	g/bhp-hr	Manufacturer Specification	2.39	2.39	0.12
CO	4.00	g/bhp-hr	40 CFR 60 Part 60 Subpart JJJ, Table 1	4.79	4.79	0.24
VOC Total	1.00	g/bhp-hr	40 CFR 60 Part 60 Subpart JJJ, Table 1	1.20	1.20	0.06
Acetaldehyde	8.36E-03	lb/MMBtu	AP-42 Table 3.2-2	0.03	0.03	<0.01
Acrolein	5.14E-03	lb/MMBtu	AP-42 Table 3.2-2	0.019	0.019	0.001
Formaldehyde	5.28E-02	lb/MMBtu	AP-42 Table 3.2-2	0.20	0.20	0.01
CO ₂	116.98	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-1 ⁽²⁾	434.93	434.93	21.75
N ₂ O	2.20E-04	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽²⁾	0.001	0.001	4.10E-05
CH ₄	2.20E-03	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽²⁾	0.01	0.01	4.10E-04
CO ₂ e ⁽³⁾	-	-	40 CFR 60 Part 98 Subpart C, Table A-1	-	-	21.77

(1) AP-42 PM Condensable Emission Factors specified for PM₁₀ and PM_{2.5} using the South Coast Air Quality Management District Guidance for internal combustion sources burning gaseous fuel. Both the condensable and filterable emission factors were converted using actual HHV.

(2) Emission factors converted from kg/MMBtu to lb/MMBtu.

(3) Global Warming Potentials (GWP) taken from 40 CFR 60 Part 98 Subpart A, Table A-1.

(4) Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

(5) Emission rates calculated as follows:

Example 1: Emission rate (lb/hr) = Fuel Consumption (MMBtu/hr) * Emission Factor (lb/MMBtu)

Example 2: Emission rate (lb/hr) = Operating Rate (bhp) * Emission Factor (g/bhp-hr) / 453.6 (g/lb)

Example 3: Emission Rate (lb/hr) = Fuel Consumption (MMBtu/hr) / Fuel Heating Value (Btu/scf) * Emission Factor (lb/MMscf)

Example 4: CO₂e Emission rate (TPY) = CO₂ ER (TPY) * GWP + N₂O ER (TPY) * GWP + CH₄ ER (TPY) * GWP

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Gas Turbine Driven Compressor Unit A - Taurus 70	TEMPO Subject Item ID EQT 0003	Emission Point ID No. GCPLC1

Operating Specifications			
Manufacturer	Solar		
Model	Taurus 70-10802S		
Rating at 50°F ⁽¹⁾	10,782 hp		
	7,281 Btu/hp-hr		
Normal Operating Rate	78.50 MMBtu/hr	Max Operating Rate ⁽¹⁾	93.78 MMBtu/hr
Fuel Type	Natural Gas		
	1,010.7 Btu/scf		
Hours of Operations	8,760 hrs/year		

Gas Turbine Driven Compressor Unit A - Taurus 70 - Criteria and GHG Emissions

Pollutant	Emission Factor		Reference	Emission Rates ⁽⁵⁾		
				Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)
PM ₁₀	6.50E-03	lb/MMBtu	AP-42 Table 3.1-2a, SCAQMD ⁽²⁾	0.51	0.61	2.24
PM _{2.5}	6.49E-03	lb/MMBtu		0.51	0.61	2.23
SO ₂	14.27	lb/MMscf	Fuel Gas Composition (5 grains sulfur/100 SCF)	1.11	1.32	4.86
NO _x	0.100	lb/MMBtu	Manufacturer Specification	7.85	9.38	34.38
CO	0.121	lb/MMBtu	Manufacturer Specification	9.50	11.35	41.60
VOC Total	7.00E-03	lb/MMBtu	Manufacturer Specification	0.55	0.66	2.41
CO ₂	116.98	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-1 ⁽³⁾	9,182.56	10,969.94	40,219.62
N ₂ O	2.20E-04	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽³⁾	0.02	0.02	0.08
CH ₄	2.20E-03	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽³⁾	0.17	0.21	0.76
CO ₂ e ⁽⁴⁾	-	-	40 CFR 60 Part 98 Subpart C, Table A-1	-	-	40,261.16

(1) Solar Predicted Engine Performance Sheets were provided by Paul Newman (Cheniere) to Sarah Boudreaux (Trinity) via email on April 9, 2015.

The 50°F basis was utilized for the average and annual emission rates.

Maximum operating rating was provided by Chelsea Wolf (Cheniere) to Rahul Pendse (Trinity) via email on March 16, 2018.

(2) AP-42 PM Total Emission Factor specified for PM₁₀ and PM_{2.5} using the South Coast Air Quality Management District Guidance for internal combustion sources burning gaseous fuel. Both the condensable and filterable emission factors were converted using actual HHV.

(3) Emission factors converted from kg/MMBtu to lb/MMBtu.

(4) Global Warming Potentials (GWP) taken from 40 CFR 60 Part 98 Subpart A, Table A-1.

(5) Emission rates calculated as follows:

Example 1: Emission rate (lb/hr) = Fuel Consumption (MMBtu/hr) * Emission Factor (lb/MMBtu)

Example 2: Emission rate (lb/hr) = Operating Rate (bhp) * Emission Factor (g/bhp-hr) / 453.6 (g/lb)

Example 3: Emission Rate (lb/hr) = Fuel Consumption (MMBtu/hr) / Fuel Heating Value (Btu/scf) * Emission Factor (lb/MMscf)

Example 4: CO₂e Emission rate (TPY) = CO₂ ER (TPY)*GWP + N₂O ER (TPY)*GWP+ CH₄ ER (TPY)*GWP

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Gas Turbine Driven Compressor Unit A - Taurus 70	TEMPO Subject Item ID EQT 0003	Emission Point ID No. GCPLC1

Operating Specifications			
Manufacturer	Solar		
Model	Taurus 70-10802S		
Rating at 50°F ⁽¹⁾	10,782 hp		
	7,281 Btu/hp-hr		
Normal Operating Rate	78.50 MMBtu/hr	Max Operating Rate ⁽¹⁾	93.78 MMBtu/hr
Fuel Type	Natural Gas		
	1,010.7 Btu/scf		
Hours of Operations	8,760 hrs/year		

Gas Turbine Driven Compressor Unit A - Taurus 70 - HAP/TAP Emissions

Pollutant	Emission Factor ⁽²⁾	Emission Rates ^{(3), (4)}		
		Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)
Acetaldehyde	4.00E-05 lb/MMBtu	0.003	0.004	0.01
Acrolein	6.40E-06 lb/MMBtu	0.001	0.001	0.002
Benzene	1.20E-05 lb/MMBtu	0.001	0.001	<0.01
Ethylbenzene	3.20E-05 lb/MMBtu	0.003	0.003	0.01
Formaldehyde	2.88E-03 lb/MMBtu	0.23	0.27	0.99
PAH	2.20E-06 lb/MMBtu	<0.001	<0.001	0.001
Propylene Oxide	2.90E-05 lb/MMBtu	0.002	0.003	0.01
Toluene	1.30E-04 lb/MMBtu	0.01	0.01	0.04
Xylene (Mixed Isomers)	6.40E-05 lb/MMBtu	0.01	0.01	0.02

(1) Solar Predicted Engine Performance Sheets were provided by Paul Newman (Cheniere) to Sarah Boudreaux (Trinity) via email on April 9, 2015.

The 50°F basis was utilized for the average and annual emission rates.

Maximum operating rating was provided by Chelsea Wolf (Cheniere) to Rahul Pendse (Trinity) via email on March 16, 2018.

(2) AP-42, Volume I, Chapter 3, Section 3.1, Stationary Gas Turbines, Table 3.1-3, Emission Factors for Hazardous Air Pollutants From Natural Gas Fired Stationary Gas Turbines, July 1998. Formaldehyde emission factor is based on vendor data.

(3) Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

(4) Emission rates calculated as follows:

$$\text{Emission rate (lb/hr)} = \text{Fuel Consumption (MMBtu/hr)} * \text{Emission Factor (lb/MMBtu)}$$

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Gas Turbine Driven Compressor Unit B - Taurus 70	TEMPO Subject Item ID EQT 0004	Emission Point ID No. GCPLC2

Operating Specifications			
Manufacturer	Solar		
Model	Taurus 70-10802S		
Rating at 50°F ⁽¹⁾	10,782 hp		
	7,281 Btu/hp-hr		
Normal Operating Rate	78.50 MMBtu/hr	Max Operating Rate ⁽¹⁾	93.78 MMBtu/hr
Fuel Type	Natural Gas		
	1,010.7 Btu/scf		
Hours of Operations	8,760 hrs/year		

Gas Turbine Driven Compressor Unit B - Taurus 70 - Criteria and GHG Emissions

Pollutant	Emission Factor		Reference	Emission Rates ⁽⁵⁾		
				Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)
PM ₁₀	6.50E-03	lb/MMBtu	AP-42 Table 3.1-2a, SCAQMD ⁽²⁾	0.51	0.61	2.24
PM _{2.5}	6.49E-03	lb/MMBtu		0.51	0.61	2.23
SO ₂	14.27	lb/MMscf	Fuel Gas Composition (5 grains sulfur/100 SCF)	1.11	1.32	4.86
NO _x	0.100	lb/MMBtu	Manufacturer Specification	7.85	9.38	34.38
CO	0.121	lb/MMBtu	Manufacturer Specification	9.50	11.35	41.60
VOC Total	7.00E-03	lb/MMBtu	Manufacturer Specification	0.55	0.66	2.41
CO ₂	116.98	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-1 ⁽³⁾	9,182.56	10,969.94	40,219.62
N ₂ O	2.20E-04	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽³⁾	0.02	0.02	0.08
CH ₄	2.20E-03	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽³⁾	0.17	0.21	0.76
CO ₂ e ⁽⁴⁾	-	-	40 CFR 60 Part 98 Subpart C, Table A-1	-	-	40,261.16

(1) Solar Predicted Engine Performance Sheets were provided by Paul Newman (Cheniere) to Sarah Boudreaux (Trinity) via email on April 9, 2015.

The 50°F basis was utilized for the average and annual emission rates.

Maximum operating rating was provided by Chelsea Wolf (Cheniere) to Rahul Pendse (Trinity) via email on March 16, 2018.

(2) AP-42 PM Total Emission Factor specified for PM₁₀ and PM_{2.5} using the South Coast Air Quality Management District Guidance

for internal combustion sources burning gaseous fuel. Both the condensable and filterable emission factors were converted using actual HHV.

(3) Emission factors converted from kg/MMBtu to lb/MMBtu.

(4) Global Warming Potentials (GWP) taken from 40 CFR 60 Part 98 Subpart A, Table A-1.

(5) Emission rates calculated as follows:

Example 1: $Emission\ rate\ (lb/hr) = Fuel\ Consumption\ (MMBtu/hr) * Emission\ Factor\ (lb/MMBtu)$

Example 2: $Emission\ rate\ (lb/hr) = Operating\ Rate\ (bhp) * Emission\ Factor\ (g/bhp-hr) / 453.6\ (g/lb)$

Example 3: $Emission\ Rate\ (lb/hr) = Fuel\ Consumption\ (MMBtu/hr) / Fuel\ Heating\ Value\ (Btu/scf) * Emission\ Factor\ (lb/MMscf)$

Example 4: $CO_2\ e\ Emission\ rate\ (TPY) = CO_2\ ER\ (TPY) * GWP + N_2O\ ER\ (TPY) * GWP + CH_4\ ER\ (TPY) * GWP$

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Gas Turbine Driven Compressor Unit B - Taurus 70	TEMPO Subject Item ID EQT 0004	Emission Point ID No. GCPLC2

Operating Specifications			
Manufacturer	Solar		
Model	Taurus 70-10802S		
Rating at 50°F ⁽¹⁾	10,782 hp		
	7,281 Btu/hp-hr		
Normal Operating Rate	78.50 MMBtu/hr	Max Operating Rate ⁽¹⁾	93.78 MMBtu/hr
Fuel Type	Natural Gas		
	1,010.7 Btu/scf		
Hours of Operations	8,760 hrs/year		

Gas Turbine Driven Compressor Unit B - Taurus 70 - HAP/TAP Emissions

Pollutant	Emission Factor ⁽²⁾	Emission Rates ^{(3), (4)}		
		Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)
Acetaldehyde	4.00E-05 lb/MMBtu	0.003	0.004	0.01
Acrolein	6.40E-06 lb/MMBtu	0.001	0.001	0.002
Benzene	1.20E-05 lb/MMBtu	0.001	0.001	<0.01
Ethylbenzene	3.20E-05 lb/MMBtu	0.003	0.003	0.01
Formaldehyde	2.88E-03 lb/MMBtu	0.23	0.27	0.99
PAH	2.20E-06 lb/MMBtu	<0.001	<0.001	0.001
Propylene Oxide	2.90E-05 lb/MMBtu	0.002	0.003	0.01
Toluene	1.30E-04 lb/MMBtu	0.01	0.01	0.04
Xylene (Mixed Isomers)	6.40E-05 lb/MMBtu	0.01	0.01	0.02

(1) Solar Predicted Engine Performance Sheets were provided by Paul Newman (Cheniere) to Sarah Boudreaux (Trinity) via email on April 9, 2015.

The 50°F basis was utilized for the average and annual emission rates.

Maximum operating rating was provided by Chelsea Wolf (Cheniere) to Rahul Pendse (Trinity) via email on March 16, 2018.

(2) AP-42, Volume I, Chapter 3, Section 3.1, Stationary Gas Turbines, Table 3.1-3, Emission Factors for Hazardous Air Pollutants From Natural Gas Fired Stationary Gas Turbines, July 1998. Formaldehyde emission factor is based on vendor data.

(3) Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

(4) Emission rates calculated as follows:

$$\text{Emission rate (lb/hr)} = \text{Fuel Consumption (MMBtu/hr)} * \text{Emission Factor (lb/MMBtu)}$$

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Gas Turbine Driven Compressor Unit C - Taurus 70	TEMPO Subject Item ID EQT 0005	Emission Point ID No. GCPLC3

Operating Specifications			
Manufacturer	Solar		
Model	Taurus 70-10802S		
Rating at 50°F ⁽¹⁾	10,782 hp		
	7,281 Btu/hp-hr		
Normal Operating Rate	78.50 MMBtu/hr	Max Operating Rate ⁽¹⁾	93.78 MMBtu/hr
Fuel Type	Natural Gas		
	1,010.7 Btu/scf		
Hours of Operations	8,760 hrs/year		

Gas Turbine Driven Compressor Unit C - Taurus 70 - Criteria and GHG Emissions

Pollutant	Emission Factor		Reference	Emission Rates ⁽⁵⁾		
				Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)
PM ₁₀	6.50E-03	lb/MMBtu	AP-42 Table 3.1-2a, SCAQMD ⁽²⁾	0.51	0.61	2.24
PM _{2.5}	6.49E-03	lb/MMBtu		0.51	0.61	2.23
SO ₂	14.27	lb/MMscf	Fuel Gas Composition (5 grains sulfur/100 SCF)	1.11	1.32	4.86
NO _x	0.100	lb/MMBtu	Manufacturer Specification	7.85	9.38	34.38
CO	0.121	lb/MMBtu	Manufacturer Specification	9.50	11.35	41.60
VOC Total	7.00E-03	lb/MMBtu	Manufacturer Specification	0.55	0.66	2.41
CO ₂	116.98	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-1 ⁽³⁾	9,182.56	10,969.94	40,219.62
N ₂ O	2.20E-04	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽³⁾	0.02	0.02	0.08
CH ₄	2.20E-03	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽³⁾	0.17	0.21	0.76
CO ₂ e ⁽⁴⁾	-	-	40 CFR 60 Part 98 Subpart C, Table A-1	-	-	40,261.16

(1) Solar Predicted Engine Performance Sheets were provided by Paul Newman (Cheniere) to Sarah Boudreaux (Trinity) via email on April 9, 2015.

The 50°F basis was utilized for the average and annual emission rates.

Maximum operating rating was provided by Chelsea Wolf (Cheniere) to Rahul Pendse (Trinity) via email on March 16, 2018.

(2) AP-42 PM Total Emission Factor specified for PM₁₀ and PM_{2.5} using the South Coast Air Quality Management District Guidance

for internal combustion sources burning gaseous fuel. Both the condensable and filterable emission factors were converted using actual HHV.

(3) Emission factors converted from kg/MMBtu to lb/MMBtu.

(4) Global Warming Potentials (GWP) taken from 40 CFR 60 Part 98 Subpart A, Table A-1.

(5) Emission rates calculated as follows:

Example 1: $Emission\ rate\ (lb/hr) = Fuel\ Consumption\ (MMBtu/hr) * Emission\ Factor\ (lb/MMBtu)$

Example 2: $Emission\ rate\ (lb/hr) = Operating\ Rate\ (bhp) * Emission\ Factor\ (g/bhp-hr) / 453.6\ (g/lb)$

Example 3: $Emission\ Rate\ (lb/hr) = Fuel\ Consumption\ (MMBtu/hr) / Fuel\ Heating\ Value\ (Btu/scf) * Emission\ Factor\ (lb/MMscf)$

Example 4: $CO_2\ e\ Emission\ rate\ (TPY) = CO_2\ ER\ (TPY)*GWP + N_2O\ ER\ (TPY)*GWP + CH_4\ ER\ (TPY)*GWP$

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Gas Turbine Driven Compressor Unit C - Taurus 70	TEMPO Subject Item ID EQT 0005	Emission Point ID No. GCPLC3

Operating Specifications			
Manufacturer	Solar		
Model	Taurus 70-10802S		
Rating at 50°F ⁽¹⁾	10,782 hp		
	7,281 Btu/hp-hr		
Normal Operating Rate	78.50 MMBtu/hr	Max Operating Rate ⁽¹⁾	93.78 MMBtu/hr
Fuel Type	Natural Gas		
	1,010.7 Btu/scf		
Hours of Operations	8,760 hrs/year		

Gas Turbine Driven Compressor Unit C - Taurus 70 - HAP/TAP Emissions

Pollutant	Emission Factor ⁽²⁾		Emission Rates ^{(3), (4)}		
			Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)
Acetaldehyde	4.00E-05	lb/MMBtu	0.003	0.004	0.01
Acrolein	6.40E-06	lb/MMBtu	0.001	0.001	0.002
Benzene	1.20E-05	lb/MMBtu	0.001	0.001	<0.01
Ethylbenzene	3.20E-05	lb/MMBtu	0.003	0.003	0.01
Formaldehyde	2.88E-03	lb/MMBtu	0.23	0.27	0.99
PAH	2.20E-06	lb/MMBtu	<0.001	<0.001	0.001
Propylene Oxide	2.90E-05	lb/MMBtu	0.002	0.003	0.01
Toluene	1.30E-04	lb/MMBtu	0.01	0.01	0.04
Xylene (Mixed Isomers)	6.40E-05	lb/MMBtu	0.01	0.01	0.02

(1) Solar Predicted Engine Performance Sheets were provided by Paul Newman (Cheniere) to Sarah Boudreaux (Trinity) via email on April 9, 2015.

The 50°F basis was utilized for the average and annual emission rates.

Maximum operating rating was provided by Chelsea Wolf (Cheniere) to Rahul Pendse (Trinity) via email on March 16, 2018.

(2) AP-42, Volume I, Chapter 3, Section 3.1, Stationary Gas Turbines, Table 3.1-3, Emission Factors for Hazardous Air Pollutants From Natural Gas Fired Stationary Gas Turbines, July 1998. Formaldehyde emission factor is based on vendor data.

(3) Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

(4) Emission rates calculated as follows:

$$\text{Emission rate (lb/hr)} = \text{Fuel Consumption (MMBtu/hr)} * \text{Emission Factor (lb/MMBtu)}$$

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Gas Turbine Driven Compressor Unit D - Titan 130e	TEMPO Subject Item ID EQT 0006	Emission Point ID No. GCPLC4

Operating Specifications ⁽¹⁾			
Manufacturer	Solar		
Model	Titan 130e-22402S		
Rating	23,436 hp		
	7,787.2 Btu/hp-hr		
Avg Operating Rate	182.50 MMBtu/hr	Max Operating Rate	215.68 MMBtu/hr
Fuel Type	Natural Gas		
	1,010.7 Btu/scf		
Hours of Operations	8,760 hrs/year		

Gas Turbine Driven Compressor Unit D - Titan 130e - Criteria and GHG Emissions

Pollutant	Emission Factor		Reference	Emission Rates ⁽⁷⁾		
				Avg (lb/hr)	Max ⁽²⁾ (lb/hr)	Annual (tons/yr)
PM ₁₀	6.50E-03	lb/MMBtu	AP-42 Table 3.1-2a, SCAQMD ⁽³⁾	1.19	1.54	5.20
PM _{2.5}	6.49E-03	lb/MMBtu		1.18	1.54	5.19
SO ₂	14.27	lb/MMscf	Fuel Gas Composition (5 grains sulfur/100 SCF)	2.58	3.35	11.29
NO _x	0.0553	lb/MMBtu	Manufacturer Specification (15 ppmvd @ 15%O ₂)	10.08	13.11	44.17
CO	0.0561	lb/MMBtu	Manufacturer Specification (25 ppmvd @ 15%O ₂)	10.23	13.30	44.81
VOC Total	6.41E-03	lb/MMBtu	Manufacturer Specification (5 ppmvd @ 15%O ₂) ⁽⁶⁾	1.17	1.52	5.12
CO ₂	116.98	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-1 ⁽⁴⁾	21,348	27,752	93,504
N ₂ O	2.20E-04	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽⁴⁾	0.04	0.05	0.18
CH ₄	2.20E-03	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽⁴⁾	0.40	0.52	1.76
CO ₂ e ⁽⁵⁾	-	-	40 CFR 60 Part 98 Subpart C, Table A-1	-	-	93,601

(1) Based on data provided by Cheniere via email dated September 23, 2019.

(2) A 10% buffer factor was utilized for the maximum emission rates.

(3) AP-42 PM Total Emission Factor specified for PM₁₀ and PM_{2.5} using the South Coast Air Quality Management District Guidance for internal combustion sources burning gaseous fuel. Both the condensable and filterable emission factors were converted using actual HHV.

(4) Emission factors converted from kg/MMBtu to lb/MMBtu.

(5) Global Warming Potentials (GWP) taken from 40 CFR 60 Part 98 Subpart A, Table A-1.

(6) Total Uncontrolled Hydrocarbons = 25 ppmvd @ 15%O₂.

VOC emissions are based on 20% of this value per Solar Turbines PIL 168 "Volatile Organic Compound, Sulfur Dioxide, and Formaldehyde Emission Estimates".

(7) Emission rates calculated as follows:

Example 1: Emission rate (lb/hr) = Fuel Consumption (MMBtu/hr) * Emission Factor (lb/MMBtu)

Example 2: Emission Rate (lb/hr) = Fuel Consumption (MMBtu/hr) / Fuel Heating Value (Btu/scf) * Emission Factor (lb/MMscf)

Example 3: CO₂e Emission rate (TPY) = CO₂ ER (TPY) * GWP + N₂O ER (TPY) * GWP + CH₄ ER (TPY) * GWP

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Gas Turbine Driven Compressor Unit D - Titan 130e	TEMPO Subject Item ID EQT 0006	Emission Point ID No. GCPLC4

Operating Specifications ⁽¹⁾			
Manufacturer	Solar		
Model	Titan 130e-22402S		
Rating	23,436 hp		
	7,787.2 Btu/hp-hr		
Avg Operating Rate	182.5 MMBtu/hr	Max Operating Rate	215.68 MMBtu/hr
Fuel Type	Natural Gas		
	1,010.7 Btu/scf		
Hours of Operations	8,760 hrs/year		

Gas Turbine Driven Compressor Unit D - Titan 130e - HAP/TAP Emissions

Pollutant	Emission Factor ⁽²⁾	Emission Rates ^{(4), (5)}		
		Avg (lb/hr)	Max ⁽³⁾ (lb/hr)	Annual (tons/yr)
Acetaldehyde	4.00E-05 lb/MMBtu	0.01	0.01	0.03
Acrolein	6.40E-06 lb/MMBtu	0.001	0.002	0.005
Benzene	1.20E-05 lb/MMBtu	0.002	0.003	0.01
Ethylbenzene	3.20E-05 lb/MMBtu	0.01	0.01	0.03
Formaldehyde	2.41E-03 lb/MMBtu	0.44	0.57	1.93
Naphthalene	1.30E-06 lb/MMBtu	<0.001	<0.001	<0.01
PAH	2.20E-06 lb/MMBtu	<0.001	0.001	0.002
Propylene Oxide	2.90E-05 lb/MMBtu	0.01	0.01	0.02
Toluene	1.30E-04 lb/MMBtu	0.02	0.03	0.10
Xylene (Mixed Isomers)	6.40E-05 lb/MMBtu	0.01	0.02	0.05

(1) Based on data provided by Cheniere via email dated September 23, 2019.

(2) AP-42, Volume 1, Chapter 3, Section 3.1, Stationary Gas Turbines, Table 3.1-3, Emission Factors for Hazardous Air Pollutants From Natural Gas Fired Stationary Gas Turbines, July 1998. Formaldehyde emission factor is based on Solar Turbines PIL 168 "Volatile Organic Compound, Sulfur Dioxide, and Formaldehyde Emission Estimates".

(3) A 10% buffer factor was utilized for the maximum emission rates.

(4) Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

(5) Emission rates calculated as follows:

$$\text{Emission rate (lb/hr)} = \text{Fuel Consumption (MMBtu/hr)} * \text{Emission Factor (lb/MMBtu)}$$

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 1	TEMPO Subject Item ID EQT0007	Emission Point ID No. GCTK01

Operating Data¹	
Tank Working Volume	4,324.15 gal
Operating Rate ¹	12,568.30 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC ²	NA	BREEZE TankESP	0.06	0.06	544.07	0.27
VOC ³	NA	Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method	1.29	1.29	11,340.00	5.67
Total VOC⁴			1.35	1.35	11,884.07	5.94

Speciated HAP/TAP Emissions from Propanol-based Naphthalene Chemical

Pollutant ⁵	Wt% ⁵	Emission Rates ⁶			
		Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
Naphthalene	5%	0.02	0.02	137.38	0.07

¹ Provided by Cheniere Creole Trail Pipeline, L.P. Operating Rate includes condensate (8,648.30 gal/yr), propanol-based naphthalene chemical (2,920 gal/yr), and diesel (1,000 gal/yr) throughputs.

² Emissions include working and breathing.

³ Emissions include flash emissions from condensate, propanol-based naphthalene chemical, and diesel.

⁴ Emissions include working and breathing + flash emissions.

⁵ Based on safety data sheet.

⁶ Emission rates calculated as follows:

$$\begin{aligned}
 \text{Annual (tons/yr)} &= (\text{Total VOC, tpy} \times \text{Propanol-based Naphthalene Chemical Throughput (gal/yr)} / \text{Total Throughput (gal/yr)} \times \text{Wt}\%) \\
 &= (5.94 \text{ tons/yr} \times 2,920 \text{ gal/yr} / 12,568.30 \text{ gal/yr} \times 5\%) \\
 &= 0.07 \text{ tpy}
 \end{aligned}$$

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTK01

Identification
 User Identification: GCTK01
 City: Lake Charles
 State: LA
 Company: Gillis Compressor Station
 Type of Tank: FRT (no floating roof)
 Description: Condensate Storage Tank No. 1

Tank Dimensions
 Shell Height (ft): 12.00
 Diameter (ft): 8.00
 Liquid Height (ft): 11.50
 Avg. Liquid Height (ft): 6.25
 Volume (gallons): 4,512.13
 Turnovers: 2.79
 Net Throughput(gal/yr): 12,568.30
 Insulation Condition: Not Insulated

Paint Characteristics
 Shell Color/Shade: Medium Gray Paint
 Shell Condition: Average
 Roof Color/Shade: Medium Gray Paint
 Roof Condition: Average

Roof Characteristics
 Type: Column-Supported (Cone)
 Height (ft): 1.00
 Roof Slope (ft/ft): 0.25

Breather Vent Settings
 Vacuum Settings (psig): -0.03
 Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TanKESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTK01 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Gasoline (RVP 7)	All	74.51	66.74	82.28	71.82	4.6453	3.9902	5.3845	66.0000			92.00 Option 4 RVP=7, ASTM Slope=3

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTK01 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations

Standing Losses (lb)	454.6651
Vapor Space Volume (cu ft)	305.7817
Vapor Density (lb/cu ft)	0.0535
Vapor Space Expansion Factor	0.1912
Vented Vapor Saturation Factor	0.4004
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	305.7817
Tank Diameter (ft)	8.0000
Vapor Space Outage (ft)	6.0833
Tank Shell Height (ft)	12.0000
Average Liquid Height (ft)	6.2500
Roof Outage (ft)	0.3333
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.3333
Roof Height (ft)	1.0000
Roof Slope (ft/ft)	0.2500
Shell Radius (ft)	4.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0535
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6453
Daily Avg. Liquid Surface Temp. (deg. F)	74.5088
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1912
Daily Vapor Temperature Range (deg. R)	31.0873
Daily Vapor Pressure Range (psia)	1.3944
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6453
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.9902
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	5.3845
Daily Avg. Liquid Surface Temp. (deg F)	74.5088
Daily Min. Liquid Surface Temp. (deg F)	66.7369
Daily Max. Liquid Surface Temp. (deg F)	82.2806
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.4004
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6453
Vapor Space Outage (ft)	6.0833

Working Losses (lb)	89.4026
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6453
Annual Net Throughput (gal/yr.)	12,568.3000
Annual Turnovers	3.1834
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	4,512.1313
Maximum Liquid Height (ft)	11.5000
Tank Diameter (ft)	8.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	544.0677

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 1	TEMPO Subject Item ID EQT 0007	Emission Point ID No. GCTK01

Volatile Organic Compound Emission Calculation for Flashing
Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method

CASE: Gillis Compressor Station

CASE INPUTS:

Based on ethane	Stock Tank API Gravity	40	API
	Separator Pressure (psig)	850	P _i
Based on pentane Estimated	Separator Temperature (F)	80	T _i
	Separator Gas Gravity	0.56	SG _i
	Barrels of Oil Per Day (BOPD)	0.82	Q
	Stock Tank Gas Molecular Weight	87.1	MW
	Wt. Fraction VOC (C ₃ +) of Stock Tank Gas	0.80	VOC
	Atmospheric Pressure (psia)	14.7	P _{atm}

Methodology Constraints

16 > API < 58	API
50 > P _i < 5250	psia
70 > T _i < 295	F
0.56 > SG _i < 1.18	28.97/MW
None > Q < None	BOPD
18 > MW < 125	lb/lb-mol
0.5 > VOC < 1.00	Fraction
20 > R _s < 2070	scf/STB

$$R_s = (C_1 \times SG_x \times (P_i^{C_2})) \times \exp((C_3 \times API)/(T_i + 460))$$

Where:

- R_s = Gas/Oil Ratio of liquid at pressure of interest
- SG_x = Dissolved gas gravity at 100 psig
- P_i = Pressure at initial condition (psia)
- API = API Gravity of liquid hydrocarbon at final condition
- T_i = Temperature of initial condition (F)

Constants	API Gravity < 30	API Gravity > 30
C ₁	= 0.0362	0.0178
C ₂	= 1.0937	1.187
C ₃	= 25.724	23.931

For SG_x = Dissolved gas gravity at 100 psig
= SG_i [1.0 + 0.00005912 x API x T_i x log(P/114.7)]

SG_i = Gas Gravity at initial condition

SG _x	= 0.6529
C ₁	= 0.0178
C ₂	= 1.187
C ₃	= 23.931

R _s	= 209.51 scf/bbl	for P _i + P _{atm}	= 864.7
----------------	------------------	---------------------------------------	---------

$$THC = R_s \times Q \times MW \times 1/385 \text{ scf/lb-mol} \times 365 \text{ day/yr} \times 1 \text{ ton}/2000 \text{ lb}$$

- THC = Total hydrocarbons (tons/year)
- R_s = Solution Oil/Gas Ratio (scf/STB)
- Q = Oil Production Rate (bbl/day)
- MW = Molecular Weight of Stock Tank Gas (lb/lb-mol)
- 385 = Volume of 1 lb/lb-mol of gas at 14.7 psia and 68 F

THC	= 7.09 tpy
-----	------------

$$VOC = THC \times \text{Frac } C_3+ \text{ in the Stock Tank Vapor}$$

VOC	= 5.67 tpy	from flashing of gas from separator to tank pressure
-----	------------	--

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station
Descriptive Name of Emission Point Maintenance, Startup, and Shutdown	TEMPO Subject Item ID EQT 0008
	Emission Point ID No. GCMSS

Description	Hours per Year	Start-up Emissions - 10 Minute Startup ⁽¹⁾													
		NO _x			CO		VOC		CO ₂		PM ₁₀ /PM _{2.5} ⁽²⁾		SO ₂ ⁽²⁾		
		Max (lb/hr)	TPY		Max (lb/hr)	TPY	Max (lb/hr)	TPY	Max (lb/hr)	TPY	Max (lb/hr)	TPY	Max (lb/hr)	TPY	
Gas Turbine Driven Compressor Units A, B, and C - Taurus 70	55.00	4.80	0.13		438.60	12.06	5.04	0.14		3,114	85.64	0.61	0.02	1.32	0.04
Gas Turbine Driven Compressor Unit D & E - Titan 130e	34.67	11.40	0.20		1,061.40	18.40	12.12	0.21		6,966	120.74	1.54	0.03	3.35	0.06
Total Startup Emissions		11.40	0.33		1,061.40	30.46	12.12	0.35		6,966	206.38	1.54	0.04	3.35	0.09

Description	Hours per Year	Shutdown Emissions - 10 Minute Shutdown ⁽¹⁾													
		NO _x			CO		VOC		CO ₂		PM ₁₀ /PM _{2.5} ⁽²⁾		SO ₂ ⁽²⁾		
		Max (lb/hr)	TPY		Max (lb/hr)	TPY	Max (lb/hr)	TPY	Max (lb/hr)	TPY	Max (lb/hr)	TPY	Max (lb/hr)	TPY	
Gas Turbine Driven Compressor Units A, B, and C - Taurus 70	55.00	6.60	0.18		560.40	15.41	6.36	0.17		3,450	94.88	0.61	0.02	1.32	0.04
Gas Turbine Driven Compressor Unit D & E - Titan 130e	34.67	14.40	0.25		1,245.60	21.59	14.28	0.25		7,632	132.29	1.54	0.03	3.35	0.06
Total Shutdown Emissions		14.40	0.43		1,245.60	37.00	14.28	0.42		7,632	227.16	1.54	0.04	3.35	0.09

Description	Hours per Year	Total Start-up and Shutdown Emissions																	
		NO _x			CO			VOC			CO ₂			PM ₁₀ /PM _{2.5}			SO ₂		
		Avg (lb/hr)	Max (lb/hr)	TPY	Avg (lb/hr)	Max (lb/hr)	TPY	Avg (lb/hr)	Max (lb/hr)	TPY	Avg (lb/hr)	Max (lb/hr)	TPY	Avg (lb/hr)	Max (lb/hr)	TPY	Avg (lb/hr)	Max (lb/hr)	TPY
Total GCMSS Emissions	179.33	8.48	14.40	0.76	752.35	1,245.60	67.46	8.60	14.28	0.77	4,835	7,632	433.54	0.97	1.54	0.09	2.11	3.35	0.19

(1) Maintenance scheduling provided by manufacturing specifications. Maximum hourly emissions data for NO_x, CO, VOC, and CO₂ provided by manufacturing specifications.

(2) Maximum hourly emission rates for PM₁₀/PM_{2.5} and SO₂ were assumed to be the same as their respective maximum hourly emission rates for normal operation.

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Taurus 70 A-C Blowdown Stacks, Titan 130e D&E Blowdown Stacks	TEMPO Subject Item ID EQT 0009, EQT 0010, EQT 0011, EQT 0012, New	Emission Point ID No. GCBA, GCB, GCBC, GCBD, GCBE

	Blowdown Volumes ¹	Number of Events Per Year ²	Number of Events Per Hour ³
Taurus 70 A-C Blowdown Stacks	207	330	1
Titan 130e D-E Blowdown Stacks	508	208	1

Pollutant ⁵	Mol Fraction	MW (lb/lb-mol)
Propane (C3)	0.004	44.096
N-butane (NC4)	0.001	58.122
Iso butane (IC4)	0.001	58.122
N-pentane (NC5)	0	72.149
Iso pentane (IC5)	0	72.149
Hexane (C6) ⁴	0.00054	86.175
Methane (C1)	0.960	16.042
Carbon Dioxide (CO ₂)	0.010	44.01
Undetermined	0.023	

Example Calculation:

lbs C6 per event = Blowdown Volume (lb-mol) x Mol Fraction of C6 x MW of C6 (lb/lb-mol)
 lbs C6 for Taurus 70 A-C per event = (207 lb-mol) x 0.00054 x (86.175 lb/lb-mol) = 9.63 lbs

Taurus 70 A-C Blowdown Emissions - CAP

Pollutant	Average Emissions per hour (lb/hr)	Maximum Emissions per hour (lb/hr)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	70.79	70.79	0.04	11.68
Hexane	9.63	9.63	0.005	1.59
Methane	3,188.16	3,188.16	1.59	526.05
Carbon Dioxide	91.97	91.97	0.05	15.18
CO ₂ e	79,795.88	79,795.88	39.90	13,166.32

Titan 130e D-E Blowdown Emissions - CAP

Pollutant	Average Emissions per hour (lb/hr)	Maximum Emissions per hour (lb/hr)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	173.72	173.72	0.09	18.07
Hexane	23.64	23.64	0.012	2.46
Methane	7,824.07	7,824.07	3.91	813.70
Carbon Dioxide	225.71	225.71	0.11	23.47
CO ₂ e	195,827.56	195,827.56	97.91	20,366.07

- [1] Based on Reference Cheniere Document CTGCS-E-PS-CAL-00003 provided by Paul Newman (Cheniere) to Sarah Boudreaux (Trinity) on May 12, 2015.
 [2] Based on information provided by Paul Newman (Cheniere) to Sarah Boudreaux (Trinity) on May 12, 2015.
 [3] Blowdown occurs in a matter of minutes. Assumes only one blowdown per hour, therefore Average Hourly Emissions = Maximum Hourly Emissions.
 [4] Based on information provided by Paul Newman (Cheniere) to Sarah Boudreaux (Trinity) on August 23, 2016.
 [5] The total sum of Mol Fraction was 0.99, hence, added weighted average to adjust the sum total to 1 (or 100%).

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Emergency Generator	TEMPO Subject Item ID EQT 0016	Emission Point ID No. GCGEN3

Operating Specifications	
Manufacturer	Dresser Waukesha
Model	VG24GL/GLD
Rating	543 hp
	6,846 Btu/hp-hr
	3.72 MMBtu/hr
Fuel Type	Natural Gas
	1,010.7 Btu/scf
Hours of Operations	100 hrs/year

Pollutant	Emission Factor		Reference	Emission Rates ^{(4), (5)}		
				Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)
PM ₁₀	9.84E-03	lb/MMBtu	AP-42 Table 3.2-2, SCAQMD ⁽¹⁾	0.04	0.04	<0.01
PM _{2.5}	9.82E-03	lb/MMBtu		0.04	0.04	<0.01
SO ₂	14.27	lb/MMScf	Client Provided based on (5 grains sulfur/100 SCF)	0.05	0.05	<0.01
NO _x	2.00	g/bhp-hr	Manufacturer Specification	2.39	2.39	0.12
CO	4.00	g/bhp-hr	40 CFR 60 Part 60 Subpart JJJ, Table 1	4.79	4.79	0.24
VOC Total	1.00	g/bhp-hr	40 CFR 60 Part 60 Subpart JJJ, Table 1	1.20	1.20	0.06
Acetaldehyde	8.36E-03	lb/MMBtu	AP-42 Table 3.2-2	0.03	0.03	<0.01
Acrolein	5.14E-03	lb/MMBtu	AP-42 Table 3.2-2	0.019	0.019	0.001
Formaldehyde	5.28E-02	lb/MMBtu	AP-42 Table 3.2-2	0.20	0.20	0.01
CO ₂	116.98	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-1 ⁽²⁾	434.93	434.93	21.75
N ₂ O	2.20E-04	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽²⁾	0.001	0.001	4.10E-05
CH ₄	2.20E-03	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽²⁾	0.01	0.01	4.10E-04
CO ₂ e ⁽³⁾	-	-	40 CFR 60 Part 98 Subpart C, Table A-1	-	-	21.77

(1) AP-42 PM Condensable Emission Factors specified for PM₁₀ and PM_{2.5} using the South Coast Air Quality Management District Guidance for internal combustion sources burning gaseous fuel. Both the condensable and filterable emission factors were converted using actual HHV.

(2) Emission factors converted from kg/MMBtu to lb/MMBtu.

(3) Global Warming Potentials (GWP) taken from 40 CFR 60 Part 98 Subpart A, Table A-1.

(4) Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

(5) Emission rates calculated as follows:

Example 1: Emission rate (lb/hr) = Fuel Consumption (MMBtu/hr) * Emission Factor (lb/MMBtu)

Example 2: Emission rate (lb/hr) = Operating Rate (bhp) * Emission Factor (g/bhp-hr) / 453.6 (g/lb)

Example 3: Emission Rate (lb/hr) = Fuel Consumption (MMBtu/hr) / Fuel Heating Value (Btu/scf) * Emission Factor (lb/MMScf)

Example 4: CO₂e Emission rate (TPY) = CO₂ ER (TPY)*GWP + N₂O ER (TPY)*GWP + CH₄ ER (TPY)*GWP

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 2	TEMPO Subject Item ID EQT0017	Emission Point ID No. GCTK02

Operating Data¹	
Tank Working Volume	2,100.00 gal
Operating Rate ¹	12,685.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC ²	NA	BREEZE TankESP	0.03	0.03	288.93	0.14
VOC ³	NA	Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method	1.31	1.31	11,460.00	5.73
Total VOC⁴			1.34	1.34	11,748.93	5.87

Speciated HAP/TAP Emissions from Propanol-based Naphthalene Chemical

Pollutant ⁵	Wt% ⁵	Emission Rates ⁶			
		Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
Naphthalene	5%	0.02	0.02	151.99	0.08

¹ Provided by Cheniere Creole Trail Pipeline, L.P. Operating Rate includes condensate (8,400 gal/yr), propanol-based naphthalene chemical (3,285 gal/yr), and diesel (1,000 gal/yr) throughputs.

² Emissions include working and breathing.

³ Emissions include flash emissions from condensate, propanol-based naphthalene chemical, and diesel.

⁴ Emissions include working and breathing + flash emissions.

⁵ Based on safety data sheet.

⁶ Emission rates calculated as follows:

$$\begin{aligned}
 \text{Annual (tons/yr)} &= (\text{Total VOC, tpy} \times \text{Propanol-based Naphthalene Chemical Throughput (gal/yr)} / \text{Total Throughput (gal/yr)} \times \text{Wt\%}) \\
 &= (5.87 \text{ tons/yr} \times 3,285 \text{ gal/yr} / 12,685.00 \text{ gal/yr} \times 5\%) \\
 &= 0.08 \text{ tpy}
 \end{aligned}$$

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTK02

Identification
 User Identification: GCTK02
 City: Lake Charles
 State: LA
 Company: Gillis Compressor Station
 Type of Tank: FRT (no floating roof)
 Description: Condensate Storage Tank No. 2

Tank Dimensions
 Shell Height (ft): 12.00
 Diameter (ft): 5.33
 Liquid Height (ft): 11.50
 Avg. Liquid Height (ft): 6.25
 Volume (gallons): 2,005.14
 Turnovers: 6.33
 Net Throughput(gal/yr): 12,685.00
 Insulation Condition: Not Insulated

Paint Characteristics
 Shell Color/Shade: Medium Gray Paint
 Shell Condition: Average
 Roof Color/Shade: Medium Gray Paint
 Roof Condition: Average

Roof Characteristics
 Type: Column-Supported (Cone)
 Height (ft): 1.00
 Roof Slope (ft/ft): 0.38

Breather Vent Settings
 Vacuum Settings (psig): -0.03
 Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTK02 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Gasoline (RVP 7)	All	74.22	66.51	81.92	71.82	4.6195	3.9726	5.3487	66.0000			92.00 Option 4 RVP=7, ASTM Slope=3

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTK02 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations

Standing Losses (lb)	199.1011
Vapor Space Volume (cu ft)	135.9848
Vapor Density (lb/cu ft)	0.0532
Vapor Space Expansion Factor	0.1886
Vented Vapor Saturation Factor	0.4015
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	135.9848
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	6.0878
Tank Shell Height (ft)	12.0000
Average Liquid Height (ft)	6.2500
Roof Outage (ft)	0.3378
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.3378
Roof Height (ft)	1.0000
Roof Slope (ft/ft)	0.3800
Shell Radius (ft)	2.6665
Vapor Density	
Vapor Density (lb/cu ft)	0.0532
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Daily Avg. Liquid Surface Temp. (deg. F)	74.2194
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1886
Daily Vapor Temperature Range (deg. R)	30.8197
Daily Vapor Pressure Range (psia)	1.3761
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.9726
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	5.3487
Daily Avg. Liquid Surface Temp. (deg F)	74.2194
Daily Min. Liquid Surface Temp. (deg F)	66.5145
Daily Max. Liquid Surface Temp. (deg F)	81.9243
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.4015
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Space Outage (ft)	6.0878

Working Losses (lb)	89.8274
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Annual Net Throughput (gal/yr.)	12,685.0000
Annual Turnovers	7.2300
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	2,005.1410
Maximum Liquid Height (ft)	11.5000
Tank Diameter (ft)	5.3330
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	288.9285

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 2	TEMPO Subject Item ID EQT0017	Emission Point ID No. GCTK02

Volatile Organic Compound Emission Calculation for Flashing
Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method

CASE: Gillis Compressor Station

CASE INPUTS:

Based on ethane	Stock Tank API Gravity	40	API
	Separator Pressure (psig)	850	P _i
Based on pentane Estimated	Separator Temperature (F)	80	T _i
	Separator Gas Gravity	0.56	SG _i
	Barrels of Oil Per Day (BOPD)	0.83	Q
	Stock Tank Gas Molecular Weight	87.1	MW
	Wt. Fraction VOC (C ₃ +) of Stock Tank Gas	0.800	VOC
	Atmospheric Pressure (psia)	14.7	P _{atm}

Methodology Constraints

16 > API < 58	API
50 > P _i < 5250	psia
70 > T _i < 295	F
0.56 > SG _i < 1.18	28.97/MW
None > Q < None	BOPD
18 > MW < 125	lb/lb-mol
0.5 > VOC < 1.00	Fraction
20 > R _s < 2070	scf/STB

$$R_s = (C_1 \times SG_x \times (P_i^{C_2})) \times \exp((C_3 \times API)/(T_i + 460))$$

Where:

- R_s = Gas/Oil Ratio of liquid at pressure of interest
- SG_x = Dissolved gas gravity at 100 psig
- P_i = Pressure at initial condition (psia)
- API = API Gravity of liquid hydrocarbon at final condition
- T_i = Temperature of initial condition (F)

Constants	API Gravity < 30	API Gravity > 30
C ₁	= 0.0362	0.0178
C ₂	= 1.0937	1.187
C ₃	= 25.724	23.931

For SG_x = Dissolved gas gravity at 100 psig
= SG_i [1.0 + 0.00005912 x API x T_i x log(P/114.7)]

SG_i = Gas Gravity at initial condition

SG _x	= 0.6529
C ₁	= 0.0178
C ₂	= 1.187
C ₃	= 23.931

R _s	= 209.51 scf/bbl	for P _i + P _{atm}	= 864.7
----------------	------------------	---------------------------------------	---------

$$THC = R_s \times Q \times MW \times 1/385 \text{ scf/lb-mol} \times 365 \text{ day/yr} \times 1 \text{ ton}/2000 \text{ lb}$$

- THC = Total hydrocarbons (tons/year)
- R_s = Solution Oil/Gas Ratio (scf/STB)
- Q = Oil Production Rate (bbl/day)
- MW = Molecular Weight of Stock Tank Gas (lb/lb-mol)
- 385 = Volume of 1 lb/lb-mol of gas at 14.7 psia and 68 F

THC	= 7.16 tpy
-----	------------

$$VOC = THC \times \text{Frac } C_{3+} \text{ in the Stock Tank Vapor}$$

VOC	= 5.73 tpy	from flashing of gas from separator to tank pressure
-----	------------	--

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 3	TEMPO Subject Item ID EQT0018	Emission Point ID No. GCTK03

Operating Data¹	
Tank Working Volume	2,100.00 gal
Operating Rate ¹	12,685.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC ²	NA	BREEZE TankESP	0.03	0.03	288.93	0.14
VOC ³	NA	Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method	1.31	1.31	11,460.00	5.73
Total VOC⁴			1.34	1.34	11,748.93	5.87

Speciated HAP/TAP Emissions from Propanol-based Naphthalene Chemical

Pollutant ⁵	Wt% ⁵	Emission Rates ⁶			
		Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
Naphthalene	5%	0.02	0.02	151.99	0.08

¹ Provided by Cheniere Creole Trail Pipeline, L.P. Operating Rate includes condensate (8,400 gal/yr), propanol-based naphthalene chemical (3,285 gal/yr), and diesel (1,000 gal/yr) throughputs.

² Emissions include working and breathing.

³ Emissions include flash emissions from condensate, propanol-based naphthalene chemical, and diesel.

⁴ Emissions include working and breathing + flash emissions.

⁵ Based on safety data sheet.

⁶ Emission rates calculated as follows:

$$\begin{aligned}
 \text{Annual (tons/yr)} &= (\text{Total VOC, tpy} \times \text{Propanol-based Naphthalene Chemical Throughput (gal/yr)} / \text{Total Throughput (gal/yr)} \times \text{Wt}\%) \\
 &= (5.87 \text{ tons/yr} \times 3,285 \text{ gal/yr} / 12,685.00 \text{ gal/yr} \times 5\%) \\
 &= 0.08 \text{ tpy}
 \end{aligned}$$

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTK03

Identification

User Identification:	GCTK03
City	Lake Charles
State	LA
Company	Gillis Compressor Station
Type of Tank	FRT (no floating roof)
Description	Condensate Storage Tank No. 3

Tank Dimensions

Shell Height (ft)	12.00
Diameter (ft)	5.33
Liquid Height (ft)	11.50
Avg. Liquid Height (ft)	6.25
Volume (gallons)	2,005.14
Turnovers	6.33
Net Throughput(gal/yr)	12,685.00
Insulation Condition	Not Insulated

Paint Characteristics

Shell Color/Shade	Medium Gray Paint
Shell Condition	Average
Roof Color/Shade	Medium Gray Paint
Roof Condition	Average

Roof Characteristics

Type	Column-Supported (Cone)
Height (ft)	1.00
Roof Slope (ft/ft)	0.38

Breather Vent Settings

Vacuum Settings (psig)	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTK03 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Gasoline (RVP 7)	All	74.22	66.51	81.92	71.82	4.6195	3.9726	5.3487	66.0000			92.00 Option 4: RVP=7, ASTM Slope=3

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTK03 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	199.1011
Vapor Space Volume (cu ft)	135.9848
Vapor Density (lb/cu ft)	0.0532
Vapor Space Expansion Factor	0.1886
Vented Vapor Saturation Factor	0.4015
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	135.9848
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	6.0878
Tank Shell Height (ft)	12.0000
Average Liquid Height (ft)	6.2500
Roof Outage (ft)	0.3378
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.3378
Roof Height (ft)	1.0000
Roof Slope (ft/ft)	0.3800
Shell Radius (ft)	2.6665
Vapor Density	
Vapor Density (lb/cu ft)	0.0532
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Daily Avg. Liquid Surface Temp. (deg. F)	74.2194
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1886
Daily Vapor Temperature Range (deg. R)	30.8197
Daily Vapor Pressure Range (psia)	1.3761
Breather Vent Press. Setting Range (psia)	0.0500
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.9726
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	5.3487
Daily Avg. Liquid Surface Temp. (deg. F)	74.2194
Daily Min. Liquid Surface Temp. (deg. F)	66.5145
Daily Max. Liquid Surface Temp. (deg. F)	81.9243
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.4015
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Space Outage (ft)	6.0878

Working Losses (lb)	89.8274
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Annual Net Throughput (gal/yr.)	12,685.0000
Annual Turnovers	7.2300
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	2,005.1410
Maximum Liquid Height (ft)	11.5000
Tank Diameter (ft)	5.3330
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	288.9285

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 3	TEMPO Subject Item ID EQT0018	Emission Point ID No. GCTK03

Volatile Organic Compound Emission Calculation for Flashing
Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method

CASE: Gillis Compressor Station

CASE INPUTS:

Based on ethane Based on pentane Estimated	Stock Tank API Gravity	40	API
	Separator Pressure (psig)	850	P _i
	Separator Temperature (F)	80	T _i
	Separator Gas Gravity	0.56	SG _i
	Barrels of Oil Per Day (BOPD)	0.83	Q
	Stock Tank Gas Molecular Weight	87.1	MW
	Wt. Fraction VOC (C ₃ +) of Stock Tank Gas	0.800	VOC
	Atmospheric Pressure (psia)	14.7	P _{atm}

Methodology Constraints

16 > API < 58	API
50 > P _i < 5250	psia
70 > T _i < 295	F
0.56 > SG _i < 1.18	28.97/MW
None > Q < None	BOPD
18 > MW < 125	lb/lb-mol
0.5 > VOC < 1.00	Fraction
20 > R _s < 2070	scf/STB

$$R_s = (C_1 \times SG_x \times (P_i^{C_2})) \times \exp((C_3 \times API)/(T_i + 460))$$

Where:

- R_s = Gas/Oil Ratio of liquid at pressure of interest
- SG_x = Dissolved gas gravity at 100 psig
- P_i = Pressure at initial condition (psia)
- API = API Gravity of liquid hydrocarbon at final condition
- T_i = Temperature of initial condition (F)

Constants	API Gravity < 30	API Gravity > 30
C ₁	= 0.0362	0.0178
C ₂	= 1.0937	1.187
C ₃	= 25.724	23.931

For SG_x = Dissolved gas gravity at 100 psig
= SG_i [1.0 + 0.00005912 x API x T_i x log(P_i/114.7)]

SG_i = Gas Gravity at initial condition

SG _x	= 0.6529
C ₁	= 0.0178
C ₂	= 1.187
C ₃	= 23.931

R _s	= 209.51 scf/bbl	for P _i + Patm =	864.7
----------------	------------------	-----------------------------	-------

$$THC = R_s \times Q \times MW \times 1/385 \text{ scf/lb-mol} \times 365 \text{ day/yr} \times 1 \text{ ton}/2000 \text{ lb}$$

- THC = Total hydrocarbons (tons/year)
- R_s = Solution Oil/Gas Ratio (scf/STB)
- Q = Oil Production Rate (bbl/day)
- MW = Molecular Weight of Stock Tank Gas (lb/lb-mol)
- 385 = Volume of 1 lb/lb-mol of gas at 14.7 psia and 68 F

THC	= 7.16 tpy
-----	------------

$$VOC = THC \times \text{Frac } C_{3+} \text{ in the Stock Tank Vapor}$$

VOC	= 5.73 tpy	from flashing of gas from separator to tank pressure
-----	------------	--

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 4	TEMPO Subject Item ID EQT0019	Emission Point ID No. GCTK04

Operating Data¹	
Tank Working Volume	2,100.00 gal
Operating Rate ¹	12,685.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC ²	NA	BREEZE TankESP	0.03	0.03	288.93	0.14
VOC ³	NA	Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method	1.31	1.31	11,460.00	5.73
Total VOC⁴			1.34	1.34	11,748.93	5.87

Speciated HAP/TAP Emissions from Propanol-based Naphthalene Chemical

Pollutant ⁵	Wt% ⁵	Emission Rates ⁶			
		Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
Naphthalene	5%	0.02	0.02	151.99	0.08

¹ Provided by Cheniere Creole Trail Pipeline, L.P. Operating Rate includes condensate (8,400 gal/yr), propanol-based naphthalene chemical (3,285 gal/yr), and diesel (1,000 gal/yr) throughputs.

² Emissions include working and breathing.

³ Emissions include flash emissions from condensate, propanol-based naphthalene chemical, and diesel.

⁴ Emissions include working and breathing + flash emissions.

⁵ Based on safety data sheet.

⁶ Emission rates calculated as follows:

$$\begin{aligned}
 \text{Annual (tons/yr)} &= (\text{Total VOC, tpy} \times \text{Propanol-based Naphthalene Chemical Throughput (gal/yr)} / \text{Total Throughput (gal/yr)} \times \text{Wt}\%) \\
 &= (5.87 \text{ tons/yr} \times 3,285 \text{ gal/yr} / 12,685.00 \text{ gal/yr} \times 5\%) \\
 &= 0.08 \text{ tpy}
 \end{aligned}$$

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTK04

Identification
 User Identification: GCTK04
 City: Lake Charles
 State: LA
 Company: G&S Compressor Station
 Type of Tank: FRT (no floating roof)
 Description: Condensate Storage Tank No. 4

Tank Dimensions
 Shell Height (ft): 12.00
 Diameter (ft): 5.33
 Liquid Height (ft): 11.50
 Avg. Liquid Height (ft): 6.25
 Volume (gallons): 2,005.14
 Turnovers: 6.33
 Net Throughput(gal/yr): 12,685.00
 Insulation Condition: Not Insulated

Paint Characteristics
 Shell Color/Shade: Medium Gray Paint
 Shell Condition: Average
 Roof Color/Shade: Medium Gray Paint
 Roof Condition: Average

Roof Characteristics
 Type: Column-Supported (Cone)
 Height (ft): 1.00
 Roof Slope (ft/ft): 0.38

Breather Vent Settings
 Vacuum Settings (psig): -0.03
 Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTK04 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Gasoline (RVP 7)	All	74.22	66.51	81.92	71.82	4.6195	3.9726	5.3487	66.0000			92.00 Option 4. RVP=7, ASTM Slope=3

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTK04 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	199.1011
Vapor Space Volume (cu ft)	135.9848
Vapor Density (lb/cu ft)	0.0532
Vapor Space Expansion Factor	0.1886
Vented Vapor Saturation Factor	0.4015
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	135.9848
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	6.0878
Tank Shell Height (ft)	12.0000
Average Liquid Height (ft)	6.2500
Roof Outage (ft)	0.3378
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.3378
Roof Height (ft)	1.0000
Roof Slope (ft/ft)	0.3800
Shell Radius (ft)	2.6665
Vapor Density	
Vapor Density (lb/cu ft)	0.0532
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Daily Avg. Liquid Surface Temp. (deg. F)	74.2194
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1886
Daily Vapor Temperature Range (deg. R)	30.8197
Daily Vapor Pressure Range (psia)	1.3761
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.9726
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	5.3487
Daily Avg. Liquid Surface Temp. (deg F)	74.2194
Daily Min. Liquid Surface Temp. (deg F)	66.5145
Daily Max. Liquid Surface Temp. (deg F)	81.9243
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.4015
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Space Outage (ft)	6.0878

Working Losses (lb)	89.8274
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Annual Net Throughput (gal/yr.)	12,685.0000
Annual Turnovers	7.2300
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	2,005.1410
Maximum Liquid Height (ft)	11.5000
Tank Diameter (ft)	5.3330
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	288.9285

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 4	TEMPO Subject Item ID EQT0019	Emission Point ID No. GCTK04

Volatile Organic Compound Emission Calculation for Flashing
Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method

CASE: Gillis Compressor Station

CASE INPUTS:

	Stock Tank API Gravity	40	API
	Separator Pressure (psig)	850	P _i
	Separator Temperature (F)	80	T _i
Based on ethane	Separator Gas Gravity	0.56	SG _i
	Barrels of Oil Per Day (BOPD)	0.83	Q
Based on pentane	Stock Tank Gas Molecular Weight	87.1	MW
Estimated	Wt. Fraction VOC (C ₃ +) of Stock Tank Gas	0.800	VOC
	Atmospheric Pressure (psia)	14.7	P _{atm}

Methodology Constraints

16 > API < 58	API
50 > P _i < 5250	psia
70 > T _i < 295	F
0.56 > SG _i < 1.18	28.97/MW
None > Q < None	BOPD
18 > MW < 125	lb/lb-mol
0.5 > VOC < 1.00	Fraction
20 > R _s < 2070	scf/STB

$$R_s = (C_1 \times SG_x \times (P_i^{C_2})) \times \exp((C_3 \times API)/(T_i + 460))$$

Where:

- R_s = Gas/Oil Ratio of liquid at pressure of interest
- SG_x = Dissolved gas gravity at 100 psig
- P_i = Pressure at initial condition (psia)
- API = API Gravity of liquid hydrocarbon at final condition
- T_i = Temperature of initial condition (F)

Constants	API Gravity < 30	API Gravity > 30
C ₁	= 0.0362	0.0178
C ₂	= 1.0937	1.187
C ₃	= 25.724	23.931

For SG_x = Dissolved gas gravity at 100 psig
= SG_i [1.0 + 0.00005912 x API x T_i x log(P/114.7)]

SG_i = Gas Gravity at initial condition

SG _x	= 0.6529
C ₁	= 0.0178
C ₂	= 1.187
C ₃	= 23.931

R _s	= 209.51 scf/bbl	for P _i + P _{atm} =	864.7
----------------	------------------	---	-------

$$THC = R_s \times Q \times MW \times 1/385 \text{ scf/lb-mol} \times 365 \text{ day/yr} \times 1 \text{ ton}/2000 \text{ lb}$$

- THC = Total hydrocarbons (tons/year)
- R_s = Solution Oil/Gas Ratio (scf/STB)
- Q = Oil Production Rate (bbl/day)
- MW = Molecular Weight of Stock Tank Gas (lb/lb-mol)
- 385 = Volume of 1 lb/lb-mol of gas at 14.7 psia and 68 F

THC	= 7.16 tpy
-----	------------

$$VOC = THC \times \text{Frac } C_{3+} \text{ in the Stock Tank Vapor}$$

VOC	= 5.73 tpy	from flashing of gas from separator to tank pressure
-----	------------	--

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Chemical Injection Tote No. 1	TEMPO Subject Item ID EQT0020	Emission Point ID No. GCTOTE01

Operating Data¹	
Tank Volume	250.00 gal
Operating Rate	2,920.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.003	0.003	23.27	0.01
Total VOC ²			0.003	0.003	23.27	0.01

¹ Provided by Cheniere Creole Trail Pipeline, L.P.

² Emissions include working and breathing.

³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTOTE01

Identification
User Identification: GCTOTE01
City: Lake Charles
State: LA
Company: Gillis Compressor Station
Type of Tank: Horizontal Tank
Description: Chemical Injection Tote No. 1

Tank Dimensions
Shell Length (ft): 5.00
Diameter (ft): 3.00
Volume (gallons): 250.00
Turnovers: 11.68
Net Throughput(gal/yr): 2,920.00
Insulation Condition: Not Insulated

Paint Characteristics
Shell Color/Shade: White Paint
Shell Condition: Average

Breather Vent Settings
Vacuum Settings (psig): -0.03
Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTOTE01 - Horizontal Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Propanol-based Naphthalene Chemical	All	71.06	66.11	76.00	71.06	2.6000	2.6000	2.6000	88.6100			88.6100	N/A
Naphthalene									128.1700	0.0500	0.0001	128.1700	Option 2 A=7.146, B=1831.6, C=211.82

TankESP

Emissions Report - Detail Format

Detail Calculations (AP-42)

GCTOTE01 - Horizontal Tank

Lake Charles, LA

Annual Emission Calculations

Standing Losses (lb)	7.5132
Vapor Space Volume (cu ft)	18.4679
Vapor Density (lb/cu ft)	0.0405
Vapor Space Expansion Factor	0.0323
Vented Vapor Saturation Factor	0.8550
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	18.4679
Tank Diameter (ft)	3.0000
Effective Diameter (ft)	4.3702
Vapor Space Outage (ft)	1.2312
Tank Shell Length (ft)	5.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0405
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0323
Daily Vapor Temperature Range (deg. R)	19.7807
Daily Vapor Pressure Range (psia)	0.0090
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	2.6000
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	2.6000
Daily Avg. Liquid Surface Temp. (deg F)	71.0588
Daily Min. Liquid Surface Temp. (deg F)	66.1136
Daily Max. Liquid Surface Temp. (deg F)	76.0040
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.8550
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Vapor Space Outage (ft)	1.2312
Working Losses (lb)	15.7519
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Annual Net Throughput (gal/yr.)	2,920,0000
Annual Turnovers	11.5659
Turnover Factor	1.0000
Tank Diameter (ft)	3.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	23.2651

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Chemical Injection Tote No. 2	TEMPO Subject Item ID EQT0021	Emission Point ID No. GCTOTE02

Operating Data¹	
Tank Volume	250.00 gal
Operating Rate	2,920.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.003	0.003	23.27	0.01
Total VOC ²			0.003	0.003	23.27	0.01

¹ Provided by Cheniere Creole Trail Pipeline, L.P.

² Emissions include working and breathing.

³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTOTE02

Identification

User Identification:	GCTOTE02
City:	Lake Charles
State:	LA
Company:	Gillis Compressor Station
Type of Tank:	Horizontal Tank
Description:	Chemical Injection Tote No. 2

Tank Dimensions

Shell Length (ft)	5.00
Diameter (ft)	3.00
Volume (gallons)	250.00
Turnovers:	11.68
Net Throughput(gal/yr)	2,920.00
Insulation Condition	Not Insulated

Paint Characteristics

Shell Color/Shade:	White Paint
Shell Condition	Average

Breather Vent Settings

Vacuum Settings (psig)	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTOTE02 - Horizontal Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Propanol-based Naphthalene Chemical	All	71.06	66.11	76.00	71.06	2.6000	2.6000	2.6000	88.6100			88.6100	N/A
Naphthalene									128.1700	0.0500	0.0001	128.1700	Option 2 A=7.146, B=1831.6, C=211.82

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTOTE02 - Horizontal Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	7.6132
Vapor Space Volume (cu ft)	18.4679
Vapor Density (lb/cu ft)	0.0405
Vapor Space Expansion Factor	0.0323
Vented Vapor Saturation Factor	0.8550
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	18.4679
Tank Diameter (ft)	3.0000
Effective Diameter (ft)	4.3702
Vapor Space Outage (ft)	1.2312
Tank Shell Length (ft)	5.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0405
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0323
Daily Vapor Temperature Range (deg. R)	19.7807
Daily Vapor Pressure Range (psia)	0.0000
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
	2.6000
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	
	2.6000
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	
Daily Avg. Liquid Surface Temp. (deg F)	71.0588
Daily Min. Liquid Surface Temp. (deg F)	66.1136
Daily Max. Liquid Surface Temp. (deg F)	76.0040
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.8550
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Vapor Space Outage (ft)	1.2312
Working Losses (lb)	
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Annual Net Throughput (gal/yr.)	2,920.0000
Annual Turnovers	11.5659
Turnover Factor	1.0000
Tank Diameter (ft)	3.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	
	0%
Total Losses (lb)	23.2651

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Chemical Injection Tote No. 3	TEMPO Subject Item ID EQT0022	Emission Point ID No. GCTOTE03

Operating Data¹	
Tank Volume	250.00 gal
Operating Rate	3,285.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.003	0.003	25.23	0.01
Total VOC ²			0.003	0.003	25.23	0.01

¹ Provided by Cheniere Creole Trail Pipeline, L.P.

² Emissions include working and breathing.

³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTOTE03

Identification

User Identification:	GCTOTE03
City:	Lake Charles
State:	LA
Company:	Gillis Compressor Station
Type of Tank:	Horizontal Tank
Description:	Chemical Injection Tote No. 3

Tank Dimensions

Shell Length (ft)	5.00
Diameter (ft)	3.00
Volume (gallons)	250.00
Turnovers:	13.14
Net Throughput(gal/yr)	3,285.00
Insulation Condition	Not Insulated

Paint Characteristics

Shell Color/Shade:	White Paint
Shell Condition	Average

Breather Vent Settings

Vacuum Settings (psig)	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.69 psia)

TankESP
Emissions Report - Detail Format
Liquid Contents of Storage Tank

GCTOTE03 - Horizontal Tank
Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.	Temp (deg F)	Avg.	Min.	Max.					
Propanol-based Naphthalene Chemical	All	71.06	66.11	76.00	71.06	2.6000	2.6000	2.6000	88.6100			88.6100	N/A
Naphthalene									128.1700	0.0500	0.0001	128.1700	Option 2: A=7.146, B=1831.6, C=211.82

TankESP

Emissions Report - Detail Format

Detail Calculations (AP-42)

GCTOTE03 - Horizontal Tank

Lake Charles, LA

Annual Emission Calculations

Standing Losses (lb)	7.5132
Vapor Space Volume (cu ft)	18.4679
Vapor Density (lb/cu ft)	0.0405
Vapor Space Expansion Factor	0.0323
Vented Vapor Saturation Factor	0.8550
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	18.4679
Tank Diameter (ft)	3.0000
Effective Diameter (ft)	4.3702
Vapor Space Outage (ft)	1.2312
Tank Shell Length (ft)	5.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0405
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0323
Daily Vapor Temperature Range (deg. R)	19.7807
Daily Vapor Pressure Range (psia)	0.0000
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	2.6000
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	2.6000
Daily Avg. Liquid Surface Temp. (deg F)	71.0588
Daily Min. Liquid Surface Temp. (deg F)	66.1136
Daily Max. Liquid Surface Temp. (deg F)	76.0040
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.8550
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Vapor Space Outage (ft)	1.2312
Working Losses (lb)	17.7209
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Annual Net Throughput (gal/yr.)	3,285,0000
Annual Turnovers	13.0116
Turnover Factor	1.0000
Tank Diameter (ft)	3.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	25.2341

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Chemical Injection Tote No. 4	TEMPO Subject Item ID EQT0023	Emission Point ID No. GCTOTE04

Operating Data¹	
Tank Volume	250.00 gal
Operating Rate	3,285.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.003	0.003	25.23	0.01
Total VOC ²			0.003	0.003	25.23	0.01

¹ Provided by Cheniere Creole Trail Pipeline, L.P.

² Emissions include working and breathing.

³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTOTE04

Identification

User Identification	GCTOTE04
City	Lake Charles
State	LA
Company	Gillis Compressor Station
Type of Tank	Horizontal Tank
Description	Chemical Injection Tote No. 4

Tank Dimensions

Shell Length (ft)	5.00
Diameter (ft)	3.00
Volume (gallons)	250.00
Turnovers	13.14
Net Throughput(gal/yr)	3,285.00
Insulation Condition	Not Insulated

Paint Characteristics

Shell Color/Shade	White Paint
Shell Condition	Average

Breather Vent Settings

Vacuum Settings (psig)	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTOTE04 - Horizontal Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Propanol-based Naphthalene Chemical	All	71.06	66.11	76.00	71.06	2.6000	2.6000	2.6000	88.6100			88.6100	N/A
Naphthalene									128.1700	0.0500	0.0001	128.1700	Option 2: A=7.146, B=1831.6, C=211.82

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTOTE04 - Horizontal Tank
Lake Charles, LA

Annual Emission Calculations

Standing Losses (lb)	7.5132
Vapor Space Volume (cu ft)	18.4679
Vapor Density (lb/cu ft)	0.0405
Vapor Space Expansion Factor	0.0323
Vented Vapor Saturation Factor	0.8550
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	18.4679
Tank Diameter (ft)	3.0000
Effective Diameter (ft)	4.3702
Vapor Space Outage (ft)	1.2312
Tank Shell Length (ft)	5.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0405
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cu ft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0323
Daily Vapor Temperature Range (deg. R)	19.7807
Daily Vapor Pressure Range (psia)	0.0000
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	2.6000
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	2.6000
Daily Avg. Liquid Surface Temp. (deg F)	71.0588
Daily Min. Liquid Surface Temp. (deg F)	66.1136
Daily Max. Liquid Surface Temp. (deg F)	76.0040
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.8550
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Vapor Space Outage (ft)	1.2312
Working Losses (lb)	17.7209
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Annual Net Throughput (gal/yr.)	3,285,0000
Annual Turnovers	13.0116
Turnover Factor	1.0000
Tank Diameter (ft)	3.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	25.2341

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Chemical Injection Tote No. 5	TEMPO Subject Item ID EQT0024	Emission Point ID No. GCTOTE05

Operating Data¹	
Tank Volume	250.00 gal
Operating Rate	3,285.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.003	0.003	25.23	0.01
Total VOC²			0.003	0.003	25.23	0.01

¹ Provided by Cheniere Creole Trail Pipeline, L.P.

² Emissions include working and breathing.

³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTOTE05

Identification

User Identification	GCTOTE05
City	Lake Charles
State	LA
Company	Gillis Compressor Station
Type of Tank	Horizontal Tank
Description	Chemical Injection Tote No. 5

Tank Dimensions

Shell Length (ft)	5.00
Diameter (ft)	3.00
Volume (gallons)	250.00
Turnovers	13.14
Net Throughput(gal/yr)	3,285.00
Insulation Condition	Not Insulated

Paint Characteristics

Shell Color/Shade	White Paint
Shell Condition	Average

Breather Vent Settings

Vacuum Settings (psig)	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTOTE05 - Horizontal Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Propanol-based Naphthalene Chemical	All	71.06	66.11	76.00	71.06	2.6000	2.6000	2.6000	88.6100			88.6100	N/A
Naphthalene									128.1700	0.0500	0.0001	128.1700	Option 2 A=7.146, B=1831.6, C=211.82

TankESP

**Emissions Report - Detail Format
Detail Calculations (AP-42)**

**GCTOTE05 - Horizontal Tank
Lake Charles, LA**

Annual Emission Calculations

Standing Losses (lb)	7.5132
Vapor Space Volume (cu ft)	18.4679
Vapor Density (lb/cu ft)	0.0405
Vapor Space Expansion Factor	0.0323
Vented Vapor Saturation Factor	0.8550
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	18.4679
Tank Diameter (ft)	3.0000
Effective Diameter (ft)	4.3702
Vapor Space Outage (ft)	1.2312
Tank Shell Length (ft)	5.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0405
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0323
Daily Vapor Temperature Range (deg. R)	19.7807
Daily Vapor Pressure Range (psia)	0.0000
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	2.6000
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	2.6000
Daily Avg. Liquid Surface Temp. (deg F)	71.0588
Daily Min. Liquid Surface Temp. (deg F)	66.1136
Daily Max. Liquid Surface Temp. (deg F)	76.0040
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.8550
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Vapor Space Outage (ft)	1.2312
Working Losses (lb)	17.7209
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Annual Net Throughput (gal/yr.)	3,285,0000
Annual Turnovers	13.0116
Turnover Factor	1.0000
Tank Diameter (ft)	3.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	25.2341

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Chemical Injection Tote No. 6	TEMPO Subject Item ID EQT0025	Emission Point ID No. GCTOTE06

Operating Data¹	
Tank Volume	250.00 gal
Operating Rate	13,140.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.007	0.007	60.19	0.03
Total VOC ²			0.007	0.007	60.19	0.03

¹ Provided by Cheniere Creole Trail Pipeline, L.P.

² Emissions include working and breathing.

³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTOTE06

Identification

User Identification:	GCTOTE06
City:	Lake Charles
State:	LA
Company:	Gillis Compressor Station
Type of Tank:	Horizontal Tank
Description:	Chemical Injection Tote No. 6

Tank Dimensions

Shell Length (ft):	5.00
Diameter (ft):	3.00
Volume (gallons):	250.00
Turnovers:	52.56
Net Throughput(gal/yr):	13,140.00
Insulation Condition:	Not Insulated

Paint Characteristics

Shell Color/Shade:	White Paint
Shell Condition:	Average

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTOTE06 - Horizontal Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Propanol-based Naphthalene Chemical Naphthalene	All	71.06	66.11	76.00	71.06	2.6000	2.6000	2.6000	88.6100 128.1700	0.0500	0.0001	88.6100 128.1700	N/A Option 2: A=7.146, B=1831.6, C=211.82

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTOTE06 - Horizontal Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	7.6132
Vapor Space Volume (cu ft)	18.4679
Vapor Density (lb/cu ft)	0.0405
Vapor Space Expansion Factor	0.0323
Vented Vapor Saturation Factor	0.8550
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	18.4679
Tank Diameter (ft)	3.0000
Effective Diameter (ft)	4.3702
Vapor Space Outage (ft)	1.2312
Tank Shell Length (ft)	5.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0405
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0323
Daily Vapor Temperature Range (deg. R)	19.7807
Daily Vapor Pressure Range (psia)	0.0000
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
	2.6000
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	
	2.6000
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	
	2.6000
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Min. Liquid Surface Temp. (deg. F)	66.1136
Daily Max. Liquid Surface Temp. (deg. F)	76.0040
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.8550
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Vapor Space Outage (ft)	1.2312
Working Losses (lb)	
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Annual Net Throughput (gal/yr.)	13,140,0000
Annual Turnovers	52.0464
Turnover Factor	0.7431
Tank Diameter (ft)	3.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	
	0%
Total Losses (lb)	60.1895

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 6	TEMPO Subject Item ID EQT0027	Emission Point ID No. GCTK06

Operating Data¹	
Tank Working Volume	441.00 gal
Operating Rate ¹	11,770.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC ²	NA	BREEZE TankESP	0.02	0.02	152.83	0.08
VOC ³	NA	Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method	1.21	1.21	10,620.00	5.31
Total VOC⁴			1.23	1.23	10,772.83	5.39

Speciated HAP/TAP Emissions from Propanol-based Naphthalene Chemical

Pollutant ⁵	Wt% ⁵	Emission Rates ⁶			
		Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
Naphthalene	5%	0.03	0.03	300.72	0.15

¹ Provided by Cheniere Creole Trail Pipeline, L.P. Operating Rate includes condensate (4,200 gal/yr), propanol-based naphthalene chemical (6,570 gal/yr), and diesel (1,000 gal/yr) throughputs.

² Emissions include working and breathing.

³ Emissions include flash emissions from condensate, propanol-based naphthalene chemical, and diesel.

⁴ Emissions include working and breathing + flash emissions.

⁵ Based on safety data sheet.

⁶ Emission rates calculated as follows:

$$\begin{aligned}
 \text{Annual (tons/yr)} &= (\text{Total VOC, tpy} \times \text{Propanol-based Naphthalene Chemical Throughput (gal/yr)} / \text{Total Throughput (gal/yr)} \times \text{Wt}\%) \\
 &= (5.39 \text{ tons/yr} \times 6,570 \text{ gal/yr} / 11,770.00 \text{ gal/yr} \times 5\%) \\
 &= 0.15 \text{ tpy}
 \end{aligned}$$

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTK06

Identification	
User Identification:	GCTK06
City:	Lake Charles
State:	LA
Company:	Gillis Compressor Station
Type of Tank:	FRT (no floating roof)
Description:	Condensate Storage Tank No. 6

Tank Dimensions	
Shell Height (ft)	5.00
Diameter (ft)	4.00
Liquid Height (ft)	4.50
Avg. Liquid Height (ft)	2.75
Volume (gallons)	470.01
Turnovers:	25.04
Net Throughput(gal/yr)	11,770.00
Insulation Condition:	Not Insulated

Paint Characteristics	
Shell Color/Shade:	Medium Gray Paint
Shell Condition:	Average
Roof Color/Shade:	Medium Gray Paint
Roof Condition:	Average

Roof Characteristics	
Type:	Column-Supported (Cone)
Height (ft)	1.00
Roof Slope (ft/ft)	0.06

Breather Vent Settings	
Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTK06 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight. Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Gasoline (RVP 7)	All	74.65	66.85	82.46	71.82	4.6581	3.9988	5.4022	66.0000			92.00 Option 4: RVP=7, ASTM Slope=3

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTK06 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	68.9223
Vapor Space Volume (cu ft)	28.7979
Vapor Density (lb/cu ft)	0.0536
Vapor Space Expansion Factor	0.1925
Vented Vapor Saturation Factor	0.6387
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	28.7979
Tank Diameter (ft)	4.0000
Vapor Space Outage (ft)	2.2917
Tank Shell Height (ft)	5.0000
Average Liquid Height (ft)	2.7500
Roof Outage (ft)	0.0417
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.0417
Roof Height (ft)	1.0000
Roof Slope (ft/ft)	0.0625
Shell Radius (ft)	2.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0536
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6581
Daily Avg. Liquid Surface Temp. (deg. F)	74.6508
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1925
Daily Vapor Temperature Range (deg. R)	31.2187
Daily Vapor Pressure Range (psia)	1.4034
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6581
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.9988
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	5.4022
Daily Avg. Liquid Surface Temp. (deg F)	74.6508
Daily Min. Liquid Surface Temp. (deg F)	66.8461
Daily Max. Liquid Surface Temp. (deg F)	82.4555
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.6387
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6581
Vapor Space Outage (ft)	2.2917

Working Losses (lb)	83.9091
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6581
Annual Net Throughput (gal/yr.)	11,770,0000
Annual Turnovers	35.7740
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	470.0137
Maximum Liquid Height (ft)	4.5000
Tank Diameter (ft)	4.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	152.8315

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 6	TEMPO Subject Item ID EQT0027	Emission Point ID No. GCTK06

Volatile Organic Compound Emission Calculation for Flashing
Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method

CASE: Gillis Compressor Station

CASE INPUTS:

Based on ethane	Stock Tank API Gravity	40	API
	Separator Pressure (psig)	850	P _i
	Separator Temperature (F)	80	T _i
Based on pentane	Separator Gas Gravity	0.56	SG _i
Estimated	Barrels of Oil Per Day (BOPD)	0.77	Q
	Stock Tank Gas Molecular Weight	87.1	MW
	Wt. Fraction VOC (C ₃ +) of Stock Tank Gas	0.800	VOC
	Atmospheric Pressure (psia)	14.7	P _{atm}

Methodology Constraints

16 > API < 58	API
50 > P _i < 5250	psia
70 > T _i < 295	F
0.56 > SG _i < 1.18	28.97/MW
None > Q < None	BOPD
18 > MW < 125	lb/lb-mol
0.5 > VOC < 1.00	Fraction
20 > R _s < 2070	scf/STB

$$R_s = (C_1 \times SG_x \times (P_i^{C_2})) \times \exp((C_3 \times API)/(T_i + 460))$$

Where:

- R_s = Gas/Oil Ratio of liquid at pressure of interest
- SG_x = Dissolved gas gravity at 100 psig
- P_i = Pressure at initial condition (psia)
- API = API Gravity of liquid hydrocarbon at final condition
- T_i = Temperature of initial condition (F)

Constants	API Gravity < 30	API Gravity > 30
C ₁	= 0.0362	0.0178
C ₂	= 1.0937	1.187
C ₃	= 25.724	23.931

For SG_x = Dissolved gas gravity at 100 psig
 $= SG_i [1.0 + 0.00005912 \times API \times T_i \times \log(P/114.7)]$

SG_i = Gas Gravity at initial condition

SG _x	= 0.6529
C ₁	= 0.0178
C ₂	= 1.187
C ₃	= 23.931

R _s	= 209.51 scf/bbl	for P _i + P _{atm} =	864.7
----------------	------------------	---	-------

$$THC = R_s \times Q \times MW \times 1/385 \text{ scf/lb-mol} \times 365 \text{ day/yr} \times 1 \text{ ton}/2000 \text{ lb}$$

- THC = Total hydrocarbons (tons/year)
- R_s = Solution Oil/Gas Ratio (scf/STB)
- Q = Oil Production Rate (bbl/day)
- MW = Molecular Weight of Stock Tank Gas (lb/lb-mol)
- 385 = Volume of 1 lb/lb-mol of gas at 14.7 psia and 68 F

THC	= 6.64 tpy
-----	------------

$$VOC = THC \times \text{Frac } C_{3+} \text{ in the Stock Tank Vapor}$$

VOC	= 5.31 tpy	from flashing of gas from separator to tank pressure
-----	------------	--

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Gasoline Storage Tank	TEMPO Subject Item ID EQT0028	Emission Point ID No. GCGST

Operating Data¹	
Tank Volume	550.00 gal
Operating Rate	550.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.012	0.012	109.34	0.05
Total VOC ²			0.012	0.012	109.34	0.05

Speciated HAP/TAP Emissions

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
2,2,4-Trimethylpentane	NA	BREEZE TankESP	<0.001	<0.001	1.18	<0.01
Benzene			<0.001	<0.001	1.02	<0.01
Toluene			<0.001	<0.001	1.18	<0.01

¹ Provided by Cheniere Creole Trail Pipeline, L.P.
² Emissions include working and breathing.
³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCGST

Identification
User Identification: GCGST
City: Lake Charles
State: LA
Company: Gillis Compressor Station
Type of Tank: Horizontal Tank
Description: Gasoline Storage Tank

Tank Dimensions
Shell Length (ft): 6.00
Diameter (ft): 4.00
Volume (gallons): 550.00
Turnovers: 1.00
Net Throughput(gal/yr): 550.00
Insulation Condition: Not Insulated

Paint Characteristics
Shell Color/Shade: Medium Gray Paint
Shell Condition: New

Breather Vent Settings
Vacuum Settings (psig): -0.03
Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
Emissions Report - Detail Format
Liquid Contents of Storage Tank

GCGST - Horizontal Tank
Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 7)	All	75.01	67.26	82.77	75.01	4.6907	4.0315	4.0315	66.0000			92.0000	Option 4 RVP=7, ASTM Slope=3
Benzene									78.1100	0.0180	0.0094	78.1100	Option 2 A=6.906, B=1211, C=220.79
Benzo(g,h,i)perylene									276.3300	0.0000	0.0000	276.3300	Option 2 A=11.82, B=6580, C=273.15
Cumene (isopropylbenzene)									120.1900	0.0050	0.0001	120.1900	Option 2 A=6.929, B=1455.8, C=207.2
Cyclohexane									84.1600	0.0024	0.0013	84.1600	Option 2 A=6.845, B=1203.5, C=222.86
Ethylbenzene									106.1700	0.0140	0.0007	106.1700	Option 2 A=6.95, B=1419.3, C=212.61
Hexane (n-)									86.1800	0.0100	0.0083	86.1800	Option 2 A=6.878, B=1171.5, C=224.37
Iso-octane (2,2,4 trimethylpentane)									114.2300	0.0400	0.0108	114.2300	Option 2 A=6.812, B=1257.8, C=220.74
Naphthalene									128.1700	0.0042	0.0000	128.1700	Option 2 A=7.146, B=1831.6, C=211.82
PACs (Chrysene)									228.2900	0.0000	0.0000	228.2900	Option 2 A=12.32, B=6160, C=273.15
Toluene									92.1400	0.0700	0.0108	92.1400	Option 2 A=7.017, B=1377.6, C=222.64
Trimethylbenzene (1,2,4)									120.1900	0.0250	0.0003	120.1900	Option 2 A=7.044, B=1573.3, C=208.56
Xylene									106.1700	0.0700	0.0031	106.1700	Option 2 A=7.009, B=1462.3, C=215.11

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCST - Horizontal Tank
Lake Charles, LA

Annual Emission Calculations

Standing Losses (lb)	105.3998
Vapor Space Volume (cu ft)	39.3982
Vapor Density (lb/cu ft)	0.0540
Vapor Space Expansion Factor	0.1925
Vented Vapor Saturation Factor	0.7102
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	39.3982
Tank Diameter (ft)	4.0000
Effective Diameter (ft)	5.5279
Vapor Space Outage (ft)	1.6416
Tank Shell Length (ft)	6.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0540
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6907
Daily Avg. Liquid Surface Temp. (deg. F)	75.0133
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cu ft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.6851
Tank Paint Solar Absorptance (Shell)	0.6800
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1925
Daily Vapor Temperature Range (deg. R)	31.0287
Daily Vapor Pressure Range (psia)	1.4027
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6907
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	4.0315
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	4.0315
Daily Avg. Liquid Surface Temp. (deg F)	75.0133
Daily Min. Liquid Surface Temp. (deg F)	67.2561
Daily Max. Liquid Surface Temp. (deg F)	82.7705
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.7102
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6907
Vapor Space Outage (ft)	1.6416
Working Losses (lb)	3.9422
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6907
Annual Net Throughput (gal/yr.)	550.0000
Annual Turnovers	1.0212
Turnover Factor	1.0000
Tank Diameter (ft)	4.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	109.3420

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Fugitive Emissions	TEMPO Subject Item ID FUG0001	Emission Point ID No. GCFUG11

Component Type ⁵	Count ⁵	Service Type	Factor ³	Factor	Total	Total	VOC	VOC	C ₆ ⁴	Naphthalene ⁶	CH ₄	CO ₂	CO ₂ e ²
			(kg/hr/comp)	(lb/hr/comp)	(lbs/hr)	(tons/yr)	(wt%)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
VALVE	2,913	Gas	4.5E-03	9.92E-03	28.90	126.60	2.20%	2.79	0.003	0.14	120.27	1.27	3,008.02
FLANGE	7,746	Gas	3.9E-04	8.60E-04	6.66	29.18	2.20%	0.64	6.42E-04	0.03	27.72	0.29	693.32
RELIEF VALVE	178	Gas	8.8E-03	1.94E-02	3.45	15.13	2.20%	0.33	3.33E-04	0.017	14.37	0.15	359.49
COMPRESSOR SEAL	5	Gas	8.8E-03	1.94E-02	0.10	0.42	2.20%	0.01	9.24E-06	4.62E-04	0.40	0.004	9.98
OPEN-ENDED LINES	39	Gas	2.0E-03	4.41E-03	0.17	0.75	2.20%	0.017	1.65E-05	8.25E-04	0.71	0.008	17.82
VALVE	65	Water / Light Oil	9.8E-05	2.16E-04	1.40E-02	0.06	100.00%	0.06	-	0.003	-	-	-
PUMPS	7	Water / Light Oil	2.4E-05	5.29E-05	3.70E-04	0.002	100.00%	0.002	-	8.11E-05	-	-	-
FLANGES/CONNECTORS ³	185	Water / Light Oil	1.1E-04	2.43E-04	4.49E-02	0.20	100.00%	0.20	-	0.010	-	-	-
RELIEF VALVES	8	Water / Light Oil	1.4E-02	3.09E-02	0.25	1.08	100.00%	1.08	-	0.05	-	-	-
OPEN-ENDED LINES	5	Water / Light Oil	2.5E-04	5.51E-04	2.76E-03	0.012	100.00%	0.012	-	6.04E-04	-	-	-
VALVES	371	Light Oil	2.5E-03	5.51E-03	2.05	8.96	100.00%	8.96	-	0.45	-	-	-
FLANGES/CONNECTORS ³	893	Light Oil	2.1E-04	4.63E-04	0.41	1.81	100.00%	1.81	-	0.09	-	-	-
RELIEF VALVES	46	Light Oil	7.5E-03	1.65E-02	0.76	3.32	100.00%	3.32	-	0.17	-	-	-
OPEN-ENDED LINES	3	Light Oil	1.4E-03	3.09E-03	9.27E-03	0.04	100.00%	0.04	-	0.002	-	-	-
Component Total					42.82	187.56		19.27	< 0.01	0.96	163.47	1.72	4,088.63

¹ Emission Factors from EPA-453/R-95-17, Protocol for Equipment Leak Emission Estimates, Table 2-4, (11/95).

² Assumes 95 wt% CH₄ and 1 wt% CO₂ with CH₄ global warming potential of 25.

³ Breakout of flanges/connectors was not available, therefore, the most conservative factor was utilized.

⁴ Hexane content in natural gas is assumed to be 0.1% by weight of the Total Volatile Organic Compounds. Based on data provided by Cheniere.

Example CO₂e Calculation:

$$(\text{Valve Total Tons/yr})(95 \text{ wt\% CH}_4)(\text{global warming potential for CH}_4) + (\text{Valve Total Tons/yr})(1 \text{ wt\% CO}_2)(\text{global warming potential for CO}_2) = \text{Tons/yr CO}_2\text{e}$$

$$(126.60 \text{ Total Tons/yr})(95 \text{ wt\% CH}_4)(25) + (126.60 \text{ Total Tons/yr})(1 \text{ wt\% CO}_2)(1) = 3,008.02 \text{ Tons/yr CO}_2\text{e}$$

⁵ Based on data provided by Cheniere (updated for the additional fugitive components associated with this permitting action).

⁶ Naphthalene emissions were conservatively assumed to be 5% of the VOC emissions.

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Gas Turbine Driven Compressor Unit E- Titan 130e	TEMPO Subject Item ID New	Emission Point ID No. GCPLCS

Operating Specifications ⁽¹⁾			
Manufacturer	Solar		
Model	Titan 130e-224025		
Rating	23,436 hp		
	7,787.2 Btu/hp-hr		
Avg Operating Rate	182.50 MMBtu/hr	Max Operating Rate	215.68 MMBtu/hr
Fuel Type	Natural Gas		
	1,010.7 Btu/scf		
Hours of Operations	8,760 hrs/year		

Gas Turbine Driven Compressor Unit E - Titan 130e - Criteria and GHG Emissions

Pollutant	Emission Factor		Reference	Emission Rates ⁽⁷⁾		
				Avg (lb/hr)	Max ⁽²⁾ (lb/hr)	Annual (tons/yr)
PM ₁₀	6.50E-03	lb/MMBtu	AP-42 Table 3.1-2a, SCAQMD ⁽³⁾	1.19	1.54	5.20
PM _{2.5}	6.49E-03	lb/MMBtu		1.18	1.54	5.19
SO ₂	14.27	lb/MMscf	Fuel Gas Composition (5 grains sulfur/100 SCF)	2.58	3.35	11.29
NO _x	0.0553	lb/MMBtu	Manufacturer Specification (15 ppmvd @ 15%O ₂)	10.08	13.11	44.17
CO	0.0561	lb/MMBtu	Manufacturer Specification (25 ppmvd @ 15%O ₂)	10.23	13.30	44.81
VOC Total	6.41E-03	lb/MMBtu	Manufacturer Specification (5 ppmvd @ 15%O ₂) ⁽⁶⁾	1.17	1.52	5.12
CO ₂	116.98	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-1 ⁽⁴⁾	21,348	27,752	93,504
N ₂ O	2.20E-04	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽⁴⁾	0.04	0.05	0.18
CH ₄	2.20E-03	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽⁴⁾	0.40	0.52	1.76
CO ₂ e ⁽⁵⁾	-	-	40 CFR 60 Part 98 Subpart C, Table A-1	-	-	93,601

(1) Based on data provided by Cheniere dated February 9, 2023.

(2) A 10% buffer factor was utilized for the maximum emission rates.

(3) AP-42 PM Total Emission Factor specified for PM₁₀ and PM_{2.5} using the South Coast Air Quality Management District Guidance

for internal combustion sources burning gaseous fuel. Both the condensable and filterable emission factors were converted using actual HHV.

(4) Emission factors converted from kg/MMBtu to lb/MMBtu.

(5) Global Warming Potentials (GWP) taken from 40 CFR 60 Part 98 Subpart A, Table A-1.

(6) Total Uncontrolled Hydrocarbons = 25 ppmvd @ 15%O₂.

VOC emissions are based on 20% of this value per Solar Turbines PIL 168 "Volatile Organic Compound, Sulfur Dioxide, and Formaldehyde Emission Estimates".

(7) Emission rates calculated as follows:

Example 1: $Emission\ rate\ (lb/hr) = Fuel\ Consumption\ (MMBtu/hr) * Emission\ Factor\ (lb/MMBtu)$

Example 2: $Emission\ Rate\ (lb/hr) = Fuel\ Consumption\ (MMBtu/hr) / Fuel\ Heating\ Value\ (Btu/scf) * Emission\ Factor\ (lb/MMscf)$

Example 3: $CO_2\ e\ Emission\ rate\ (TPY) = CO_2\ ER\ (TPY) * GWP + N_2O\ ER\ (TPY) * GWP + CH_4\ ER\ (TPY) * GWP$

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Gas Turbine Driven Compressor Unit E- Titan 130e	TEMPO Subject Item ID New	Emission Point ID No. GCPLC5

Operating Specifications ⁽¹⁾			
Manufacturer	Solar		
Model	Titan 130e-22402S		
Rating	23,436 hp		
	7,787.2 Btu/hp-hr		
Avg Operating Rate	182.50 MMBtu/hr	Max Operating Rate	215.68 MMBtu/hr
Fuel Type	Natural Gas		
	1,010.7 Btu/scf		
Hours of Operations	8,760 hrs/year		

Gas Turbine Driven Compressor Unit E - Titan 130e - HAP/TAP Emissions

Pollutant	Emission Factor ⁽²⁾	Emission Rates ^{(4), (5)}		
		Avg (lb/hr)	Max ⁽³⁾ (lb/hr)	Annual (tons/yr)
Acetaldehyde	4.00E-05 lb/MMBtu	0.01	0.01	0.03
Acrolein	6.40E-06 lb/MMBtu	0.001	0.002	0.005
Benzene	1.20E-05 lb/MMBtu	0.002	0.003	0.01
Ethylbenzene	3.20E-05 lb/MMBtu	0.01	0.01	0.03
Formaldehyde	2.41E-03 lb/MMBtu	0.44	0.57	1.93
Naphthalene	1.30E-06 lb/MMBtu	<0.001	<0.001	<0.01
PAH	2.20E-06 lb/MMBtu	<0.001	0.001	0.002
Propylene Oxide	2.90E-05 lb/MMBtu	0.01	0.01	0.02
Toluene	1.30E-04 lb/MMBtu	0.02	0.03	0.10
Xylene (Mixed Isomers)	6.40E-05 lb/MMBtu	0.01	0.02	0.05

(1) Based on data provided by Cheniere dated February 9, 2023.

(2) AP-42, Volume I, Chapter 3, Section 3.1, Stationary Gas Turbines, Table 3.1-3, Emission Factors for Hazardous Air Pollutants From Natural Gas Fired Stationary Gas Turbines, July 1998. Formaldehyde emission factor is based on Solar Turbines PIL 168 "Volatile Organic Compound, Sulfur Dioxide, and Formaldehyde Emission Estimates".

(3) A 10% buffer factor was utilized for the maximum emission rates.

(4) Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

(5) Emission rates calculated as follows:

$$\text{Emission rate (lb/hr)} = \text{Fuel Consumption (MMBtu/hr)} * \text{Emission Factor (lb/MMBtu)}$$

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Emergency Generator	TEMPO Subject Item ID New	Emission Point ID No. GCGEN4

Operating Specifications	
Manufacturer	Dresser Waukesha
Model	VGF24GL/GLD
Rating	543 hp
	6,846 Btu/hp-hr
	3.72 MMBtu/hr
Fuel Type	Natural Gas
	1,010.7 Btu/scf
Hours of Operations	100 hrs/year

Pollutant	Emission Factor		Reference	Emission Rates ^{(4), (5)}		
				Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)
PM ₁₀	9.84E-03	lb/MMBtu	AP-42 Table 3.2-2, SCAQMD ⁽¹⁾	0.04	0.04	<0.01
PM _{2.5}	9.82E-03	lb/MMBtu		0.04	0.04	<0.01
SO ₂	14.27	lb/MMScf	Client Provided based on (5 grains sulfur/100 SCF)	0.05	0.05	<0.01
NO _x	2.00	g/bhp-hr	Manufacturer Specification	2.39	2.39	0.12
CO	4.00	g/bhp-hr	40 CFR 60 Part 60 Subpart JJJ, Table 1	4.79	4.79	0.24
VOC Total	1.00	g/bhp-hr	40 CFR 60 Part 60 Subpart JJJ, Table 1	1.20	1.20	0.06
Acetaldehyde	8.36E-03	lb/MMBtu	AP-42 Table 3.2-2	0.03	0.03	<0.01
Acrolein	5.14E-03	lb/MMBtu	AP-42 Table 3.2-2	0.019	0.019	0.001
Formaldehyde	5.28E-02	lb/MMBtu	AP-42 Table 3.2-2	0.20	0.20	0.01
CO ₂	116.98	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-1 ⁽²⁾	434.93	434.93	21.75
N ₂ O	2.20E-04	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽²⁾	0.001	0.001	4.10E-05
CH ₄	2.20E-03	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽²⁾	0.01	0.01	4.10E-04
CO ₂ e ⁽³⁾	-	-	40 CFR 60 Part 98 Subpart C, Table A-1	-	-	21.77

(1) AP-42 PM Condensable Emission Factors specified for PM₁₀ and PM_{2.5} using the South Coast Air Quality Management District Guidance for internal combustion sources burning gaseous fuel. Both the condensable and filterable emission factors were converted using actual HHV.

(2) Emission factors converted from kg/MMBtu to lb/MMBtu.

(3) Global Warming Potentials (GWP) taken from 40 CFR 60 Part 98 Subpart A, Table A-1.

(4) Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

(5) Emission rates calculated as follows:

Example 1: Emission rate (lb/hr) = Fuel Consumption (MMBtu/hr) * Emission Factor (lb/MMBtu)

Example 2: Emission rate (lb/hr) = Operating Rate (bhp) * Emission Factor (g/bhp-hr) / 453.6 (g/lb)

Example 3: Emission Rate (lb/hr) = Fuel Consumption (MMBtu/hr) / Fuel Heating Value (Btu/scf) * Emission Factor (lb/MMscf)

Example 4: CO₂e Emission rate (TPY) = CO₂ ER (TPY)*GWP + N₂O ER (TPY)*GWP+ CH₄ ER (TPY)*GWP

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Emergency Generator	TEMPO Subject Item ID New	Emission Point ID No. GCGENS

Operating Specifications	
Manufacturer	Dresser Waukesha
Model	VGF24GL/GLD
Rating	543 hp
	6,846 Btu/hp-hr
	3.72 MMBtu/hr
Fuel Type	Natural Gas
	1,010.7 Btu/scf
Hours of Operations	100 hrs/year

Pollutant	Emission Factor		Reference	Emission Rates ^{(4), (5)}		
				Avg (lb/hr)	Max (lb/hr)	Annual (tons/yr)
PM ₁₀	9.84E-03	lb/MMBtu	AP-42 Table 3.2-2, SCAQMD ⁽¹⁾	0.04	0.04	<0.01
PM _{2.5}	9.82E-03	lb/MMBtu		0.04	0.04	<0.01
SO ₂	14.27	lb/MMScf	Client Provided based on (5 grains sulfur/100 SCF)	0.05	0.05	<0.01
NO _x	2.00	g/bhp-hr	Manufacturer Specification	2.39	2.39	0.12
CO	4.00	g/bhp-hr	40 CFR 60 Part 60 Subpart JJJ, Table 1	4.79	4.79	0.24
VOC Total	1.00	g/bhp-hr	40 CFR 60 Part 60 Subpart JJJ, Table 1	1.20	1.20	0.06
Acetaldehyde	8.36E-03	lb/MMBtu	AP-42 Table 3.2-2	0.03	0.03	<0.01
Acrolein	5.14E-03	lb/MMBtu	AP-42 Table 3.2-2	0.019	0.019	0.001
Formaldehyde	5.28E-02	lb/MMBtu	AP-42 Table 3.2-2	0.20	0.20	0.01
CO ₂	116.98	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-1 ⁽²⁾	434.93	434.93	21.75
N ₂ O	2.20E-04	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽²⁾	0.001	0.001	4.10E-05
CH ₄	2.20E-03	lb/MMBtu	40 CFR 60 Part 98 Subpart C, Table C-2 ⁽²⁾	0.01	0.01	4.10E-04
CO ₂ e ⁽³⁾	-	-	40 CFR 60 Part 98 Subpart C, Table A-1	-	-	21.77

(1) AP-42 PM Condensable Emission Factors specified for PM₁₀ and PM_{2.5} using the South Coast Air Quality Management District Guidance for internal combustion sources burning gaseous fuel. Both the condensable and filterable emission factors were converted using actual HHV.

(2) Emission factors converted from kg/MMBtu to lb/MMBtu.

(3) Global Warming Potentials (GWP) taken from 40 CFR 60 Part 98 Subpart A, Table A-1.

(4) Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

(5) Emission rates calculated as follows:

Example 1: Emission rate (lb/hr) = Fuel Consumption (MMBtu/hr) * Emission Factor (lb/MMBtu)

Example 2: Emission rate (lb/hr) = Operating Rate (bhp) * Emission Factor (g/bhp-hr) / 453.6 (g/lb)

Example 3: Emission Rate (lb/hr) = Fuel Consumption (MMBtu/hr) / Fuel Heating Value (Btu/scf) * Emission Factor (lb/MMScf)

Example 4: CO₂e Emission rate (TPY) = CO₂ ER (TPY)*GWP + N₂O ER (TPY)*GWP+ CH₄ ER (TPY)*GWP

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 7	TEMPO Subject Item ID New	Emission Point ID No. GCTK07

Operating Data¹	
Tank Working Volume	2,100.00 gal
Operating Rate ¹	11,770.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC ²	NA	BREEZE TankESP	0.03	0.03	282.45	0.14
VOC ³	NA	Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method	1.21	1.21	10,620.00	5.31
Total VOC⁴			1.24	1.24	10,902.45	5.45

Speciated HAP/TAP Emissions from Propanol-based Naphthalene Chemical

Pollutant ⁵	Wt% ⁵	Emission Rates ⁶			
		Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
Naphthalene	5%	0.03	0.03	303.17	0.15

¹ Provided by Cheniere Creole Trail Pipeline, L.P. Operating Rate includes condensate (4,200 gal/yr), propanol-based naphthalene chemical (6,570 gal/yr), and diesel (1,000 gal/yr) throughputs.

² Emissions include working and breathing.

³ Emissions include flash emissions from condensate, propanol-based naphthalene chemical, and diesel.

⁴ Emissions include working and breathing + flash emissions.

⁵ Based on safety data sheet.

⁶ Emission rates calculated as follows:

$$\begin{aligned}
 \text{Annual (tons/yr)} &= (\text{Total VOC, tpy} \times \text{Propanol-based Naphthalene Chemical Throughput (gal/yr)} / \text{Total Throughput (gal/yr)} \times \text{Wt}\%) \\
 &= (5.45 \text{ tons/yr} \times 6,570 \text{ gal/yr} / 11,770.00 \text{ gal/yr} \times 5\%) \\
 &= 0.15 \text{ tpy}
 \end{aligned}$$

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTK07

Identification

User Identification:	GCTK07
City:	Lake Charles
State:	LA
Company:	Gillis Compressor Station
Type of Tank:	FRT (no floating roof)
Description:	Condensate Storage Tank No. 7

Tank Dimensions

Shell Height (ft):	12.00
Diameter (ft):	5.33
Liquid Height (ft):	11.50
Avg. Liquid Height (ft):	6.25
Volume (gallons):	2,005.14
Turnovers:	5.87
Net Throughput(gal/yr):	11,770.00
Insulation Condition:	Not Insulated

Paint Characteristics

Shell Color/Shade:	Medium Gray Paint
Shell Condition:	Average
Roof Color/Shade:	Medium Gray Paint
Roof Condition:	Average

Roof Characteristics

Type:	Column-Supported (Cone)
Height (ft):	1.00
Roof Slope (ft/ft):	0.38

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTK07 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 7)	All	74.22	66.51	81.92	71.82	4.6195	3.9726	5.3487	66.0000			92.00	Option 4 RVP=7, ASTM Slope=3

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTK07 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	199.1011
Vapor Space Volume (cu ft)	135.9848
Vapor Density (lb/cu ft)	0.0532
Vapor Space Expansion Factor	0.1886
Vented Vapor Saturation Factor	0.4015
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	135.9848
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	6.0878
Tank Shell Height (ft)	12.0000
Average Liquid Height (ft)	6.2500
Roof Outage (ft)	0.3378
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.3378
Roof Height (ft)	1.0000
Roof Slope (ft/ft)	0.3800
Shell Radius (ft)	2.8665
Vapor Density	
Vapor Density (lb/cu ft)	0.0532
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Daily Avg. Liquid Surface Temp. (deg. F)	74.2194
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1886
Daily Vapor Temperature Range (deg. R)	30.8197
Daily Vapor Pressure Range (psia)	1.3761
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.9726
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	5.3487
Daily Avg. Liquid Surface Temp. (deg F)	74.2194
Daily Min. Liquid Surface Temp. (deg F)	66.5145
Daily Max. Liquid Surface Temp. (deg F)	81.9243
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.4015
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Space Outage (ft)	6.0878

Working Losses (lb)	83.3479
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Annual Net Throughput (gal/yr.)	11,770.0000
Annual Turnovers	6.7085
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	2,005.1410
Maximum Liquid Height (ft)	11.5000
Tank Diameter (ft)	5.3330
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	282.4490

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 7	TEMPO Subject Item ID New	Emission Point ID No. GCTK07

Volatile Organic Compound Emission Calculation for Flashing
Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method

CASE: Gillis Compressor Station

CASE INPUTS:

Based on ethane	Stock Tank API Gravity	40	API
	Separator Pressure (psig)	850	P _i
Based on pentane Estimated	Separator Temperature (F)	80	T _i
	Separator Gas Gravity	0.56	SG _i
	Barrels of Oil Per Day (BOPD)	0.77	Q
	Stock Tank Gas Molecular Weight	87.1	MW
	Wt. Fraction VOC (C ₃ +) of Stock Tank Gas	0.80	VOC
	Atmospheric Pressure (psia)	14.7	P _{atm}

Methodology Constraints

16 > API < 58	API
50 > P _i < 5250	psia
70 > T _i < 295	F
0.56 > SG _i < 1.18	28.97/MW
None > Q < None	BOPD
18 > MW < 125	lb/lb-mol
0.5 > VOC < 1.00	Fraction
20 > R _s < 2070	scf/STB

$$R_s = (C_1 \times SG_x \times (P_i^{C_2})) \times \exp((C_3 \times API)/(T_i + 460))$$

Where:

- R_s = Gas/Oil Ratio of liquid at pressure of interest
- SG_x = Dissolved gas gravity at 100 psig
- P_i = Pressure at initial condition (psia)
- API = API Gravity of liquid hydrocarbon at final condition
- T_i = Temperature of initial condition (F)

Constants	API Gravity < 30	API Gravity > 30
C ₁	= 0.0362	0.0178
C ₂	= 1.0937	1.187
C ₃	= 25.724	23.931

For SG_x = Dissolved gas gravity at 100 psig
= SG_i [1.0 + 0.00005912 x API x T_i x log(P/114.7)]

SG_i = Gas Gravity at initial condition

SG _x	= 0.6529
C ₁	= 0.0178
C ₂	= 1.187
C ₃	= 23.931

R _s = 209.51 scf/bbl	for P _i + P _{atm} =	864.7
---------------------------------	---	-------

$$THC = R_s \times Q \times MW \times 1/385 \text{ scf/lb-mol} \times 365 \text{ day/yr} \times 1 \text{ ton}/2000 \text{ lb}$$

- THC = Total hydrocarbons (tons/year)
- R_s = Solution Oil/Gas Ratio (scf/STB)
- Q = Oil Production Rate (bbl/day)
- MW = Molecular Weight of Stock Tank Gas (lb/lb-mol)
- 385 = Volume of 1 lb/lb-mol of gas at 14.7 psia and 68 F

THC = 6.64 tpy

$$VOC = THC \times \text{Frac } C_{3+} \text{ in the Stock Tank Vapor}$$

VOC = 5.31 tpy	from flashing of gas from separator to tank pressure
----------------	--

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 8	TEMPO Subject Item ID New	Emission Point ID No. GCTK08

Operating Data¹	
Tank Working Volume	4,324.15 gal
Operating Rate ¹	12,568.30 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC ²	NA	BREEZE TankESP	0.06	0.06	544.07	0.27
VOC ³	NA	Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method	1.29	1.29	11,340.00	5.67
Total VOC⁴			1.35	1.35	11,884.07	5.94

Speciated HAP/TAP Emissions from Propanol-based Naphthalene Chemical

Pollutant ⁵	Wt% ⁵	Emission Rates ⁶			
		Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
Naphthalene	5%	0.02	0.02	137.38	0.07

¹ Provided by Cheniere Creole Trail Pipeline, L.P. Operating Rate includes condensate (8,648.30 gal/yr), propanol-based naphthalene chemical (2,920 gal/yr), and diesel (1,000 gal/yr) throughputs.

² Emissions include working and breathing.

³ Emissions include flash emissions from condensate, propanol-based naphthalene chemical, and diesel.

⁴ Emissions include working and breathing + flash emissions.

⁵ Based on safety data sheet.

⁶ Emission rates calculated as follows:

$$\begin{aligned}
 \text{Annual (tons/yr)} &= (\text{Total VOC, tpy} \times \text{Propanol-based Naphthalene Chemical Throughput (gal/yr)} / \text{Total Throughput (gal/yr)} \times \text{Wt}\%) \\
 &= (5.94 \text{ tons/yr} \times 2,920 \text{ gal/yr} / 12,568.30 \text{ gal/yr} \times 5\%) \\
 &= 0.07 \text{ tpy}
 \end{aligned}$$

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTK08

Identification
 User Identification: GCTK08
 City: Lake Charles
 State: LA
 Company: Gillis Compressor Station
 Type of Tank: FRT (no floating roof)
 Description: Condensate Storage Tank No. 8

Tank Dimensions
 Shell Height (ft): 12.00
 Diameter (ft): 8.00
 Liquid Height (ft): 11.50
 Avg. Liquid Height (ft): 6.25
 Volume (gallons): 4,512.13
 Turnovers: 2.79
 Net Throughput(gal/yr): 12,568.30
 Insulation Condition: Not Insulated

Paint Characteristics
 Shell Color/Shade: Medium Gray Paint
 Shell Condition: Average
 Roof Color/Shade: Medium Gray Paint
 Roof Condition: Average

Roof Characteristics
 Type: Column-Supported (Cone)
 Height (ft): 1.00
 Roof Slope (ft/ft): 0.25

Breather Vent Settings
 Vacuum Settings (psig): -0.03
 Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTK06 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Gasoline (RVP 7)	All	74.51	66.74	82.28	71.82	4.6453	3.9902	5.3845	66.0000			92.00 Option 4 RVP=7, ASTM Slope=3

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTK08 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	454.6651
Vapor Space Volume (cu ft)	305.7817
Vapor Density (lb/cu ft)	0.0535
Vapor Space Expansion Factor	0.1912
Vented Vapor Saturation Factor	0.4004
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	305.7817
Tank Diameter (ft)	8.0000
Vapor Space Outage (ft)	6.0833
Tank Shell Height (ft)	12.0000
Average Liquid Height (ft)	6.2500
Roof Outage (ft)	0.3333
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.3333
Roof Height (ft)	1.0000
Roof Slope (ft/ft)	0.2500
Shell Radius (ft)	4.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0535
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6453
Daily Avg. Liquid Surface Temp. (deg. F)	74.5088
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1912
Daily Vapor Temperature Range (deg. R)	31.0873
Daily Vapor Pressure Range (psia)	1.3944
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6453
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.9902
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	5.3845
Daily Avg. Liquid Surface Temp. (deg F)	74.5088
Daily Min. Liquid Surface Temp. (deg F)	66.7369
Daily Max. Liquid Surface Temp. (deg F)	82.2806
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.4004
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6453
Vapor Space Outage (ft)	6.0833

Working Losses (lb)	89.4026
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6453
Annual Net Throughput (gal/yr.)	12,568.3000
Annual Turnovers	3.1834
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	4,512.1313
Maximum Liquid Height (ft)	11.5000
Tank Diameter (ft)	8.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	544.0677

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 8	TEMPO Subject Item ID New	Emission Point ID No. GCTK08

Volatile Organic Compound Emission Calculation for Flashing
Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method

CASE: Gillis Compressor Station

CASE INPUTS:

	Stock Tank API Gravity	40	API
	Separator Pressure (psig)	850	P _i
	Separator Temperature (F)	80	T _i
Based on ethane	Separator Gas Gravity	0.56	SG _i
	Barrels of Oil Per Day (BOPD)	0.82	Q
Based on pentane	Stock Tank Gas Molecular Weight	87.1	MW
Estimated	Wt. Fraction VOC (C ₃ +) of Stock Tank Gas	0.80	VOC
	Atmospheric Pressure (psia)	14.7	P _{atm}

Methodology Constraints

16 > API < 58	API
50 > P _i < 5250	psia
70 > T _i < 295	F
0.56 > SG _i < 1.18	28.97/MW
None > Q < None	BOPD
18 > MW < 125	lb/lb-mol
0.5 > VOC < 1.00	Fraction
20 > R _s < 2070	scf/STB

$$R_s = (C_1 \times SG_x \times (P_i^{C_2})) \times \exp((C_3 \times API)/(T_i + 460))$$

Where:

- R_s = Gas/Oil Ratio of liquid at pressure of interest
 SG_x = Dissolved gas gravity at 100 psig
 P_i = Pressure at initial condition (psia)
 API = API Gravity of liquid hydrocarbon at final condition
 T_i = Temperature of initial condition (F)

Constants	API Gravity < 30	API Gravity > 30
C ₁	= 0.0362	0.0178
C ₂	= 1.0937	1.187
C ₃	= 25.724	23.931

For SG_x = Dissolved gas gravity at 100 psig
 = SG_i [1.0 + 0.00005912 x API x T_i x log(P/114.7)]

SG_i = Gas Gravity at initial condition

SG _x	= 0.6529
C ₁	= 0.0178
C ₂	= 1.187
C ₃	= 23.931

R _s = 209.51 scf/bbl	for P _i + P _{atm} =	864.7
---------------------------------	---	-------

$$THC = R_s \times Q \times MW \times 1/385 \text{ scf/lb-mol} \times 365 \text{ day/yr} \times 1 \text{ ton}/2000 \text{ lb}$$

- THC = Total hydrocarbons (tons/year)
 R_s = Solution Oil/Gas Ratio (scf/STB)
 Q = Oil Production Rate (bbl/day)
 MW = Molecular Weight of Stock Tank Gas (lb/lb-mol)
 385 = Volume of 1 lb/lb-mol of gas at 14.7 psia and 68 F

THC = 7.09 tpy

$$VOC = THC \times \text{Frac } C_{3+} \text{ in the Stock Tank Vapor}$$

VOC = 5.67 tpy	from flashing of gas from separator to tank pressure
----------------	--

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 9	TEMPO Subject Item ID New	Emission Point ID No. GCTK09

Operating Data¹	
Tank Working Volume	2,100.00 gal
Operating Rate ¹	12,685.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC ²	NA	BREEZE TankESP	0.03	0.03	288.93	0.14
VOC ³	NA	Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method	1.31	1.31	11,460.00	5.73
Total VOC⁴			1.34	1.34	11,748.93	5.87

Speciated HAP/TAP Emissions from Propanol-based Naphthalene Chemical

Pollutant ⁵	Wt% ⁵	Emission Rates ⁶			
		Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
Naphthalene	5%	0.02	0.02	151.99	0.08

¹ Provided by Cheniere Creole Trail Pipeline, L.P. Operating Rate includes condensate (8,400 gal/yr), propanol-based naphthalene chemical (3,285 gal/yr), and diesel (1,000 gal/yr) throughputs.

² Emissions include working and breathing.

³ Emissions include flash emissions from condensate, propanol-based naphthalene chemical, and diesel.

⁴ Emissions include working and breathing + flash emissions.

⁵ Based on safety data sheet.

⁶ Emission rates calculated as follows:

$$\begin{aligned}
 \text{Annual (tons/yr)} &= (\text{Total VOC, tpy} \times \text{Propanol-based Naphthalene Chemical Throughput (gal/yr)} / \text{Total Throughput (gal/yr)} \times \text{Wt}\%) \\
 &= (5.87 \text{ tons/yr} \times 3,285 \text{ gal/yr} / 12,685.00 \text{ gal/yr} \times 5\%) \\
 &= 0.08 \text{ tpy}
 \end{aligned}$$

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTK09

Identification
 User Identification: GCTK09
 City: Lake Charles
 State: LA
 Company: Gillis Compressor Station
 Type of Tank: FRT (no floating roof)
 Description: Condensate Storage Tank No. 9

Tank Dimensions
 Shell Height (ft): 12.00
 Diameter (ft): 5.33
 Liquid Height (ft): 11.50
 Avg. Liquid Height (ft): 6.25
 Volume (gallons): 2,005.14
 Turnovers: 6.33
 Net Throughput(gal/yr): 12,685.00
 Insulation Condition: Not Insulated

Paint Characteristics
 Shell Color/Shade: Medium Gray Paint
 Shell Condition: Average
 Roof Color/Shade: Medium Gray Paint
 Roof Condition: Average

Roof Characteristics
 Type: Column-Supported (Cone)
 Height (ft): 1.00
 Roof Slope (ft/ft): 0.38

Breather Vent Settings
 Vacuum Settings (psig): -0.03
 Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTK09 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Gasoline (RVP 7)	All	74.22	66.51	81.92	71.82	4.6195	3.9726	5.3487	66.0000			92.00 Option 4: RVP=7, ASTM Slope=3

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTK09 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations

Standing Losses (lb)	199.1011
Vapor Space Volume (cu ft)	135.9848
Vapor Density (lb/cu ft)	0.0532
Vapor Space Expansion Factor	0.1886
Vented Vapor Saturation Factor	0.4015
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	135.9848
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	6.0878
Tank Shell Height (ft)	12.0000
Average Liquid Height (ft)	6.2500
Roof Outage (ft)	0.3378
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.3378
Roof Height (ft)	1.0000
Roof Slope (ft/ft)	0.3800
Shell Radius (ft)	2.6665
Vapor Density	
Vapor Density (lb/cu ft)	0.0532
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Daily Avg. Liquid Surface Temp. (deg. F)	74.2194
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1886
Daily Vapor Temperature Range (deg. R)	30.8197
Daily Vapor Pressure Range (psia)	1.3761
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.9726
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	5.3487
Daily Avg. Liquid Surface Temp. (deg F)	74.2194
Daily Min. Liquid Surface Temp. (deg F)	66.5145
Daily Max. Liquid Surface Temp. (deg F)	81.9243
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.4015
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Space Outage (ft)	6.0878

Working Losses (lb)	89,8274
Vapor Molecular Weight (lb/lb-mole)	66,0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4,6195
Annual Net Throughput (gal/yr.)	12,685,0000
Annual Turnovers	7,2300
Turnover Factor	1,0000
Maximum Liquid Volume (gal)	2,005,1410
Maximum Liquid Height (ft)	11,5000
Tank Diameter (ft)	5,3330
Working Loss Product Factor	1,0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	288,9285

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 9	TEMPO Subject Item ID New	Emission Point ID No. GCTK09

Volatile Organic Compound Emission Calculation for Flashing
Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method

CASE: Gillis Compressor Station

CASE INPUTS:

Based on ethane	Stock Tank API Gravity	40	API
	Separator Pressure (psig)	850	P _i
Based on pentane Estimated	Separator Temperature (F)	80	T _i
	Separator Gas Gravity	0.56	SG _i
	Barrels of Oil Per Day (BOPD)	0.83	Q
	Stock Tank Gas Molecular Weight	87.1	MW
	Wt. Fraction VOC (C ₃ +) of Stock Tank Gas	0.800	VOC
	Atmospheric Pressure (psia)	14.7	P _{atm}

Methodology Constraints

16 > API < 58	API
50 > P _i < 5250	psia
70 > T _i < 295	F
0.56 > SG _i < 1.18	28.97/MW
None > Q < None	BOPD
18 > MW < 125	lb/lb-mol
0.5 > VOC < 1.00	Fraction
20 > R _s < 2070	scf/STB

$$R_s = (C_1 \times SG_x \times (P_i^{C_2})) \times \exp((C_3 \times API)/(T_i + 460))$$

Where:

- R_s = Gas/Oil Ratio of liquid at pressure of interest
- SG_x = Dissolved gas gravity at 100 psig
- P_i = Pressure at initial condition (psia)
- API = API Gravity of liquid hydrocarbon at final condition
- T_i = Temperature of initial condition (F)

Constants	API Gravity < 30	API Gravity > 30
C ₁	= 0.0362	0.0178
C ₂	= 1.0937	1.187
C ₃	= 25.724	23.931

For SG_x = Dissolved gas gravity at 100 psig
 $= SG_i [1.0 + 0.00005912 \times API \times T_i \times \log(P_i/114.7)]$

SG_i = Gas Gravity at initial condition

SG _x	= 0.6529
C ₁	= 0.0178
C ₂	= 1.187
C ₃	= 23.931

R _s	= 209.51 scf/bbl	for P _i + P _{atm}	= 864.7
----------------	------------------	---------------------------------------	---------

$$THC = R_s \times Q \times MW \times 1/385 \text{ scf/lb-mol} \times 365 \text{ day/yr} \times 1 \text{ ton}/2000 \text{ lb}$$

- THC = Total hydrocarbons (tons/year)
- R_s = Solution Oil/Gas Ratio (scf/STB)
- Q = Oil Production Rate (bbl/day)
- MW = Molecular Weight of Stock Tank Gas (lb/lb-mol)
- 385 = Volume of 1 lb/lb-mol of gas at 14.7 psia and 68 F

THC	= 7.16 tpy
-----	------------

$$VOC = THC \times \text{Frac } C_{3+} \text{ in the Stock Tank Vapor}$$

VOC	= 5.73 tpy	from flashing of gas from separator to tank pressure
-----	------------	--

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 10	TEMPO Subject Item ID New	Emission Point ID No. GCTK10

Operating Data¹	
Tank Working Volume	2,100.00 gal
Operating Rate ¹	12,685.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC ²	NA	BREEZE TankESP	0.03	0.03	288.93	0.14
VOC ³	NA	Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method	1.31	1.31	11,460.00	5.73
Total VOC⁴			1.34	1.34	11,748.93	5.87

Speciated HAP/TAP Emissions from Propanol-based Naphthalene Chemical

Pollutant ⁵	Wt% ⁵	Emission Rates ⁶			
		Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
Naphthalene	5%	0.02	0.02	151.99	0.08

¹ Provided by Cheniere Creole Trail Pipeline, L.P. Operating Rate includes condensate (8,400 gal/yr), propanol-based naphthalene chemical (3,285 gal/yr), and diesel (1,000 gal/yr) throughputs.

² Emissions include working and breathing.

³ Emissions include flash emissions from condensate, propanol-based naphthalene chemical, and diesel.

⁴ Emissions include working and breathing + flash emissions.

⁵ Based on safety data sheet.

⁶ Emission rates calculated as follows:

$$\begin{aligned}
 \text{Annual (tons/yr)} &= (\text{Total VOC, tpy} \times \text{Propanol-based Naphthalene Chemical Throughput (gal/yr)} / \text{Total Throughput (gal/yr)} \times \text{Wt\%}) \\
 &= (5.87 \text{ tons/yr} \times 3,285 \text{ gal/yr} / 12,685.00 \text{ gal/yr} \times 5\%) \\
 &= 0.08 \text{ tpy}
 \end{aligned}$$

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTK10

Identification

User Identification:	GCTK10
City:	Lake Charles
State:	LA
Company:	Gillis Compressor Station
Type of Tank:	FRT (no floating roof)
Description:	Condensate Storage Tank No. 10

Tank Dimensions

Shell Height (ft)	12.00
Diameter (ft)	5.33
Liquid Height (ft)	11.50
Avg. Liquid Height (ft)	6.25
Volume (gallons)	2,005.14
Turnovers:	6.33
Net Throughput(gal/yr)	12,685.00
Insulation Condition:	Not Insulated

Paint Characteristics

Shell Color/Shade:	Medium Gray Paint
Shell Condition:	Average
Roof Color/Shade:	Medium Gray Paint
Roof Condition:	Average

Roof Characteristics

Type:	Column-Supported (Cone)
Height (ft)	1.00
Roof Slope (ft/ft)	0.38

Breather Vent Settings

Vacuum Settings (psig)	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTK10 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol Weight. Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Gasoline (RVP 7)	All	74.22	66.51	81.92	71.82	4.6195	3.9726	5.3487	66.0000			92.00 Option 4 RVP=7, ASTM Slope=3

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTK10 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	199.1011
Vapor Space Volume (cu ft)	135.9848
Vapor Density (lb/cu ft)	0.0532
Vapor Space Expansion Factor	0.1886
Vented Vapor Saturation Factor	0.4015
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	135.9848
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	6.0878
Tank Shell Height (ft)	12.0000
Average Liquid Height (ft)	6.2500
Roof Outage (ft)	0.3378
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.3378
Roof Height (ft)	1.0000
Roof Slope (ft/ft)	0.3800
Shell Radius (ft)	2.6665
Vapor Density	
Vapor Density (lb/cu ft)	0.0532
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Daily Avg. Liquid Surface Temp. (deg. F)	74.2194
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1886
Daily Vapor Temperature Range (deg. R)	30.8197
Daily Vapor Pressure Range (psia)	1.3761
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.9726
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	5.3487
Daily Avg. Liquid Surface Temp. (deg. F)	74.2194
Daily Min. Liquid Surface Temp. (deg. F)	66.5145
Daily Max. Liquid Surface Temp. (deg. F)	81.9243
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.4015
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Space Outage (ft)	6.0878

Working Losses (lb)	89.8274
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Annual Net Throughput (gal/yr.)	12,685.0000
Annual Turnovers	7.2300
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	2,005.1410
Maximum Liquid Height (ft)	11.5000
Tank Diameter (ft)	5.3330
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	288.9285

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 10	TEMPO Subject Item ID New	Emission Point ID No. GCTK10

Volatile Organic Compound Emission Calculation for Flashing
Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method

CASE: Gillis Compressor Station

CASE INPUTS:

Based on ethane	Stock Tank API Gravity	40	API
	Separator Pressure (psig)	850	P _i
Based on pentane Estimated	Separator Temperature (F)	80	T _i
	Separator Gas Gravity	0.56	SG _i
	Barrels of Oil Per Day (BOPD)	0.83	Q
	Stock Tank Gas Molecular Weight	87.1	MW
	Wt. Fraction VOC (C ₃ +) of Stock Tank Gas	0.800	VOC
	Atmospheric Pressure (psia)	14.7	P _{atm}

Methodology Constraints

16 > API < 58	API
50 > P _i < 5250	psia
70 > T _i < 295	F
0.56 > SG _i < 1.18	28.97/MW
None > Q < None	BOPD
18 > MW < 125	lb/lb-mol
0.5 > VOC < 1.00	Fraction
20 > R _s < 2070	scf/STB

$$R_s = (C_1 \times SG_x \times (P_i^{C_2})) \times \exp((C_3 \times API)/(T_i + 460))$$

Where:

- R_s = Gas/Oil Ratio of liquid at pressure of interest
- SG_x = Dissolved gas gravity at 100 psig
- P_i = Pressure at initial condition (psia)
- API = API Gravity of liquid hydrocarbon at final condition
- T_i = Temperature of initial condition (F)

Constants	API Gravity < 30	API Gravity > 30
C ₁	= 0.0362	0.0178
C ₂	= 1.0937	1.187
C ₃	= 25.724	23.931

For SG_x = Dissolved gas gravity at 100 psig
= SG_i [1.0 + 0.00005912 x API x T_i x log(P_i/114.7)]

SG_i = Gas Gravity at initial condition

SG _x	= 0.6529
C ₁	= 0.0178
C ₂	= 1.187
C ₃	= 23.931

R _s = 209.51 scf/bbl	for P _i + Patm =	864.7
---------------------------------	-----------------------------	-------

$$THC = R_s \times Q \times MW \times 1/385 \text{ scf/lb-mol} \times 365 \text{ day/yr} \times 1 \text{ ton}/2000 \text{ lb}$$

- THC = Total hydrocarbons (tons/year)
- R_s = Solution Oil/Gas Ratio (scf/STB)
- Q = Oil Production Rate (bbl/day)
- MW = Molecular Weight of Stock Tank Gas (lb/lb-mol)
- 385 = Volume of 1 lb/lb-mol of gas at 14.7 psia and 68 F

THC = 7.16 tpy

$$VOC = THC \times \text{Frac } C_{3+} \text{ in the Stock Tank Vapor}$$

VOC = 5.73 tpy	from flashing of gas from separator to tank pressure
----------------	--

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 11	TEMPO Subject Item ID New	Emission Point ID No. GCTK11

Operating Data¹	
Tank Working Volume	2,100.00 gal
Operating Rate ¹	12,685.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC ²	NA	BREEZE TankESP	0.03	0.03	288.93	0.14
VOC ³	NA	Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method	1.31	1.31	11,460.00	5.73
Total VOC⁴			1.34	1.34	11,748.93	5.87

Speciated HAP/TAP Emissions from Propanol-based Naphthalene Chemical

Pollutant ⁵	Wt% ⁵	Emission Rates ⁶			
		Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
Naphthalene	5%	0.02	0.02	151.99	0.08

¹ Provided by Cheniere Creole Trail Pipeline, L.P. Operating Rate includes condensate (8,400 gal/yr), propanol-based naphthalene chemical (3,285 gal/yr), and diesel (1,000 gal/yr) throughputs.

² Emissions include working and breathing.

³ Emissions include flash emissions from condensate, propanol-based naphthalene chemical, and diesel.

⁴ Emissions include working and breathing + flash emissions.

⁵ Based on safety data sheet.

⁶ Emission rates calculated as follows:

$$\begin{aligned}
 \text{Annual (tons/yr)} &= (\text{Total VOC, tpy} \times \text{Propanol-based Naphthalene Chemical Throughput (gal/yr)} / \text{Total Throughput (gal/yr)} \times \text{Wt}\%) \\
 &= (5.87 \text{ tons/yr} \times 3,285 \text{ gal/yr} / 12,685.00 \text{ gal/yr} \times 5\%) \\
 &= 0.08 \text{ tpy}
 \end{aligned}$$

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTK11

Identification
 User Identification: GCTK11
 City: Lake Charles
 State: LA
 Company: Gillis Compressor Station
 Type of Tank: FRT (no floating roof)
 Description: Condensate Storage Tank No. 11

Tank Dimensions
 Shell Height (ft): 12.00
 Diameter (ft): 5.33
 Liquid Height (ft): 11.50
 Avg. Liquid Height (ft): 6.25
 Volume (gallons): 2,005.14
 Turnovers: 6.33
 Net Throughput(gal/yr): 12,685.00
 Insulation Condition: Not Insulated

Paint Characteristics
 Shell Color/Shade: Medium Gray Paint
 Shell Condition: Average
 Roof Color/Shade: Medium Gray Paint
 Roof Condition: Average

Roof Characteristics
 Type: Column-Supported (Cone)
 Height (ft): 1.00
 Roof Slope (ft/ft): 0.38

Breather Vent Settings
 Vacuum Settings (psig): -0.03
 Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTK11 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Gasoline (RVP 7)	All	74.22	66.51	81.92	71.82	4.6195	3.9726	5.3487	66.0000			92.00 Option 4 RVP=7, ASTM Slope=3

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTK11 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	199.1011
Vapor Space Volume (cu ft)	135.9848
Vapor Density (lb/cu ft)	0.0532
Vapor Space Expansion Factor	0.1886
Vented Vapor Saturation Factor	0.4015
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	135.9848
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	6.0878
Tank Shell Height (ft)	12.0000
Average Liquid Height (ft)	6.2500
Roof Outage (ft)	0.3378
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.3378
Roof Height (ft)	1.0000
Roof Slope (ft/ft)	0.3800
Shell Radius (ft)	2.8865
Vapor Density	
Vapor Density (lb/cu ft)	0.0532
Vapor Molecular Weight (lb/lb-mole)	86.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Daily Avg. Liquid Surface Temp. (deg. F)	74.2194
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1886
Daily Vapor Temperature Range (deg. R)	30.8197
Daily Vapor Pressure Range (psia)	1.3761
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.9726
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	5.3487
Daily Avg. Liquid Surface Temp. (deg F)	74.2194
Daily Min. Liquid Surface Temp. (deg F)	66.5145
Daily Max. Liquid Surface Temp. (deg F)	81.9243
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.4015
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Space Outage (ft)	6.0878

Working Losses (lb)	89.8274
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Annual Net Throughput (gal/yr.)	12,685.0000
Annual Turnovers	7.2300
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	2,005.1410
Maximum Liquid Height (ft)	11.5000
Tank Diameter (ft)	5.3330
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	288.9285

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 11	TEMPO Subject Item ID New	Emission Point ID No. GCTK11

Volatile Organic Compound Emission Calculation for Flashing
Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method

CASE: Gillis Compressor Station

CASE INPUTS:

Based on ethane Based on pentane Estimated	Stock Tank API Gravity	40	API
	Separator Pressure (psig)	850	P _i
	Separator Temperature (F)	80	T _i
	Separator Gas Gravity	0.56	SG _i
	Barrels of Oil Per Day (BOPD)	0.83	Q
	Stock Tank Gas Molecular Weight	87.1	MW
	Wt. Fraction VOC (C ₃ +) of Stock Tank Gas	0.800	VOC
	Atmospheric Pressure (psia)	14.7	P _{atm}

Methodology Constraints

16 > API < 58	API
50 > P _i < 5250	psia
70 > T _i < 295	F
0.56 > SG _i < 1.18	28.97/MW
None > Q < None	BOPD
18 > MW < 125	lb/lb-mol
0.5 > VOC < 1.00	Fraction
20 > R _s < 2070	scf/STB

$$R_s = (C_1 \times SG_x \times (P_i^{C_2})) \times \exp((C_3 \times API)/(T_i + 460))$$

Where:

- R_s = Gas/Oil Ratio of liquid at pressure of interest
- SG_x = Dissolved gas gravity at 100 psig
- P_i = Pressure at initial condition (psia)
- API = API Gravity of liquid hydrocarbon at final condition
- T_i = Temperature of initial condition (F)

Constants	API Gravity < 30	API Gravity > 30
C ₁	= 0.0362	0.0178
C ₂	= 1.0937	1.187
C ₃	= 25.724	23.931

For SG_x = Dissolved gas gravity at 100 psig
= SG_i [1.0 + 0.00005912 x API x T_i x log(P/114.7)]

SG_i = Gas Gravity at initial condition

SG _x	= 0.6529
C ₁	= 0.0178
C ₂	= 1.187
C ₃	= 23.931

R _s	= 209.51 scf/bbl	for P _i + P _{atm} =	864.7
----------------	------------------	---	-------

$$THC = R_s \times Q \times MW \times 1/385 \text{ scf/lb-mol} \times 365 \text{ day/yr} \times 1 \text{ ton}/2000 \text{ lb}$$

- THC = Total hydrocarbons (tons/year)
- R_s = Solution Oil/Gas Ratio (scf/STB)
- Q = Oil Production Rate (bbl/day)
- MW = Molecular Weight of Stock Tank Gas (lb/lb-mol)
- 385 = Volume of 1 lb/lb-mol of gas at 14.7 psia and 68 F

THC	= 7.16 tpy
-----	------------

$$VOC = THC \times \text{Frac } C_{3+} \text{ in the Stock Tank Vapor}$$

VOC	= 5.73 tpy	from flashing of gas from separator to tank pressure
-----	------------	--

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 12	TEMPO Subject Item ID New	Emission Point ID No. GCTK12

Operating Data¹	
Tank Working Volume	2,100.00 gal
Operating Rate ¹	12,685.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC ²	NA	BREEZE TankESP	0.03	0.03	288.93	0.14
VOC ³	NA	Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method	1.31	1.31	11,460.00	5.73
Total VOC⁴			1.34	1.34	11,748.93	5.87

Speciated HAP/TAP Emissions from Propanol-based Naphthalene Chemical

Pollutant ⁵	Wt% ⁵	Emission Rates ⁶			
		Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
Naphthalene	5%	0.02	0.02	151.99	0.08

¹ Provided by Cheniere Creole Trail Pipeline, L.P. Operating Rate includes condensate (8,400 gal/yr), propanol-based naphthalene chemical (3,285 gal/yr), and diesel (1,000 gal/yr) throughput:

² Emissions include working and breathing.

³ Emissions include flash emissions from condensate, propanol-based naphthalene chemical, and diesel.

⁴ Emissions include working and breathing + flash emissions.

⁵ Based on safety data sheet.

⁶ Emission rates calculated as follows:

$$\text{Annual (tons/yr)} = (\text{Total VOC, tpy} \times \text{Propanol-based Naphthalene Chemical Throughput (gal/yr)} / \text{Total Throughput (gal/yr)} \times \text{Wt\%})$$

$$= (5.87 \text{ tons/yr} \times 3,285 \text{ gal/yr} / 12,685.00 \text{ gal/yr} \times 5\%)$$

$$= 0.08 \text{ tpy}$$

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTK12

Identification
 User Identification: GCTK12
 City: Lake Charles
 State: LA
 Company: Gillis Compressor Station
 Type of Tank: FRT (no floating roof)
 Description: Condensate Storage Tank No. 12

Tank Dimensions
 Shell Height (ft): 12.00
 Diameter (ft): 5.33
 Liquid Height (ft): 11.50
 Avg. Liquid Height (ft): 6.25
 Volume (gallons): 2,005.14
 Turnovers: 6.33
 Net Throughput(gal/yr): 12,685.00
 Insulation Condition: Not Insulated

Paint Characteristics
 Shell Color/Shade: Medium Gray Paint
 Shell Condition: Average
 Roof Color/Shade: Medium Gray Paint
 Roof Condition: Average

Roof Characteristics
 Type: Column-Supported (Cone)
 Height (ft): 1.00
 Roof Slope (ft/ft): 0.38

Breather Vent Settings
 Vacuum Settings (psig): -0.03
 Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTK12 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight. Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Gasoline (RVP 7)	All	74.22	66.51	81.92	71.82	4.6195	3.9726	5.3487	66.0000			92.00 Option 4: RVP=7, ASTM Slope=3

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTK12 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	199.1011
Vapor Space Volume (cu ft)	135.9848
Vapor Density (lb/cu ft)	0.0532
Vapor Space Expansion Factor	0.1886
Vented Vapor Saturation Factor	0.4015
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	135.9848
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	6.0878
Tank Shell Height (ft)	12.0000
Average Liquid Height (ft)	6.2500
Roof Outage (ft)	0.3378
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.3378
Roof Height (ft)	1.0000
Roof Slope (ft/ft)	0.3800
Shell Radius (ft)	2.6665
Vapor Density	
Vapor Density (lb/cu ft)	0.0532
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Daily Avg. Liquid Surface Temp. (deg. F)	74.2194
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cu ft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sq ft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.1886
Daily Vapor Temperature Range (deg. R)	30.8197
Daily Vapor Pressure Range (psia)	1.3761
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	3.9726
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	5.3487
Daily Avg. Liquid Surface Temp. (deg. F)	74.2194
Daily Min. Liquid Surface Temp. (deg. F)	66.5145
Daily Max. Liquid Surface Temp. (deg. F)	81.9243
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.4015
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Vapor Space Outage (ft)	6.0878

Working Losses (lb)	89.8274
Vapor Molecular Weight (lb/lb-mole)	66.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	4.6195
Annual Net Throughput (gal/yr.)	12,685.0000
Annual Turnovers	7.2300
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	2,005.1410
Maximum Liquid Height (ft)	11.5000
Tank Diameter (ft)	5.3330
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	288.9285

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Condensate Storage Tank No. 12	TEMPO Subject Item ID New	Emission Point ID No. GCTK12

Volatile Organic Compound Emission Calculation for Flashing
Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method

CASE: Gillis Compressor Station

CASE INPUTS:

Based on ethane	Stock Tank API Gravity	40	API
	Separator Pressure (psig)	850	P _i
Based on pentane Estimated	Separator Temperature (F)	80	T _i
	Separator Gas Gravity	0.56	SG _i
	Barrels of Oil Per Day (BOPD)	0.83	Q
	Stock Tank Gas Molecular Weight	87.1	MW
	Wt. Fraction VOC (C ₃ +) of Stock Tank Gas	0.800	VOC
	Atmospheric Pressure (psia)	14.7	P _{atm}

Methodology Constraints

16 > API < 58	API
50 > P _i < 5250	psia
70 > T _i < 295	F
0.56 > SG _i < 1.18	28.97/MW
None > Q < None	BOPD
18 > MW < 125	lb/lb-mol
0.5 > VOC < 1.00	Fraction
20 > R _s < 2070	scf/STB

$$R_s = (C_1 \times SG_x \times (P_i^{C_2})) \times \exp((C_3 \times API)/(T_i + 460))$$

Where:

- R_s = Gas/Oil Ratio of liquid at pressure of interest
- SG_x = Dissolved gas gravity at 100 psig
- P_i = Pressure at initial condition (psia)
- API = API Gravity of liquid hydrocarbon at final condition
- T_i = Temperature of initial condition (F)

Constants	API Gravity < 30	API Gravity > 30
C ₁	= 0.0362	0.0178
C ₂	= 1.0937	1.187
C ₃	= 25.724	23.931

For SG_x = Dissolved gas gravity at 100 psig
= SG_i [1.0 + 0.00005912 x API x T_i x log(P/114.7)]

SG_i = Gas Gravity at initial condition

SG _x	= 0.6529
C ₁	= 0.0178
C ₂	= 1.187
C ₃	= 23.931

R _s = 209.51 scf/bbl	for P _i + P _{atm} =	864.7
---------------------------------	---	-------

$$THC = R_s \times Q \times MW \times 1/385 \text{ scf/lb-mol} \times 365 \text{ day/yr} \times 1 \text{ ton}/2000 \text{ lb}$$

- THC = Total hydrocarbons (tons/year)
- R_s = Solution Oil/Gas Ratio (scf/STB)
- Q = Oil Production Rate (bbl/day)
- MW = Molecular Weight of Stock Tank Gas (lb/lb-mol)
- 385 = Volume of 1 lb/lb-mol of gas at 14.7 psia and 68 F

THC =	7.16 tpy
-------	----------

$$VOC = THC \times \text{Frac } C_{3+} \text{ in the Stock Tank Vapor}$$

VOC =	5.73 tpy	from flashing of gas from separator to tank pressure
-------	----------	--

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Chemical Injection Tote No. 7	TEMPO Subject Item ID New	Emission Point ID No. GCTOTE07

Operating Data¹	
Tank Volume	250.00 gal
Operating Rate	2,920.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.003	0.003	23.27	0.01
Total VOC ²			0.003	0.003	23.27	0.01

¹ Provided by Cheniere Creole Trail Pipeline, L.P.

² Emissions include working and breathing.

³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTOTE07

Identification

User Identification	GCTOTE07
City	Lake Charles
State	LA
Company	Gillis Compressor Station
Type of Tank	Horizontal Tank
Description	Chemical Injection Tote No. 7

Tank Dimensions

Shell Length (ft)	5.00
Diameter (ft)	3.00
Volume (gallons)	250.00
Turnovers	11.68
Net Throughput(gal/yr)	2,920.00
Insulation Condition	Not Insulated

Paint Characteristics

Shell Color/Shade	White Paint
Shell Condition	Average

Breather Vent Settings

Vacuum Settings (psig)	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTOTE07 - Horizontal Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Propanol-based Naphthalene Chemical	All	71.06	66.11	76.00	71.06	2.6000	2.6000	2.6000	88.6100			88.6100	N/A
Naphthalene									128.1700	0.0500	0.0001	128.1700	Option 2: A=7.146, B=1831.6, C=211.82

TankESP
 Emissions Report - Detail Format
 Detail Calculations (AP-42)

GCTOTE07 - Horizontal Tank

Lake Charles, LA

Annual Emission Calculations

Standing Losses (lb)	7.5132
Vapor Space Volume (cu ft)	18.4679
Vapor Density (lb/cu ft)	0.0405
Vapor Space Expansion Factor	0.0323
Vented Vapor Saturation Factor	0.8550
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	18.4679
Tank Diameter (ft)	3.0000
Effective Diameter (ft)	4.3702
Vapor Space Outage (ft)	1.2312
Tank Shell Length (ft)	5.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0405
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0323
Daily Vapor Temperature Range (deg. R)	19.7807
Daily Vapor Pressure Range (psia)	0.0000
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	2.6000
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	2.6000
Daily Avg. Liquid Surface Temp. (deg F)	71.0588
Daily Min. Liquid Surface Temp. (deg F)	66.1136
Daily Max. Liquid Surface Temp. (deg F)	76.0040
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.8550
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Vapor Space Outage (ft)	1.2312
Working Losses (lb)	15.7519
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Annual Net Throughput (gal/yr.)	2,920,000
Annual Turnovers	11.5659
Turnover Factor	1.0000
Tank Diameter (ft)	3.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	23.2651

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Chemical Injection Tote No. 8	TEMPO Subject Item ID New	Emission Point ID No. GCTOTE08

Operating Data¹	
Tank Volume	250.00 gal
Operating Rate	2,920.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.003	0.003	23.27	0.01
Total VOC ²			0.003	0.003	23.27	0.01

¹ Provided by Cheniere Creole Trail Pipeline, L.P.

² Emissions include working and breathing.

³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTOTE08

Identification
User Identification: GCTOTE08
City: Lake Charles
State: LA
Company: Gillis Compressor Station
Type of Tank: Horizontal Tank
Description: Chemical Injection Tote No. 8

Tank Dimensions
Shell Length (ft): 5.00
Diameter (ft): 3.00
Volume (gallons): 250.00
Turnovers: 11.68
Net Throughput(gal/yr): 2,920.00
Insulation Condition: Not Insulated

Paint Characteristics
Shell Color/Shade: White Paint
Shell Condition: Average

Breather Vent Settings
Vacuum Settings (psig): -0.03
Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTOTE08 - Horizontal Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight Basis for Vapor Pressure Calculations	
		Avg.	Min.	Max.		Avg.	Min.	Max.				88.6100	N/A
Propanol-based Naphthalene Chemical Naphthalene	All	71.06	66.11	76.00	71.06	2.6000	2.6000	2.6000	88.6100	0.0500	0.0001	128.1700	Option 2: A=7.146, B=1831.6, C=211.82

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTOTE08 - Horizontal Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	7.5132
Vapor Space Volume (cu ft)	18.4679
Vapor Density (lb/cu ft)	0.0405
Vapor Space Expansion Factor	0.0323
Vented Vapor Saturation Factor	0.8550
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	18.4679
Tank Diameter (ft)	3.0000
Effective Diameter (ft)	4.3702
Vapor Space Outage (ft)	1.2312
Tank Shell Length (ft)	5.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0405
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0323
Daily Vapor Temperature Range (deg. R)	19.7807
Daily Vapor Pressure Range (psia)	0.0000
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
	2.6000
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	
	2.6000
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	
	2.6000
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Min. Liquid Surface Temp. (deg. F)	66.1136
Daily Max. Liquid Surface Temp. (deg. F)	76.0040
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.8550
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
	2.6000
Vapor Space Outage (ft)	1.2312
Working Losses (lb)	
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
	2.6000
Annual Net Throughput (gal/yr.)	2,920.0000
Annual Turnovers	11.5659
Turnover Factor	1.0000
Tank Diameter (ft)	3.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	
	0%
Total Losses (lb)	23.2651

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Chemical Injection Tote No. 9	TEMPO Subject Item ID New	Emission Point ID No. GCTOTE09

Operating Data¹	
Tank Volume	250.00 gal
Operating Rate	13,140.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.007	0.007	60.19	0.03
Total VOC ²			0.007	0.007	60.19	0.03

¹ Provided by Cheniere Creole Trail Pipeline, L.P.

² Emissions include working and breathing.

³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTOTE09

Identification
User Identification: GCTOTE09
City: Lake Charles
State: LA
Company: Gillis Compressor Station
Type of Tank: Horizontal Tank
Description: Chemical Injection Tote No. 9

Tank Dimensions
Shell Length (ft): 5.00
Diameter (ft): 3.00
Volume (gallons): 250.00
Turnovers: 52.56
Net Throughput(gal/yr): 13,140.00
Insulation Condition: Not Insulated

Paint Characteristics
Shell Color/Shade: White Paint
Shell Condition: Average

Breather Vent Settings
Vacuum Settings (psig): -0.03
Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTOTE09 - Horizontal Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Propanol-based Naphthalene Chemical Naphthalene	All	71.06	66.11	76.00	71.06	2.6000	2.6000	2.6000	88.6100	0.0500	0.0001	128.1700	N/A Option 2: A=7.146, B=1831.6, C=211.62

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTOTE09 - Horizontal Tank
Lake Charles, LA

Annual Emission Calculations

Standing Losses (lb)	7.5132
Vapor Space Volume (cu ft)	18.4679
Vapor Density (lb/cu ft)	0.0405
Vapor Space Expansion Factor	0.0323
Vented Vapor Saturation Factor	0.8550
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	18.4679
Tank Diameter (ft)	3.0000
Effective Diameter (ft)	4.3702
Vapor Space Outage (ft)	1.2312
Tank Shell Length (ft)	5.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0405
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0323
Daily Vapor Temperature Range (deg. R)	19.7807
Daily Vapor Pressure Range (psia)	0.0000
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	2.6000
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	2.6000
Daily Avg. Liquid Surface Temp. (deg F)	71.0588
Daily Min. Liquid Surface Temp. (deg F)	66.1136
Daily Max. Liquid Surface Temp. (deg F)	76.0040
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.8550
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Vapor Space Outage (ft)	1.2312
Working Losses (lb)	52.6763
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	2.6000
Annual Net Throughput (gallyr.)	13,140,0000
Annual Turnovers	52.0464
Turnover Factor	0.7431
Tank Diameter (ft)	3.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	60.1895

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Chemical Injection Tote No. 10	TEMPO Subject Item ID New	Emission Point ID No. GCTOTE10

Operating Data¹	
Tank Volume	250.00 gal
Operating Rate	13,140.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.007	0.007	60.19	0.03
Total VOC²			0.007	0.007	60.19	0.03

¹ Provided by Cheniere Creole Trail Pipeline, L.P.

² Emissions include working and breathing.

³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

GCTOTE10

Identification

User Identification:	GCTOTE10
City:	Lake Charles
State:	LA
Company:	Gillis Compressor Station
Type of Tank:	Horizontal Tank
Description:	Chemical Injection Tote No. 10

Tank Dimensions

Shell Length (ft)	5.00
Diameter (ft)	3.00
Volume (gallons)	250.00
Turnovers:	52.56
Net Throughput(gal/yr)	13,140.00
Insulation Condition	Not Insulated

Paint Characteristics

Shell Color/Shade	White Paint
Shell Condition	Average

Breather Vent Settings

Vacuum Settings (psig)	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTOTE10 - Horizontal Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.	Temp (deg F)	Avg.	Min.	Max.					
Propanol-based Naphthalene Chemical	All	71.06	66.11	76.00	71.06	2.6000	2.6000	2.6000	88.6100			88.6100	N/A
Naphthalene									128.1700	0.0500	0.0001	128.1700	Option 2: A=7.146, B=1831.6, C=211.82

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTOTE10 - Horizontal Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	7.5132
Vapor Space Volume (cu ft)	18.4679
Vapor Density (lb/cu ft)	0.0405
Vapor Space Expansion Factor	0.0323
Vented Vapor Saturation Factor	0.8550
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	18.4679
Tank Diameter (ft)	3.0000
Effective Diameter (ft)	4.3702
Vapor Space Outage (ft)	1.2312
Tank Shell Length (ft)	5.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0405
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0323
Daily Vapor Temperature Range (deg. R)	19.7807
Daily Vapor Pressure Range (psia)	0.0000
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
	2.6000
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	
	2.6000
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	
Daily Avg. Liquid Surface Temp. (deg F)	71.0588
Daily Min. Liquid Surface Temp. (deg F)	66.1136
Daily Max. Liquid Surface Temp. (deg F)	76.0040
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.8550
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Vapor Space Outage (ft)	1.2312
Working Losses (lb)	
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Annual Net Throughput (gal/yr.)	13,140.0000
Annual Turnovers	52.0464
Turnover Factor	0.7431
Tank Diameter (ft)	3.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	
	0%
Total Losses (lb)	60.1895

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Chemical Injection Tote No. 11	TEMPO Subject Item ID New	Emission Point ID No. GCTOTE11

Operating Data¹	
Tank Volume	250.00 gal
Operating Rate	13,140.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.007	0.007	60.19	0.03
Total VOC ²			0.007	0.007	60.19	0.03

¹ Provided by Cheniere Creole Trail Pipeline, L.P.

² Emissions include working and breathing.

³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
GCTOTE11

Identification

User Identification:	GCTOTE11
City:	Lake Charles
State:	LA
Company:	Gillis Compressor Station
Type of Tank:	Horizontal Tank
Description:	Chemical Injection Tote No. 11

Tank Dimensions

Shell Length (ft)	5.00
Diameter (ft)	3.00
Volume (gallons)	250.00
Turnovers:	52.56
Net Throughput(gal/yr)	13,140.00
Insulation Condition:	Not Insulated

Paint Characteristics

Shell Color/Shade:	White Paint
Shell Condition:	Average

Breather Vent Settings

Vacuum Settings (psig)	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

GCTOTE11 - Horizontal Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight. Basis for Vapor Pressure Calculations	
		Avg.	Min.	Max.		Avg.	Min.	Max.				88.6100	N/A
Propanol-based Naphthalene Chemical Naphthalene	All	71.06	66.11	76.00	71.06	2.6000	2.6000	2.6000	88.6100	0.0500	0.0001	128.1700	Option 2 A=7.146, B=1831.6, C=211.82

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTOTE11 - Horizontal Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	7.5132
Vapor Space Volume (cu ft)	18.4679
Vapor Density (lb/cu ft)	0.0405
Vapor Space Expansion Factor	0.0323
Vented Vapor Saturation Factor	0.8550
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	18.4679
Tank Diameter (ft)	3.0000
Effective Diameter (ft)	4.3702
Vapor Space Outage (ft)	1.2312
Tank Shell Length (ft)	5.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0405
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cu ft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0323
Daily Vapor Temperature Range (deg. R)	19.7807
Daily Vapor Pressure Range (psia)	0.0000
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
	2.6000
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	
	2.6000
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	
Daily Avg. Liquid Surface Temp. (deg F)	71.0588
Daily Min. Liquid Surface Temp. (deg F)	66.1136
Daily Max. Liquid Surface Temp. (deg F)	76.0040
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.8550
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Vapor Space Outage (ft)	1.2312
Working Losses (lb)	
Working Losses (lb)	52.6763
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Annual Net Throughput (gal/yr.)	13,140.0000
Annual Turnovers	52.0464
Turnover Factor	0.7431
Tank Diameter (ft)	3.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	
Vapor Control Efficiency (%)	0%
Total Losses (lb)	60.1895

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Chemical Injection Tote No. 12	TEMPO Subject Item ID New	Emission Point ID No. GCTOTE12

Operating Data¹	
Tank Volume	250.00 gal
Operating Rate	13,140.00 gal/yr
Hours of Operation	8,760 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates ³			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC	NA	BREEZE TankESP	0.007	0.007	60.19	0.03
Total VOC²			0.007	0.007	60.19	0.03

¹ Provided by Cheniere Creole Trail Pipeline, L.P.

² Emissions include working and breathing.

³ Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

GCTOTE12

Identification

User Identification:	GCTOTE12
City:	Lake Charles
State:	LA
Company:	Gillis Compressor Station
Type of Tank:	Horizontal Tank
Description:	Chemical Injection Tote No. 12

Tank Dimensions

Shell Length (ft):	5.00
Diameter (ft):	3.00
Volume (gallons):	250.00
Turnovers:	52.56
Net Throughput(gal/yr):	13,140.00
Insulation Condition:	Not Insulated

Paint Characteristics

Shell Color/Shade:	White Paint
Shell Condition:	Average

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

OCTOTE12 - Horizontal Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Propanol-based Naphthalene Chemical	All	71.06	66.11	76.00	71.06	2.6000	2.6000	2.6000	88.6100			88.6100	N/A
Naphthalene									128.1700	0.0500	0.0001	128.1700	Option 2 A=7.146, B=1831.6, C=211.82

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

GCTOTE12 - Horizontal Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	7.5132
Vapor Space Volume (cu ft)	18.4679
Vapor Density (lb/cu ft)	0.0405
Vapor Space Expansion Factor	0.0323
Vented Vapor Saturation Factor	0.8550
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	18.4679
Tank Diameter (ft)	3.0000
Effective Diameter (ft)	4.3702
Vapor Space Outage (ft)	1.2312
Tank Shell Length (ft)	5.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0405
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0323
Daily Vapor Temperature Range (deg. R)	19.7807
Daily Vapor Pressure Range (psia)	0.0000
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
	2.6000
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	
	2.6000
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	
Daily Avg. Liquid Surface Temp. (deg. F)	71.0588
Daily Min. Liquid Surface Temp. (deg. F)	66.1136
Daily Max. Liquid Surface Temp. (deg. F)	76.0040
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.8550
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Vapor Space Outage (ft)	1.2312
Working Losses (lb)	
Vapor Molecular Weight (lb/lb-mole)	88.6100
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Annual Net Throughput (gal/yr.)	13,140.0000
Annual Turnovers	52.0464
Turnover Factor	0.7431
Tank Diameter (ft)	3.0000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	
	0%
Total Losses (lb)	60.1895

GC XVII Activities

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Truck Loading Operations	TEMPO Subject Item ID N/A	Emission Point ID No. TRKLD

Parameter	Unit
Saturation Factor ¹	0.60
Input Data for Condensate Tanks Truck Loading	
Temperature of bulk liquid loaded ²	531.32 R
True Vapor Pressure of liquid loaded ²	4.63 PSI
Molecular Weight of Vapor ³	68.00
Input Data for Wastewater Tank Truck Loading	
Temperature of bulk liquid loaded ²	534.00 R
True Vapor Pressure of liquid loaded ²	0.01 PSI
Molecular Weight of Vapor ³	130.00
Emissions from Condensate Tanks Truck Loading	
Loading Loss Factor = $12.46 * S * VP * MW / T$	
Loading Loss Factor	4.43 lb/1000 gal
Condensate Tanks Throughput ⁴	137,471.60 gal/yr
Loadout VOC Emissions	0.30 TPY
Loadout Naphthalene Emissions ⁵	0.02 TPY
Emissions from Wastewater Tank Truck Loading	
Loading Loss Factor = $12.46 * S * VP * MW / T$	
Loading Loss Factor	0.02 lb/1000 gal
Wastewater Tanks Throughput ⁴	40,000.00 gal/yr
Loadout VOC Emissions	3.64E-04 TPY

Emissions Summary

Activity	Pollutant	Total Emissions	Unit
Condensate Tanks Truck Loading	VOC	0.30	TPY
	Naphthalene	0.02	TPY
Wastewater Tanks Truck Loading	VOC	3.64E-04	TPY
Total Loadout VOC Emissions		0.30	TPY
Total Loadout Naphthalene Emissions		0.02	TPY

¹Saturation factor from AP-42 Fifth Edition, Table 5.2-1

²BREEZE TankESP PRO Version 5.3.1, (Meteorological data: Lake Charles, LA).

³AP-42 Fifth Edition, Table 7.1-2. Properties of Selected Petroleum Liquids. Based upon Gasoline RVP 7 and No. 2 Fuel Oil (Diesel) for Condensate Tanks and Wastewater Tank contents, respectively.

⁴Based on total throughput of all condensate storage tanks (GCTK01 through GCTK12) and wastewater tanks (ISA-21 and ISA-24).

⁵Based on safety data sheet.

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point General Condition XVII Blowdowns	TEMPO Subject Item ID N/A	Emission Point ID No. GCSSB1, GCSSB2, GCSSB3, GCSSB4, GCSDDB1, GCSDDB2

	Blowdown Volumes ¹	Number of Events Per Year ²	Number of Events Per Hour ³
Station Suction Blowdown Stacks	1663 lb-mol	2	1
Station Discharge Blowdown Stacks	2012 lb-mol	2	1

Pollutant	Mol Fraction	MW (lb/lb-mol)
Propane (C3)	0.004	44.096
N-butane (NC4)	0.001	58.122
Iso butane (IC4)	0.001	58.122
N-pentane (NC5)	0	72.149
Iso pentane (IC5)	0	72.149
Hexane (C6)	0.00054	86.175
Methane (C1)	0.960	16.042
Carbon Dioxide (CO ₂)	0.010	44.01
Undetermined ⁴	0.023	

Example Calculation:

lbs C6 per event = Blowdown Volume (lb-mol) x Mol Fraction of C6 x MW of C6 (lb/lb-mol)
 lbs C6 for Station Suction per event = (1663 lb-mol) x 0.00054 x (86.175 lb/lb-mol) = 77.39 lbs

Station Suction Blowdown Stack 1

Pollutant	Average Emissions per hour (lbs)	Maximum Emissions per hour (lbs)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	568.68	568.68	0.28	0.57
Hexane	77.39	77.39	0.04	0.08
Methane	25,613.06	25,613.06	12.81	25.61
Carbon Dioxide	738.88	738.88	0.37	0.74
CO ₂ e	641,065.43	641,065.43	320.53	641.07

Station Suction Blowdown Stack 2

Pollutant	Average Emissions per hour (lbs)	Maximum Emissions per hour (lbs)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	568.68	568.68	0.28	0.57
Hexane	77.39	77.39	0.04	0.08
Methane	25,613.06	25,613.06	12.81	25.61
Carbon Dioxide	738.88	738.88	0.37	0.74
CO ₂ e	641,065.43	641,065.43	320.53	641.07

Company Cheniere Creole Trail Pipeline, L.P.		Facility Gillis Compressor Station	
Descriptive Name of Emission Point General Condition XVII Blowdowns		TEMPO Subject Item ID N/A	Emission Point ID No. GCSSB1, GCSSB2, GCSSB3, GCSSB4, GCSD1, GCSD2

Station Suction Blowdown Stack 3

Pollutant	Average Emissions per hour (lbs)	Maximum Emissions per hour (lbs)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	568.68	568.68	0.28	0.57
Hexane	77.39	77.39	0.04	0.08
Methane	25,613.06	25,613.06	12.81	25.61
Carbon Dioxide	738.88	738.88	0.37	0.74
CO ₂ e	641,065.43	641,065.43	320.53	641.07

Station Suction Blowdown Stack 4

Pollutant	Average Emissions per hour (lbs)	Maximum Emissions per hour (lbs)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	568.68	568.68	0.28	0.57
Hexane	77.39	77.39	0.04	0.08
Methane	25,613.06	25,613.06	12.81	25.61
Carbon Dioxide	738.88	738.88	0.37	0.74
CO ₂ e	641,065.43	641,065.43	320.53	641.07

Station Discharge Blowdown Stack 1

Pollutant	Average Emissions per hour (lbs)	Maximum Emissions per hour (lbs)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	688.02	688.02	0.34	0.69
Hexane	93.63	93.63	0.05	0.09
Methane	30,988.26	30,988.26	15.49	30.99
Carbon Dioxide	893.94	893.94	0.45	0.89
CO ₂ e	775,600.51	775,600.51	387.80	775.60

Station Discharge Blowdown Stack 2

Pollutant	Average Emissions per hour (lbs)	Maximum Emissions per hour (lbs)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	688.02	688.02	0.34	0.69
Hexane	93.63	93.63	0.05	0.09
Methane	30,988.26	30,988.26	15.49	30.99
Carbon Dioxide	893.94	893.94	0.45	0.89
CO ₂ e	775,600.51	775,600.51	387.80	775.60

¹ Based on Reference Cheniere Document CTGCS-E-PS-CAL-00003 provided by Paul Newman (Cheniere) to Sarah Boudreaux (Trinity) on May 12, 2015.

² Based on information provided by Paul Newman (Cheniere) to Sarah Boudreaux (Trinity) on May 12, 2015.

³ Blowdown occurs in a matter of minutes. Assumes only one blowdown per hour, therefore Average Hourly Emissions = Maximum Hourly Emissions.

⁴ Non-VOC; non-HAP/TAP.

Company Cheniere Creole Trail Pipeline, L.P.	Facility Gillis Compressor Station	
Descriptive Name of Emission Point Miscellaneous Venting from Filter Separators/Slug Catchers	TEMPO Subject Item ID N/A	Emission Point ID No. MISCVENT

	Total Venting Volumes from All Filter Separators/Slug Catchers Per Event¹	Number of Events Per Year¹	Number of Filter Separators/Slug Catchers
Miscellaneous Venting from Filter Separators/Slug Catchers	849 lb-mol/event	8	24

Gas Speciation

Pollutant	Mol Fraction	MW (lb/lb-mol)
Propane (C3)	0.004	44.096
N-butane (NC4)	0.001	58.122
Iso butane (IC4)	0.001	58.122
N-pentane (NC5)	0	72.149
Iso pentane (IC5)	0	72.149
Hexane (C6)	0.00054	86.175
Methane (C1)	0.960	16.042
Carbon Dioxide (CO ₂)	0.010	44.01
Undetermined ²	0.023	

Example Calculation:

lbs C6 per event = Total Venting Volumes from All Filter Separators/Slug Catchers Per Event (lb-mol/event) x Mol Fraction of C6 x MW of C6 (lb/lb-mol)

$$= (849 \text{ lb-mol/event}) \times 0.00054 \times (86.175 \text{ lb/lb-mol}) = 39.51 \text{ lbs/event}$$

Emissions from Miscellaneous Venting

Pollutant	Emissions Per Event (lbs)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	290.32	0.15	1.16
Hexane	39.51	0.02	0.16
Naphthalene ³	14.52	0.01	0.06
Methane	13,076.06	6.54	52.30
Carbon Dioxide	377.22	0.19	1.51
CO ₂ e	327,278.74	163.64	1,309.11

¹ Based on Cheniere process data and process knowledge.

² Non-VOC; non-HAP/TAP.

³ Naphthalene emissions were conservatively assumed to be 5% of the VOC emissions.

Insignificant Activities

LAC 33:III.501.B.5.A.3 Insignificant Activity Tanks

VOC Emissions Summary

Tank ID	Tank Description	Working Losses[1]	Standing Losses[1]	Total Emissions[1]	Emission Rates
		(lb/yr)	(lb/yr)	(lb/yr)	Annual (tpy)
ISA-21	Wastewater Tank (4,200 gal)	0.62	1.47	2.10	1.05E-03
ISA-24	Wastewater Tank (4,200 gal)	0.62	1.47	2.10	1.05E-03
ISA-25	Lube Oil Tank (1,500 gal)	0.01	0.06	0.07	3.50E-05
ISA-26	Lube Oil Tank (1,500 gal)	0.01	0.06	0.07	3.50E-05
ISA-27	Lube Oil Tank (1,500 gal)	0.01	0.06	0.07	3.50E-05
ISA-28	Lube Oil Tank (2,500 gal)	0.01	0.10	0.11	5.50E-05
ISA-29	Lube Oil Tank (2,500 gal)	0.01	0.10	0.11	5.50E-05
Total					0.002

[1] Based on BREEZE TankESP Program.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
ISA-21

Identification

User Identification:	ISA-21
City:	Lake Charles
State:	LA
Company:	Gillis Compressor Station
Type of Tank:	FRT (no floating roof)
Description:	Wastewater Tank (4,200 gal)

Tank Dimensions

Shell Height (ft):	11.00
Diameter (ft):	8.50
Liquid Height (ft):	10.00
Avg. Liquid Height (ft):	5.50
Volume (gallons):	4,669.29
Turnovers:	4.28
Net Throughput(gal/yr):	20,000.00
Insulation Condition:	Not Insulated

Paint Characteristics

Shell Color/Shade:	Medium Gray Paint
Shell Condition:	Average
Roof Color/Shade:	Medium Gray Paint
Roof Condition:	Average

Roof Characteristics

Type:	Column-Supported (Cone)
Height (ft):	0.27
Roof Slope (ft/ft):	0.06

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

ISA-21 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight. Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Diesel	All	74.62	66.83	82.42	71.82	0.0104	0.0081	0.0132	130.0000			188.00 Option 3 A=12.101, B=8907

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

ISA-21 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	1.4739
Vapor Space Volume (cu ft)	317.1889
Vapor Density (lb/cu ft)	0.0002
Vapor Space Expansion Factor	0.0546
Vented Vapor Saturation Factor	0.9969
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	317.1889
Tank Diameter (ft)	8.5000
Vapor Space Outage (ft)	5.5897
Tank Shell Height (ft)	11.0000
Average Liquid Height (ft)	5.5000
Roof Outage (ft)	0.0897
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.0897
Roof Height (ft)	0.2692
Roof Slope (ft/ft)	0.0633
Shell Radius (ft)	4.2500
Vapor Density	
Vapor Density (lb/cu ft)	0.0002
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0104
Daily Avg. Liquid Surface Temp. (deg. F)	74.6234
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0546
Daily Vapor Temperature Range (deg. R)	31.1933
Daily Vapor Pressure Range (psia)	0.0051
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0104
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	0.0081
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	0.0132
Daily Avg. Liquid Surface Temp. (deg F)	74.6234
Daily Min. Liquid Surface Temp. (deg F)	66.8250
Daily Max. Liquid Surface Temp. (deg F)	82.4217
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.9969
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0104
Vapor Space Outage (ft)	5.5897

Working Losses (lb)	0.6248
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0104
Annual Net Throughput (gal/yr.)	20,000,0000
Annual Turnovers	5.2351
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	4,669,2921
Maximum Liquid Height (ft)	10.0000
Tank Diameter (ft)	8.5000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	2.0987

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
ISA-24

Identification
 User Identification: ISA-24
 City: Lake Charles
 State: LA
 Company: Gills Compressor Station
 Type of Tank: FRT (no floating roof)
 Description: Wastewater Tank (4,200 gal)

Tank Dimensions
 Shell Height (ft): 11.00
 Diameter (ft): 8.50
 Liquid Height (ft): 10.00
 Avg. Liquid Height (ft): 5.50
 Volume (gallons): 4,669.29
 Turnovers: 4.28
 Net Throughput(gal/yr): 20,000.00
 Insulation Condition: Not Insulated

Paint Characteristics
 Shell Color/Shade: Medium Gray Paint
 Shell Condition: Average
 Roof Color/Shade: Medium Gray Paint
 Roof Condition: Average

Roof Characteristics
 Type: Column-Supported (Cone)
 Height (ft): 0.27
 Roof Slope (ft/R): 0.06

Breather Vent Settings
 Vacuum Settings (psig): -0.03
 Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

ISA-24 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight. Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Diesel	All	74.62	66.83	82.42	71.82	0.0104	0.0081	0.0132	130.0000			188.00 Option 3: A=12.101, B=8907

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

ISA-24 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	1.4739
Vapor Space Volume (cu ft)	317.1889
Vapor Density (lb/cu ft)	0.0002
Vapor Space Expansion Factor	0.0546
Vented Vapor Saturation Factor	0.9969
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	317.1889
Tank Diameter (ft)	8.5000
Vapor Space Outage (ft)	5.5897
Tank Shell Height (ft)	11.0000
Average Liquid Height (ft)	5.5000
Roof Outage (ft)	0.0897
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.0897
Roof Height (ft)	0.2692
Roof Slope (ft/ft)	0.0633
Shell Radius (ft)	4.2500
Vapor Density	
Vapor Density (lb/cu ft)	0.0002
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0104
Daily Avg. Liquid Surface Temp. (deg. F)	74.6234
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	71.8151
Tank Paint Solar Absorptance (Shell)	0.7100
Tank Paint Solar Absorptance (Roof)	0.7100
Daily Total Solar Insulation Factor (Btu/sqft day)	1.445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0546
Daily Vapor Temperature Range (deg. R)	31.1933
Daily Vapor Pressure Range (psia)	0.0051
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0104
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	0.0081
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	0.0132
Daily Avg. Liquid Surface Temp. (deg F)	74.6234
Daily Min. Liquid Surface Temp. (deg F)	66.8250
Daily Max. Liquid Surface Temp. (deg F)	82.4217
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.9969
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0104
Vapor Space Outage (ft)	5.5897

Working Losses (lb)	0.6248
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0104
Annual Net Throughput (gal/yr.)	20,000,0000
Annual Turnovers	5.2351
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	4,669,2921
Maximum Liquid Height (ft)	10.0000
Tank Diameter (ft)	8.5000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	2.0987

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
ISA-25

Identification		
User Identification:	ISA-25	
City:	Lake Charles	
State:	LA	
Company:	Gillis Compressor Station	
Type of Tank:	FRT (no floating roof)	
Description:	Lube Oil Tank (1,500 gal)	

Tank Dimensions		
Shell Height (ft)		9.00
Diameter (ft)		5.33
Liquid Height (ft)		8.00
Avg. Liquid Height (ft)		4.50
Volume (gallons)	1,503.86	
Turnovers:		1.00
Net Throughput(gal/yr)		1,500.00
Insulation Condition:	Not Insulated	

Paint Characteristics		
Shell Color/Shade:	White Paint	
Shell Condition:	Average	
Roof Color/Shade:	White Paint	
Roof Condition:	Average	

Roof Characteristics		
Type:	Column-Supported (Cone)	
Height (ft)		0.17
Roof Slope (ft/ft)		0.05

Breather Vent Settings		
Vacuum Settings (psig):		-0.03
Pressure Settings (psig):		0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

ISA-25 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight. Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Turbine Oil	All	70.74	65.53	75.95	69.82	0.0019	0.0019	0.0019	130.0000			188.00 N/A

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

ISA-25 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	0.0576
Vapor Space Volume (cu ft)	101.7593
Vapor Density (lb/cu ft)	4.42E-05
Vapor Space Expansion Factor	0.0352
Vented Vapor Saturation Factor	0.9995
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	101.7593
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	4.5556
Tank Shell Height (ft)	9.0000
Average Liquid Height (ft)	4.5000
Roof Outage (ft)	0.0556
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.0556
Roof Height (ft)	0.1667
Roof Slope (ft/ft)	0.0625
Shell Radius (ft)	2.6665
Vapor Density	
Vapor Density (lb/cu ft)	4.42E-05
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Daily Avg. Liquid Surface Temp. (deg. F)	70.7380
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Tank Paint Solar Absorptance (Roof)	0.2500
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0352
Daily Vapor Temperature Range (deg. R)	20.8335
Daily Vapor Pressure Range (psia)	0.00E+00
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	0.0019
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	0.0019
Daily Avg. Liquid Surface Temp. (deg F)	70.7380
Daily Min. Liquid Surface Temp. (deg F)	65.5297
Daily Max. Liquid Surface Temp. (deg F)	75.9464
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.9995
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Vapor Space Outage (ft)	4.5556

Working Losses (lb)	0.0088
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Annual Net Throughput (gal/yr.)	1,500.0000
Annual Turnovers	1.2824
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	1,503.8558
Maximum Liquid Height (ft)	8.0000
Tank Diameter (ft)	5.3330
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	0.0664

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
ISA-26

Identification		
User Identification:	ISA-26	
City:	Lake Charles	
State:	LA	
Company:	Gillis Compressor Station	
Type of Tank:	FRT (no floating roof)	
Description:	Lube Oil Tank (1,500 gal)	
Tank Dimensions		
Shell Height (ft)		9.00
Diameter (ft)		5.33
Liquid Height (ft)		8.00
Avg. Liquid Height (ft)		4.50
Volume (gallons)	1,503.86	
Turnovers:		1.00
Net Throughput(gal/yr):		1,500.00
Insulation Condition:	Not Insulated	
Paint Characteristics		
Shell Color/Shade:	White Paint	
Shell Condition:	Average	
Roof Color/Shade:	White Paint	
Roof Condition:	Average	
Roof Characteristics		
Type:	Column-Supported (Cone)	
Height (ft)		0.17
Roof Slope (ft/ft)		0.06
Breather Vent Settings		
Vacuum Settings (psig):		-0.03
Pressure Settings (psig):		0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

ISA-26 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight. Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Turbine Oil	All	70.74	65.53	75.95	69.82	0.0019	0.0019	0.0019	130.0000			188.00 N/A

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

ISA-26 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	0.0576
Vapor Space Volume (cu ft)	101.7593
Vapor Density (lb/cu ft)	4.42E-05
Vapor Space Expansion Factor	0.0352
Vented Vapor Saturation Factor	0.9995
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	101.7593
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	4.5556
Tank Shell Height (ft)	9.0000
Average Liquid Height (ft)	4.5000
Roof Outage (ft)	0.0556
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.0556
Roof Height (ft)	0.1667
Roof Slope (ft/ft)	0.0625
Shell Radius (ft)	2.6665
Vapor Density	
Vapor Density (lb/cu ft)	4.42E-05
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Daily Avg. Liquid Surface Temp. (deg. F)	70.7380
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Tank Paint Solar Absorptance (Roof)	0.2500
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0352
Daily Vapor Temperature Range (deg. R)	20.8335
Daily Vapor Pressure Range (psia)	0.00E+00
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	0.0019
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	0.0019
Daily Avg. Liquid Surface Temp. (deg F)	70.7380
Daily Min. Liquid Surface Temp. (deg F)	65.5297
Daily Max. Liquid Surface Temp. (deg F)	75.9464
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.9995
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Vapor Space Outage (ft)	4.5556

Working Losses (lb)	0.0088
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Annual Net Throughput (gal/yr.)	1,500,0000
Annual Turnovers	1.2824
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	1,503,8558
Maximum Liquid Height (ft)	8.0000
Tank Diameter (ft)	5.3330
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	0.0664

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
ISA-27

Identification		
User Identification:	ISA-27	
City:	Lake Charles	
State:	LA	
Company:	Gillis Compressor Station	
Type of Tank:	FRT (no floating roof)	
Description:	Lube Oil Tank (1,500 gal)	
Tank Dimensions		
Shell Height (ft)		9.00
Diameter (ft)		5.33
Liquid Height (ft)		8.00
Avg. Liquid Height (ft)		4.50
Volume (gallons)		1,503.86
Turnovers		1.00
Net Throughput(gal/yr)		1,500.00
Insulation Condition	Not Insulated	
Paint Characteristics		
Shell Color/Shade	White Paint	
Shell Condition	Average	
Roof Color/Shade	White Paint	
Roof Condition	Average	
Roof Characteristics		
Type	Column-Supported (Cone)	
Height (ft)		0.17
Roof Slope (ft/ft)		0.06
Breather Vent Settings		
Vacuum Settings (psig)		-0.03
Pressure Settings (psig)		0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

ISA-27 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Turbine Oil	All	70.74	65.53	75.95	69.82	0.0019	0.0019	0.0019	130.0000			188.00 N/A

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

ISA-27 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	0.0576
Vapor Space Volume (cu ft)	101.7593
Vapor Density (lb/cu ft)	4.42E-05
Vapor Space Expansion Factor	0.0352
Vented Vapor Saturation Factor	0.9995
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	101.7593
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	4.5556
Tank Shell Height (ft)	9.0000
Average Liquid Height (ft)	4.5000
Roof Outage (ft)	0.0556
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.0556
Roof Height (ft)	0.1667
Roof Slope (ft/ft)	0.0625
Shell Radius (ft)	2.6665
Vapor Density	
Vapor Density (lb/cu ft)	4.42E-05
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Daily Avg. Liquid Surface Temp. (deg. F)	70.7380
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Tank Paint Solar Absorptance (Roof)	0.2500
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0352
Daily Vapor Temperature Range (deg. R)	20.8335
Daily Vapor Pressure Range (psia)	0.00E+00
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	0.0019
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	0.0019
Daily Avg. Liquid Surface Temp. (deg F)	70.7380
Daily Min. Liquid Surface Temp. (deg F)	65.5297
Daily Max. Liquid Surface Temp. (deg F)	75.9464
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.9995
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Vapor Space Outage (ft)	4.5556

Working Losses (lb)	0.0088
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Annual Net Throughput (gal/yr.)	1,500.0000
Annual Turnovers	1.2824
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	1,503.8558
Maximum Liquid Height (ft)	8.0000
Tank Diameter (ft)	5.3330
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	0.0664

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
ISA-28

Identification
 User Identification: ISA-28
 City: Lake Charles
 State: LA
 Company: Gillis Compressor Station
 Type of Tank: FRT (no floating roof)
 Description: Lube Oil Tank (2,500 gal)

Tank Dimensions
 Shell Height (ft): 15.00
 Diameter (ft): 5.33
 Liquid Height (ft): 14.00
 Avg. Liquid Height (ft): 7.50
 Volume (gallons): 2,506.43
 Turnovers: 1.00
 Net Throughput(gal/yr): 2,500.00
 Insulation Condition: Not Insulated

Paint Characteristics
 Shell Color/Shade: White Paint
 Shell Condition: Average
 Roof Color/Shade: White Paint
 Roof Condition: Average

Roof Characteristics
 Type: Column-Supported (Cone)
 Height (ft): 0.17
 Roof Slope (ft/ft): 0.06

Breather Vent Settings
 Vacuum Settings (psig): -0.03
 Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

ISA-28 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Turbine Oil	All	70.62	65.31	75.92	69.82	0.0019	0.0019	0.0019	130.0000			188.00 N/A

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

ISA-28 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	0.0976
Vapor Space Volume (cu ft)	168.7716
Vapor Density (lb/cu ft)	4.42E-05
Vapor Space Expansion Factor	0.0359
Vented Vapor Saturation Factor	0.9992
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	168.7716
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	7.5556
Tank Shell Height (ft)	15.0000
Average Liquid Height (ft)	7.5000
Roof Outage (ft)	0.0556
Roof Outage (Cone Roof)	
Roof Outage (ft)	0.0556
Roof Height (ft)	0.1667
Roof Slope (ft/ft)	0.0625
Shell Radius (ft)	2.6665
Vapor Density	
Vapor Density (lb/cu ft)	4.42E-05
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Daily Avg. Liquid Surface Temp. (deg. F)	70.6181
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Tank Paint Solar Absorptance (Roof)	0.2500
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0359
Daily Vapor Temperature Range (deg. R)	21.2270
Daily Vapor Pressure Range (psia)	0.00E+00
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	0.0019
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	0.0019
Daily Avg. Liquid Surface Temp. (deg. F)	70.6181
Daily Min. Liquid Surface Temp. (deg. F)	65.3114
Daily Max. Liquid Surface Temp. (deg. F)	75.9249
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.9992
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Vapor Space Outage (ft)	7.5556

Working Losses (lb)	0.0147
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Annual Net Throughput (gal/yr.)	2,500.0000
Annual Turnovers	1.1509
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	2,506.4263
Maximum Liquid Height (ft)	14.0000
Tank Diameter (ft)	5.3330
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	0.1123

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
ISA-29

Identification

User Identification:	ISA-29
City:	Lake Charles
State:	LA
Company:	Gillis Compressor Station
Type of Tank:	FRT (no floating roof)
Description:	Lube Oil Tank (2,500 gal)

Tank Dimensions

Shell Height (ft)	15.00
Diameter (ft)	5.33
Liquid Height (ft)	14.00
Avg. Liquid Height (ft)	7.50
Volume (gallons)	2,506.43
Turnovers	1.00
Net Throughput(gal/yr)	2,500.00
Insulation Condition:	Not Insulated

Paint Characteristics

Shell Color/Shade:	White Paint
Shell Condition:	Average
Roof Color/Shade:	White Paint
Roof Condition:	Average

Roof Characteristics

Type:	Column-Supported (Cone)
Height (ft)	0.17
Roof Slope (ft/ft)	0.06

Breather Vent Settings

Vacuum Settings (psig)	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

ISA-29 - Vertical Fixed Roof Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight, Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.				
Turbine Oil	All	70.62	65.31	75.92	69.82	0.0019	0.0019	0.0019	130.0000			188.00 N/A

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

ISA-29 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	0.0976
Vapor Space Volume (cu ft):	168.7716
Vapor Density (lb/cu ft)	4.42E-05
Vapor Space Expansion Factor:	0.0359
Vented Vapor Saturation Factor	0.9992
Tank Vapor Space Volume	
Vapor Space Volume (cu ft):	168.7716
Tank Diameter (ft)	5.3330
Vapor Space Outage (ft)	7.5556
Tank Shell Height (ft)	15.0000
Average Liquid Height (ft)	7.5000
Roof Outage (ft)	0.0556
Roof Outage (Cone Roof)	
Roof Outage (ft):	0.0556
Roof Height (ft)	0.1667
Roof Slope (ft/ft)	0.0625
Shell Radius (ft)	2.6665
Vapor Density	
Vapor Density (lb/cu ft)	4.42E-05
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Daily Avg. Liquid Surface Temp. (deg. F)	70.6181
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cu ft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	69.8207
Tank Paint Solar Absorptance (Shell)	0.2500
Tank Paint Solar Absorptance (Roof)	0.2500
Daily Total Solar Insulation Factor (Btu/sqft day)	1,445.2678
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0359
Daily Vapor Temperature Range (deg. R)	21.2270
Daily Vapor Pressure Range (psia)	0.00E+00
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	0.0019
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	0.0019
Daily Avg. Liquid Surface Temp. (deg F)	70.6181
Daily Min. Liquid Surface Temp. (deg F)	65.3114
Daily Max. Liquid Surface Temp. (deg F)	75.9249
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.9992
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Vapor Space Outage (ft)	7.5556

Working Losses (lb)	0.0147
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	0.0019
Annual Net Throughput (gal/yr.)	2,500.0000
Annual Turnovers	1.1509
Turnover Factor	1.0000
Maximum Liquid Volume (gal)	2,506.4263
Maximum Liquid Height (ft)	14.0000
Tank Diameter (ft)	5.3330
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb)	0.1123

LAC 33:III.501.B.5.A.8 Insignificant Activity Tanks

VOC Emissions Summary

Tank ID	Tank Description	Working Losses[1]	Standing Losses[1]	Total Emissions[1]	Emission Rates
		(lb/yr)	(lb/yr)	(lb/yr)	Annual (tpy)
ISA-23	Portable Diesel Tank (500 gal)	0.01	0.19	0.20	9.80E-05

[1] Based on BREEZE TankESP Program.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
ISA-23

Identification

User Identification:	ISA-23
City:	Lake Charles
State:	LA
Company:	Gillis Compressor Station
Type of Tank:	Horizontal Tank
Description:	Portable Diesel Tank (500 gal)

Tank Dimensions

Shell Length (ft):	6.00
Diameter (ft):	3.60
Volume (gallons):	456.85
Turnovers:	0.55
Net Throughput(gal/yr):	250.00
Insulation Condition:	Not Insulated

Paint Characteristics

Shell Color/Shade:	Red Primer Or Dark Green Paint
Shell Condition:	New

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
 Emissions Report - Detail Format
 Liquid Contents of Storage Tank

ISA-23 - Horizontal Tank
 Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg	Min.	Max.		Avg	Min.	Max.					
Diesel	All	77.00	67.86	86.15	77.00	0.0112	0.0084	0.0084	130.0000			188.0000	Option 3: A=12.101, B=8907

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

ISA-23 - Horizontal Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb)	0.1875
Vapor Space Volume (cu ft)	31.9126
Vapor Density (lb/cu ft)	0.0003
Vapor Space Expansion Factor	0.0645
Vented Vapor Saturation Factor	0.9991
Tank Vapor Space Volume	
Vapor Space Volume (cu ft)	31.9126
Tank Diameter (ft)	3.6000
Effective Diameter (ft)	5.2442
Vapor Space Outage (ft)	1.4774
Tank Shell Length (ft)	6.0000
Vapor Density	
Vapor Density (lb/cu ft)	0.0003
Vapor Molecular Weight (lb/lb-mole)	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Daily Avg. Liquid Surface Temp. (deg. F)	77.0033
Daily Average Ambient Temp. (deg. F)	68.7367
Ideal Gas Constant R (psia cuft / (lb-mol-deg R))	10.7310
Liquid Bulk Temperature (deg. F)	72.5956
Tank Paint Solar Absorptance (Shell)	0.8900
Vapor Space Expansion Factor	
Vapor Space Expansion Factor	0.0645
Daily Vapor Temperature Range (deg. R)	36.5703
Daily Vapor Pressure Range (psia)	0.0064
Breather Vent Press. Setting Range (psia)	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
	0.0112
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	
	0.0084
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	
Daily Avg. Liquid Surface Temp. (deg F)	77.0033
Daily Min. Liquid Surface Temp. (deg F)	67.8607
Daily Max. Liquid Surface Temp. (deg F)	86.1459
Daily Ambient Temp. Range (deg. R)	17.8492
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor	0.9991
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Vapor Space Outage (ft)	1.4774
Working Losses (lb)	
Vapor Molecular Weight (lb/lb-mole)	0.0083
	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia)	
Annual Net Throughput (gal/yr.)	250.0000
Annual Turnovers	0.5730
Turnover Factor	1.0000
Tank Diameter (ft)	3.6000
Working Loss Product Factor	1.0000
Vapor Control Efficiency (%)	
	0%
Total Losses (lb)	0.1958

APPENDIX C. CERTIFICATE OF GOOD STANDING

**State of
Louisiana
Secretary of
State**



COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Name	Type	City	Status
CHENIERE CREOLE TRAIL PIPELINE, L.P.	Partnership (Non-Louisiana)		Active

Previous Names

CHENIERE CREOLE TRAIL PIPELINE COMPANY (Changed: 5/2/2006)

Business: CHENIERE CREOLE TRAIL PIPELINE, L.P.

Charter Number: 35844726L

Registration Date: 12/29/2004

Domicile Address

DOMICILE: DELAWARE

Mailing Address

700 MILAM STREET, SUITE 1900
HOUSTON, TX 77002

Principal Business Office

700 MILAM STREET, SUITE 1900
HOUSTON, TX 77002

Registered Office in Louisiana

Principal Business Establishment in Louisiana

501 LOUISIANA AVENUE
BATON ROUGE, LA 70802

Status

Status: Active

Registered: 12/29/2004

Last Report Filed: 12/2/2022

Type: Partnership (Non-Louisiana)

Registered Agent(s)

Agent:	CORPORATION SERVICE COMPANY
Address 1:	501 LOUISIANA AVENUE
City, State, Zip:	BATON ROUGE, LA 70802
Appointment Date:	12/29/2004

Officer(s)**Additional Officers: No**

Officer:	CHENIERE PIPELINE GP INTERESTS, LLC
Title:	General Partner
Address 1:	700 MILAM STREET, SUITE 1900
City, State, Zip:	HOUSTON, TX 77002

Amendments on File (3)

Description	Date
Conversion	5/2/2006
Name Change	5/2/2006
Stmt of Chg or Chg Prin Bus Off	12/28/2015

[Print](#)