U.S. DEPARTMENT OF TRANSPORTATION PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

FINAL ENVIRONMENTAL ASSESSMENT

and

FINDING OF NO SIGNIFICANT IMPACT

Special Permit Information:

Docket Number:

PHMSA-2018-0042

Requested by:

Golden Pass LNG Terminal LLC

Date Requested:

April 2, 2018

Original Issuance Date:

June 3, 2019

Effective Dates:

June 3, 2019 to June 2, 2025

Code Section(s):

49 CFR 193.2603(a) and (b), 193.2607, 193.2609,

193.2619(c) and (e), 193.2631, and 193.2635(3)

I. Background

The Pipeline and Hazardous Materials Safety Administration (PHMSA) noticed on March 26, 2019, in the Federal Register (83 FR 52050) a special permit request by Golden Pass LNG Terminal LLC (GPLNG), owner and operator of the Liquefied Natural Gas (LNG) Regasification Import Receiving Terminal (GPLNG Terminal). The GPLNG Terminal is located on the southern shore of the Sabine-Neches Waterway in Jefferson County, Texas, approximately ten (10) miles south of Port Arthur, Texas, and two (2) miles north of Sabine Pass, Texas. The special permit waives compliance with 49 CFR 193.2603(a) and (b), 193.2607, 193.2609, 193.2619(c) and (e), 193.2631, and 193.2635(3).

This Final Environmental Assessment (FEA) describes GPLNG's request including the location of the LNG terminal, operational review, any effect to safety and the environment, and the special permit conditions.

In accordance with the U.S. Department of Transportation's (DOT) Order 5610.1C, the National Environmental Policy Act (NEPA), 42 United States Code (U.S.C.), 4321–4375,

and the Council on Environmental Quality regulations, 40 CFR 1500-1508, the processing of a special permit application involves the preparation of an FEA. NEPA requires that agencies analyze a proposed action to determine whether the action will have a significant impact on the human environment.

As required by 49 CFR 190.341, PHMSA analyzes special permit requests for potential risks to public safety and the environment that could result from our decision to grant or deny the request. As part of this analysis, PHMSA looks at whether a special permit would impact the likelihood and consequences of a pipeline failure as compared with a pipeline that operates in full compliance with the pipeline safety regulations. PHMSA may grant the special permit request, grant the request with additional conditions, or deny the request.

TABLE OF CONTENTS

1.0	Introd	luction	6
	1.1	Project Description	8
	1.2	FERC Environmental Impact Statement	
2.0	Purpo	se and Need	.11
	2.1	Are there any completed projects or permits that provide context or important information for the	
		request (i.e. background)?	
	2.2	Describe the purpose of the requested special permit. What will it allow the operator to do that	
		could not do under the existing regulations?	
	2.3	List the LNG Facility Safety Regulation(s) for which the Operator Seeks Relief from	.12
	2.4	Describe the need for the requested special permit. Why can't the applicant operate the LNG	
	2.,	facility under existing regulations? How would a special permit benefit the operator? Would a	
		special permit benefit the public? If so, please explain how	
	2.5	Indicate whether this is an existing or proposed facility.	. 13
	2.6	Are there any existing or reasonably foreseeable requests that are connected to this action? If no	ο,
	2.0	please make an affirmative statement.	
3.0	Site D	escription	.14
2.0	3.1	Describe the environment in the vicinity of the facility that would be subject to the special perm	iit.
	3.1	Photos are extremely helpful.	
		3.1.1 Air Quality and Climate.	
		3.1.2 Hydrology and Water Resources	
		3.1.3 Geology/Groundwater/Soils	
		3.1.4 Biological Resources	
-	3.2	Describe the LNG facility, the materials currently handled by the facility, and specify the count	
	J.2	and states where the affected facility is located.	
	3.3	Provide general and specific map(s) of the facility location and show the following on the map(s):
	3.3	dwellings (human)	
	3.4	Describe the nature of the population in the vicinity. Describe the nearby population density an	
	5.1	places of public assembly such as schools, playgrounds, parks, theatres, types of businesses and	
		residences, etc. Photos are extremely helpful.	. 16
4.0	Alteri	natives	
	4.1	"Do Nothing / No Action" Alternative	.16
	4.2	Proposed Action	
5.0		ted Resources and Environmental Consequences	
2.0	5.1	Aesthetics	
	5.2	Air Quality	
	5.3	Biological Resources	
	5.4	Climate Change	.19
	5.5	Cultural Resources	
	5.6	Environmental Justice	
	5.7	Geology, Soils, and Mineral Resources	.20
	5.8	Indian Trust Assets.	
•	5.9	Land Use	
	5.10	Noise	
	5.11	Recreation	
	5.12	Safety	
	5.13	Socioeconomics	
*	5.14	Transportation	
	5.15	Water Resources	
6.0		parative Environmental Impacts of Alternatives	
0.0	6.1	Explain how the proposed conditions will ensure pipeline safety and integrity to at least the san	- ne
	0.1	extent that full compliance with the Pipeline Safety Regulations would.	.21
	6.2	Explain how or whether a pipeline failure would differ under the proposed special permit? How	
	. 0.2	would human safety be impacted? How would the natural environment be impacted?	
7.0	Const	ultation and Coordination	

*	7.1	Please list the name, title and company of any person involved in the preparation of this	
		document	22
	7.2	Please provide names and contact information for any person or entity you know will be impa	cted
		by the special permit. PHMSA may perform appropriate public scoping. The applicant's	
		assistance in identifying these parties will speed the process considerably	22
	7.3	If you have engaged in any stakeholder or public communication regarding this request, pleas	
		include information regarding this contact.	
8.0	Respo	onse to Public Comments Placed on Docket PHMSA-2018-0042	
9.0	Findi	ng of No Significant Impact	23
10.0		ENDIX A	
11 A		ENDLY D	29

LIST OF ACRONYMS AND DEFINED TERMS

APCI Air Products and Chemicals, Inc.

DOT U. S. Department of Transportation

EIS Environmental Impact Statement

FEIS Final Environmental Impact Statement

FERC Federal Energy Regulatory Commission

GPLNG Golden Pass Terminal LNG, LP; Golden Pass Products, LLC; and

Golden Pass Pipeline, LLC

GPLNG Terminal The existing regasification/import receiving terminal.

GPX Project LNG export facilities along with associated new compression and loop

pipeline facilities

LNG Liquefied Natural Gas

MTA Millions of Tonnes (metric ton unit) of LNG per Year

NGA Natural Gas Act

Order FERC Order dated December 21, 2016

PHMSA Pipeline and Hazardous Materials Safety Administration

SNWW Sabine Neches Water Way

1.0 Introduction

On July 6, 2005, the Federal Energy Regulatory Commission (FERC or Commission) issued an order to authorize Golden Pass LNG Terminal LP and Golden Pass Pipeline LP to site, construct, and operate a liquefied natural gas (LNG) regasification import receiving terminal (GPLNG Terminal). Golden Pass LNG Terminal LP currently operates the GPLNG Terminal on the Sabine Neches Waterway (SNWW), near Sabine Pass, Texas. Since June 2012, the GPLNG Terminal has maintained a warmed state, where all LNG has been removed, but equipment remains in a state of readiness and contains methane vapors.

On December 21, 2016, FERC issued an "Order Granting Authorizations Under Sections 3 and 7 of the Natural Gas Act" (NGA) for Golden Pass Products LLC and Golden Pass Pipeline LLC (collectively with Golden Pass LNG Terminal LP, referred to as GPLNG) to site, construct, and operate LNG export facilities along with associated new compression and loop pipeline facilities (GPX Project).

As part of the GPX Project, GPLNG plans to modify the existing GPLNG Terminal to interconnect it with the GPX Project's liquefaction facilities so that LNG can be stored in existing LNG tanks and exported from existing marine berths at a nominal rate of 15.6 million tonnes per annum (MTA).¹

The Pipeline Safety Act of 1968 authorized the U.S. Secretary of Transportation to prescribe safety standards for the purpose of transportation of natural gas by pipeline and for the siting, design, construction and operation of facilities that liquefy natural gas. Those regulations are found in "LNG Facilities: Federal Safety Standards 49 CFR Part 193." PHMSA is the agency that administers 49 CFR Part 193. Many of the regulations in 49 CFR Part 193 will not be applicable to the GPLNG Terminal during the facility modification process because the facility will not be transferring, storing, or vaporizing liquefied natural gas. The table in Appendix A specifies which regulations and portions of regulations within 49 CFR Part 193 are applicable to the GPLNG Terminal and the scope of the proposed special permit. This final environmental assessment (FEA) analyzes GPLNG's special permit application PHMSA-2018-0042-0001,

¹ Metric ton unit.

which seeks a waiver from the following provisions within 49 CFR, Part 193, subpart G Maintenance: 193.2603(a) and (b), 193.2607, 193.2609, 193.2619(c) and (e), 193.2631, and 193.2635(e).

To maximize safety, GPLNG will create a hydrocarbon-free environment in the GPLNG Terminal prior to construction of the GPX Project. Existing equipment in the GPLNG Terminal will be kept at ambient temperature, and all hydrocarbons will be purged and displaced with nitrogen. The main gas supply pipeline will be blinded off from the GPLNG Terminal. In some cases, containment will be broken for modification. A hydrocarbon-free environment will allow new equipment/facilities to be interconnected to existing equipment and allow certain existing equipment to be modified under safer conditions.

This FEA analyzes the proposed limited component maintenance and associated training when the GPLNG Terminal is purged free of all hydrocarbon in preparation for interconnecting with the GPX Project. The GPLNG facility and all components must comply fully with Part 193 prior to the reintroduction of hydrocarbons, so maintaining components that are not in use in the GPLNG Terminal during construction of the GPX Project would add minimal, if any, safety and reliability to components.

The scope of this document pertains only to the exceptions requested for the existing GPLNG Terminal. Authorization of the GPX Project has been granted under the FERC Order of December 21, 2016.

Figure 1 below shows the layout of the existing GPLNG Terminal. The area within the purple boundary line identified as the GPLNG Terminal, where GPLNG seeks waivers from certain maintenance requirements specified in 49 CFR Part 193, subpart G.

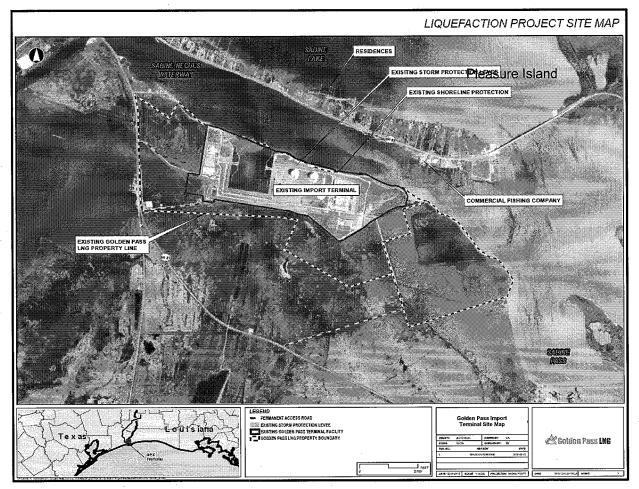


Figure 1: GPLNG Terminal Site Map

1.1 Project Description

The GPLNG Terminal is located on the southern shore of the Sabine-Neches Waterway in Jefferson County, Texas, approximately ten (10) miles south of Port Arthur, Texas, and two (2) miles north of Sabine Pass, Texas. As described in the FERC Order of December 21, 2016, and shown in Figure 2, the facilities comprising the GPX Project for liquefaction and export of natural gas will be constructed contiguous to, and integrated with, the GPLNG Terminal. GPLNG plans to modify the existing GPLNG Terminal and install equipment to allow it to liquefy natural gas at a nominal rate of 15.6 MTA using three identical propane pre-cooled mixed refrigerant liquefaction trains manufactured by Air Products and Chemicals, Inc.

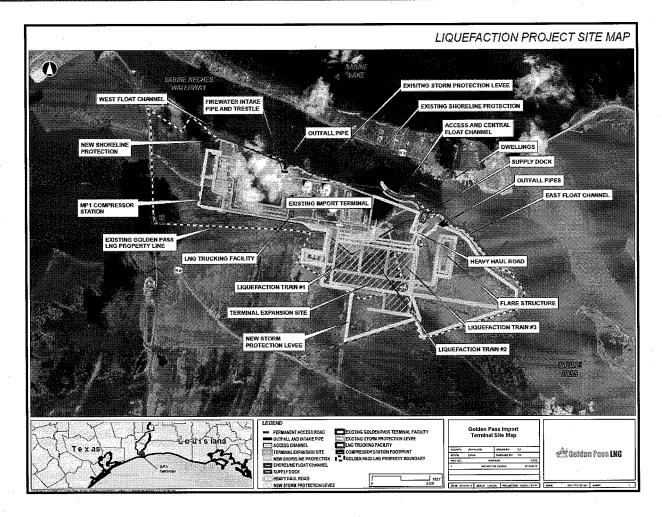


Figure 2: Diagram showing the location of the future GPX Project.

The GPLNG Terminal marine facilities consist of two (2) berths, each capable of unloading LNG ships with cargo capacities ranging from 125,000 cubic meters (m³) to 267,000 m³. Because the liquefaction facilities will use these existing marine berths, all associated piping, valves, and pumps will be made hydrocarbon free in accordance with 49 CFR 193.2517 and American Gas Association's Purging Principles and Practices (incorporated by reference, see 49 CFR 193.2013).

The GPLNG Terminal currently has five (5) LNG storage tanks, each with a capacity of 155,000 cubic meters. The tanks were originally designed and used to store LNG imported from abroad. For the GPX Project, the tanks will be used to store LNG produced by the future liquefaction facilities before it is transferred to LNG carriers and exported. In preparation for the GPX Project, the GPLNG Terminal, including all piping, valves, and pumps associated with the LNG

storage tanks, as well as the tanks themselves, will be made hydrocarbon free in accordance with 49 CFR 193.2517 and American Gas Association's Purging Principles and Practices (incorporated by reference, see 49 CFR 193.2013).

The GPLNG terminal has 10 regasification heaters, which heat a propylene glycol heat transfer fluid to regasify LNG into natural gas. Propylene glycol is non-toxic and will remain in the idle heaters.

A number of key systems within the regasification terminal will remain active in whole or in part for certain periods during GPX Project construction and while the GPLNG Terminal has been purged free of all hydrocarbon. These systems include: fire water system, nitrogen supply, instrument air, the essential generator (for emergency electrical power), the spill containment and stormwater management system, potable water, sanitary waste system, telecommunications, HVAC, lighting, certain instruments and control for the electrical system, and the diesel fuel storage, which is needed to run the essential generator.

1.2 FERC Environmental Impact Statement

FERC issued the final environmental impact statement (EIS) for the GPX Project on July 29, 2016. The FEIS was developed with PHMSA participation as a cooperating agency. All documents related to that authorization are available in FERC's elibrary in docket CP14-517-000. The final EIS assessed the potential environmental and public safety effects of the siting, construction, commissioning, and operation of the GPX Project, including the modifications of equipment at the GPLNG Terminal, in accordance with the requirements of the National Environmental Policy Act (NEPA). The draft of the EIS was thereafter presented to the FERC, which agreed with the conclusions presented in the final EIS and approved the GPX Project on December 21, 2016.

The GPX Project selected the Terminal Expansion Site and the Pipeline System Expansion locations after careful review and consideration of alternative sites. A number of measures were implemented in the planned design to avoid or minimize potential environmental and public safety impacts.

The GPX Project will provide or enhance positive economic and social benefits, while avoiding or minimizing potential adverse environmental and public safety impacts. The GPX Project will

require installation of piping tie-ins and modifications to the valves and pumps to increase capacity for transferring LNG from the LNG storage tanks to the marine vessels. To ensure safer construction of the GPX Project, GPLNG is ensuring a hydrocarbon-free status at the GPLNG Terminal site.

2.0 Purpose and Need

2.1 Are there any completed projects or permits that provide context or important information for this request (i.e. background)?

The GPX Project successfully completed a NEPA Analysis with FERC (DOT PHMSA was a cooperating agency in the proceeding) and received its Section 3 and 7 authorizations under the NGA in December, 2016. All documents related to those authorizations, including the environmental impact statement, can be found in FERC's elibrary under docket CP14-517-000. For context, the associated filings with FERC describe the work scope at the GPLNG Terminal in some detail.

2.2 Describe the purpose of the requested special permit. What will it allow the operator to do that it could not do under the existing regulations?

The existing GPLNG terminal is under the jurisdiction of US DOT PHMSA and the safety regulations in 49 CFR Part 193. An operator is required to comply with the maintenance, training, testing, and reporting requirements for equipment and personnel prescribed under these regulations. However, only certain regulations within Part 193 are applicable because during the GPX Project neither liquefying, storing, transferring, or vaporizing of LNG or natural gas will occur. GPLNG proposes to suspend six (6) maintenance provisions, as detailed in Appendix A, once the import terminal is out of LNG service, purged of hazardous fluid,² and atmospherically exposed (i.e. with "containment broken" for valve and pump replacement) while undergoing facility modification during the GPX Project.

Performing the maintenance activities in 49 CFR Part 193, subpart G, will not increase safety and reliability to the LNG facilities at the GPLNG Terminal, which will not contain

² Hazardous fluid is defined in § 193.2007 as gas or hazardous liquid. Hazardous liquid is defined in § 193.2007 as LNG or a liquid that is flammable or toxic. There will be small quantities (1,000 gallons or less) of petroleum products (i.e., diesel, gasoline, motor/hydraulic oi) used for construction equipment at the GPLNG Terminal.

hydrocarbons during the project. Execution of 49 CFR Part 193, subpart G, while the GPLNG Terminal does not carry hydrocarbon, with certain listed exceptions in Appendix A, would be ineffective and create unnecessary risk. Component maintenance is intended to ensure component reliability and safe facility operation. Maintaining components that are not in use during the hydrocarbon-free period would provide minimal if any safety benefit. Cutting out unnecessary work increases efficiency and reduces the potential for injuries by eliminating unnecessary work. As all components will be brought up to 49 CFR Part 193 standards prior to the reintroduction of hydrocarbons, maintaining components not being used for safe facility operation during construction does not bring additional safety and reliability to components.

Equipment purged of hydrocarbons must be recommissioned and restarted in full compliance with 49 CFR 193. Prior to bringing the equipment at the GPLNG Terminal back to service, GPLNG will carry out its recommissioning/restart plan, and PHMSA will perform inspections to verify that the LNG facility equipment and components are fully restored to their original and fully compliant functions. This special permit waives compliance with those activities detailed in Appendix A while imposing special permit conditions to ensure proper inspections and testing so that the existing GPLNG Terminal is compliant with 49 CFR Part 193, including subpart G, at the time of startup.

2.3 List the LNG Facility Safety Regulation(s) for which the Operator Seeks Relief from.

GPLNG requests relief for the following sections of 49 CFR 193, subpart G – Maintenance during the hydrocarbon-free stage: 193.2603(a) and (b), 193.2607, 193.2609, 193.2619(c) and (e), 193.2631, and 193.2635(e). Appendix A includes descriptions of requested items as well as the justification for the variances.

As the GPLNG Terminal will be non-operational and hydrocarbon-free, the regulations within Subpart F – Operations are not applicable. GPLNG is not seeking a waiver to 49 CFR Part 193, subpart H – Personnel, Qualifications & Training because these regulations are also not applicable. GPLNG will continue to comply with the following Subpart H regulations that do apply: 49 CFR 193.2703 and 2705 for personnel performing mitigation under 49 CFR 193.2637 only. LNG Facilities: Federal Safety Standards 49 CFR 193.2707, 193.2711, 193.2713(a)(1)(ii) and (iii), and 193.2713(b) will also continue to apply, but only for work related to 49 CFR 193.2613, 193.2627, 193.2629, 193.2633, and 193.2635. Appendix B includes the regulations

that GPLNG will continue to meet. Any regulations from 49 CFR 193, subpart G not included in Appendices A and B are inapplicable to a non-operational and hydrocarbon-free facility.

GPLNG will suspend certain maintenance activities once the GPLNG Terminal is out of LNG service, purged of hazardous fluids, and has containment broken in preparation for interconnecting with the GPX Project. However, GPLNG would continue LNG tank and foundation inspection and testing, including corrosion control maintenance, so the following sections of 49 CFR Part 193, subpart G will remain in effect as described in Appendix B: 193.2613 (essential generator only), 193.2619(b), 193.2623(a), 193.2627, 193.2629, 193.2633, and 193.2635; compliance with 49 CFR 193.2605, 193.2625(b), and 193.2637 will also continue but only as these regulations apply to 49 CFR 193.2627, 193.2629, 193.2633, and 193.2635. Maintenance procedures under 193.2605 will also apply and be executed for 193.2613. Compliance with 193.2639 (Maintenance Records) will continue for those regulations specified above. Appendix B includes the regulations that GPLNG will continue to meet. GPLNG seeks a waiver only to the specific sections in Subpart G as described in Appendix A.

2.4 Describe the need for the requested special permit. Why can't the applicant operate the LNG facility under existing regulations? How would a special permit benefit the operator? Would a special permit benefit the public? If so, please explain how.

Execution of 49 CFR Part 193, subpart G during construction, with certain listed exceptions in Appendix A, would provide minimal, if any, safety benefit for a non-operational facility and would be an inefficient use of resources. However, GPLNG will maintain certain components to protect component reliability and safe future facility operation. PHMSA will require full compliance with 49 CFR Part 193 for all components prior to the reintroduction of hydrocarbons.

2.5 Indicate whether this is an existing or proposed facility.

The GPLNG Terminal is an existing facility. As described above, the GPLNG Terminal was previously in operation as an LNG import facility. The special permit waives various provisions while the GPLNG Terminal is free of hydrocarbons and undergoing construction for conversion from an import facility to an export facility.

2.6 Are there any existing or reasonably foreseeable requests that are connected to this action? If no, please make an affirmative statement.

There are no existing or reasonably foreseeable requests that are connected to this action.

3.0 Site Description

3.1 Describe the environment in the vicinity of the facility that would be subject to the special permit. Photos are extremely helpful.

The following sections describe the environment in the vicinity of the existing GPLNG Terminal. More detail can be found by searching the FERC elibrary in docket CP04-386, for Resource Report 1, Accession No. 20040802-0002, filed on July 26, 2004. An aerial view of the facility is provided in Figure 1.

3.1.1 Air Quality and Climate

The regional climate is a modified marine climate that can be influenced by a predominant onshore flow of tropical marine air from the Gulf of Mexico. During onshore flow events, the area experiences a subtropical, humid climate. In summer, sea breezes help to decrease temperatures. General climate conditions are comparable across the terminal site.

Jefferson County is in attainment with all national ambient air quality standards.

3.1.2 Hydrology and Water Resources

Wetlands are areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands can be a source of substantial biodiversity and serve a variety of functions that include providing wildlife habitat, recreational opportunities, flood control, and naturally improving water quality of wetlands. Wetland terrain surrounds the GPLNG Terminal site, but the terminal is situated on industrial land outside of any wetlands.

3.1.3 Geology/Groundwater/Soils

The existing GPLNG Terminal is under laid by the upper portion of the Coastal Lowlands Aquifer System (known as the Chicot Aquifer). More detail can be found by searching the FERC elibrary in docket CP14-517, for Resource Report 6, Accession No. 20140707-5058, filed

on July 7, 2014. The special permit conditions will not affect groundwater resources since it will occur within the existing plant site.

3.1.4 Biological Resources

Wildlife species in the existing site area are characteristic of the communities that inhabit the vegetative habitats that occur in the vicinity of the GPLNG Terminal as identified through literature review, interpretation of aerial photography, and GPLNG' field reconnaissance.

The wildlife habitat types surrounding the terminal site include wetlands, tidal marsh, open water, upland forest, and open upland habitat. Wetlands and tidal marshes provide habitat for waterfowl, wading birds, raptors, mammals, reptiles, and amphibians. Typical wildlife associated with these habitats include: wood duck; pileated woodpecker; snowy, great, and cattle egrets; green, little blue, and great blue herons; king rail; marsh hawk; red-winged blackbird; common muskrat; swamp rabbit; beaver; nutria; eastern cottonmouth and diamond-backed water snakes; bronze frog; and eastern Missouri slider.

3.2 Describe the LNG facility, the materials currently handled by the facility, and specify the counties and states where the affected facility is located.

The existing GPLNG Terminal is located in Jefferson County, Texas. LNG is the liquefied form of natural gas, which many American homes use for heating and cooking. Natural gas, which is primarily methane, is liquefied to make it easier to transport globally. The GPLNG Terminal was designed to receive LNG from overseas locations in purpose-built ships called LNG Carriers. The carriers would dock at one of two marine berths where their cargo would be offloaded into LNG storage tanks. The stored LNG was pumped into heat exchangers, which turned the liquid LNG into natural gas. The natural gas would move from the heat exchangers into a pipeline that connects the GPLNG Terminal to many interstate gas transmission pipelines for distribution throughout the United States. Given the increase in U.S. natural gas production, GPLNG intends to and has received permission from FERC to modify the GPLNG Terminal to export LNG produced in North America via vessel for overseas use.

3.3 Provide general and specific map(s) of the facility location and show the following on the map(s): dwellings (human).

Figure 1 above shows the location of the existing GPLNG Terminal and the nearest residences on Pleasure Island, which forms the north shore of the Sabine Neches Waterway, and is about

1600 feet from the GPLNG Terminal site. The Walter Umphrey State Park sits at the east end of the island, and a small shrimp fishing company is situated just west of the park along the waterfront facing the GPLNG Terminal.

3.4 Describe the nature of the population in the vicinity. Describe the nearby population density and places of public assembly such as schools, playgrounds, parks, theatres, types of businesses and residences, etc. Photos are extremely helpful.

Per Figure 1, there are forty residences on Pleasure Island but no public schools, playgrounds, or theatres. The Walter Umphrey State Park is at the east end of the island. The closest school or playground is 2 miles away in the community of Sabine Pass, Texas.

4.0 Alternatives

4.1 "Do Nothing / No Action" Alternative

If the special permit application were denied, GPLNG would need to comply with all applicable maintenance requirements in 49 CFR Part 193 for LNG facilities that would apply to non-operational facilities purged of hydrocarbons.

4.2 Proposed Action

The special permit would allow GPLNG to proceed without complying with 49 CFR 193.2603(a) and (b), 193.2607, 193.2609, 193.2619(c) and (e), 193.2631, and 193.2635(e).

This special permit does not waive other maintenance requirements within 49 CFR Part 193, and GPLNG would be required to perform certain facility maintenance activities as specified in Appendix B, including 49 CFR 193.2605 Maintenance procedures, 193.2613 Auxiliary power sources, 193.2619(b) Control systems, 193.2623(a) Inspecting LNG storage tanks, 193.2625(b) Corrosion protection, 193.2627 Atmospheric corrosion control, 193.2629 External corrosion control: buried or submerged components, 193.2633 Interference currents, 193.2635(a) through (d) Monitoring corrosion control, 193.2637 Remedial measures, and 193.2639 Maintenance records.

The special permit would require compliance with the following safety conditions:

1) No later than 30 days after the issuance of this special permit, GPLNG must provide PHMSA the plan, drawings, schedule, and procedures for:

- a. safely purging hydrocarbon from tanks, equipment, and piping in accordance with 49 CFR 193.2517 and American Gas Association's Purging Principles and Practices (incorporated by reference, see 49 CFR 193.2013). The drawings should show that vent locations do not pose a risk to plant personnel, the public, and possible cascading damages to adjacent components;
- b. placing all LNG facilities under a hydrocarbon-free stage and filled completely with nitrogen; and
- c. inspection requirements for nitrogen filled components to ensure these components are maintained above atmospheric pressure.
- 2) No later than 30 days after the issuance of this special permit, GPLNG must provide PHMSA the procedures for continuously monitoring, with details of location and interval, for the LNG facility equipment that is atmospherically exposed (i.e. with "containment broken" for valve and pump replacement) during hot work activities.
- 3) Provide procedures and records upon request by PHMSA that demonstrate that GPLNG continues to comply with the regulations that are not waived by this special permit as specified in Appendix B.
- 4) No later than 60 days prior to introducing hazardous fluid into the GPLNG Terminal, GPLNG must provide PHMSA a list of components, with procedures and schedule, for inspecting and testing to ensure components meet the original function and integrity, manufacturer specifications, and all applicable requirements prescribed in 49 CFR 193.2303. All procedures must include the following items:
 - a. the return to service criteria and action items for components that do not meet the
 procedure requirements. GPLNG must also provide records for the
 implementation and documentation of those procedures;
 - specification for additional tests, in accordance with equipment manufacturer's maintenance requirements, to ensure long term integrity and reliability of the components; and
 - c. non-destructive tests (NDT) and acceptance criteria to verify that piping and equipment, that will be exposed to the atmosphere, will maintain the designed minimum wall thickness.
- 5) All test records must be made available for PHMSA's review no later than 30 days after tests are completed.

6) No later than 30 days prior to returning any component to service, a senior executive officer, vice president or higher, of GPLNG must certify in writing that GPLNG meets all of the conditions required by this permit. GPLNG must send the certifications required with the completion date, compliance documentation summary, the required senior executive signature, and date of signature, to the PHMSA, OPS, Associate Administrator for Pipeline Safety, with copies to the Deputy Associate Administrator, OPS Field Operations; Deputy Associate Administrator, OPS Policy and Programs; OPS Southwest Region Director; Director, OPS Standards and Rulemaking Division; Director, Engineering and Research Division; and to the Federal Register Docket (PHMSA 2018-0042) at www.Regulations.gov.

Appendix B of this application lists those 49 CFR Part 193, subparts G and H regulations that are applicable to the partially deconstructed and hydrocarbon-free facility. GPLNG will comply with these listed regulations during the special permit period.

5.0 Affected Resources and Environmental Consequences

5.1 Aesthetics

The waiver of the regulations listed in Appendix A will not alter the appearance or other aesthetic attributes of the site.

Cattle grazing is practiced near the terminal. The special permit would not impact cattle grazing activities.

5.2 Air Quality

Fired equipment will be shutdown except for the diesel generator that may be run for periodic maintenance or for emergency purposes. Fired equipment will also include the backup fire water pump and stormwater pumps. Some methane will be vented in the hydrocarbon purging process. While there would be methane purging in both the no action and proposed action alternatives, under the no action alternative, it is possible that less methane emission will result because GPLNG may not choose to purge the entire existing GPLNG Terminal free of hydrocarbon. In that case, the volume of methane in the modified piping or equipment to be purged would be smaller than the volume of methane from the entire LNG terminal. These releases will be small

and temporary in nature. Although it is possible that more methane emissions would result from the no action alternative, the special permit granted action alternative is preferred for its greater protections for safety of onsite personnel, future facility integrity, and the avoidance of incidents that result in increased emissions.

5.3 Biological Resources

The special permit is associated with a variance from regulatory requirements for the existing LNG facility and is related to operations, maintenance, and personnel reporting requirements within an existing LNG facility. The removal and release of methane for the duration of the LNG import to export conversion process will not increase or reduce impacts related to the project. Therefore, biological resources will not be impacted by the issuance of the special permit application.

5.4 Climate Change

The special permit is associated with a variance from regulatory requirements for the existing LNG facility and is related to operations, maintenance, and personnel reporting requirements within an existing LNG facility. The efforts to remove methane from the facility during the conversion process would result in minor and temporary emissions of greenhouse gases. Although it is possible that more methane emissions would result from the no action alternative, the special permit granted action alternative is preferred for its greater protections for safety of onsite personnel, future facility integrity, and avoidance of incidents, which result in increased emissions.

5.5 Cultural Resources

The conversion process is taking place within the footprint of the existing LNG facility. No cultural resources were ever identified at or around the terminal site during the permitting of the import or export facilities.

5.6 Environmental Justice

The removal of hydrocarbons from the facility during conversion is intended to increase safety. The waiver of certain maintenance requirements will not affect safety because the facility will not be in operation during the time the special permit is in effect. As stated above, GPLNG must achieve full compliance with 49 CFR Part 193 prior to the start of natural gas liquefaction or

transfer. There would be no disparate impacts to environmental justice communities if the special permit were issued. Evidence that Pleasure Island residents are neither disproportionately low income or minority can be found by searching FERC's elibrary for Resource Report 5, Accession No. 20140707-5058 of docket CP14-517-000 which was filed on July 7, 2014.

5.7 Geology, Soils, and Mineral Resources

The special permit will not impact these resources because the site was previously in used as an LNG terminal.

5.8 Indian Trust Assets

There are no trust or Native American lands in the GPLNG Terminal vicinity. Therefore, this resource will not be impacted by the special permit.

5.9 Land Use

The special permit is associated with a variance from regulatory requirements for the existing LNG facility and is related to operations, maintenance, and personnel reporting requirements within an existing LNG facility. Therefore, this resource will not be impacted by the special permit application.

5.10 Noise

The special permit is associated with a variance from regulatory requirements for the existing LNG facility and is related to operations, maintenance, and personnel reporting requirements within an existing LNG facility. The special permit is not expected to have any impact on noise. Approval of the special permit application will waive compliance with certain provisions within 49 CFR Part 193 after the facility has been fully purged.

5.11 Recreation

While Sabine Lake is used as a recreation resource, no impacts to its use would result from the issuance or denial of the special permit of the LNG regulations during the conversion.

5.12 Safety

Completely purging the LNG facility to be free of flammable fluid and the use of a "nitrogen blanket" would increase safety to plant personnel and the public by reducing the risk of ignition. Furthermore, the use of inert gas nitrogen would reduce the risk of internal corrosion to LNG

facilities; however, the use of nitrogen introduces the risk for asphyxiation. 49 CFR Part 193 Subpart J Security regulations do not apply during the special permit period as the GPLNG Terminal will not contain or process LNG.

5.13 Socioeconomics

The socioeconomic impacts are expected to be the same under both the no action or proposed action alternatives.

5.14 Transportation

The import to export conversion process is already authorized by FERC, the issuance or denial related to certain maintenance activities listed in the special permit would have no impact on transportation in the vicinity of the GPLNG Terminal.

5.15 Water Resources

Because this is an existing facility and the construction process is already approved by FERC, there are no impacts to water resources.

6.0 Comparative Environmental Impacts of Alternatives

6.1 Explain how the proposed conditions will ensure pipeline safety and integrity to at least the same extent that full compliance with the Pipeline Safety Regulations would.

The Pipeline Safety Regulations are composed with an operating facility in mind. The intent of this variance is to place the facility into essentially a long-term (multiple months) out-of-service state.

Explain how or whether a pipeline failure would differ under the proposed special permit? How would human safety be impacted? How would the natural environment be impacted?

Under the use of the special permit, the facility will be in a hydrocarbon-free state, which will reduce the exposure of construction workers to the risk of flammable gas and fire during the construction of the GPX Project at the GPLNG Terminal. The Golden Pass pipeline will be isolated from the GPLNG Terminal. Therefore, in the event of an equipment (pipeline) failure, the hazards would be reduced because no flammable materials would be released. This will reduce risk to human safety along with risk to the natural environment. Given that the special permit would only be in effect during the hydrocarbon-free period, the risks associated with an

LNG facility are not applicable. Any risks to long-term integrity of the facility are managed through the imposition of the special permit conditions and the requirements that the facility be in full compliance with 49 CFR Part 193 prior to startup.

7.0 Consultation and Coordination

7.1 Please list the name, title and company of any person involved in the preparation of this document.

Jenna Wilson, LNG Consultant, CH·IV International
Phil Suter, LNG Consultant, CH·IV International
Steven Andrews, HSE & Regulatory Compliance Supervisor, Golden Pass Terminal
Mark Burley, Safety, Environment and Regulatory Manager, Golden Pass Products

Amelia Samaras, PHMSA, Attorney Melanie Stevens, PHMSA, Attorney Ahuva Battams, PHMSA, Attorney Thach Nguyen, PHMSA, General Engineer

7.2 Please provide names and contact information for any person or entity you know will be impacted by the special permit. PHMSA may perform appropriate public scoping. The applicant's assistance in identifying these parties will speed the process considerably.

There are no known entities or persons who will be impacted by this special permit as the variance is applicable only to those working in the facility.

7.3 If you have engaged in any stakeholder or public communication regarding this request, please include information regarding this contact.

The Project has not engaged in any stakeholder or public communication regarding this request. Prior to commencing work, the local Community Advisory Panel will be informed of the beginning of this project.

8.0 Response to Public Comments Placed on Docket PHMSA-2018-0042

PHMSA published the special permit request in the Federal Register (84 FR 11394) on March 26, 2019, and the public notice comment period ended on April 25, 2019, with all comments received through May 6, 2019, being reviewed and considered. The special permit application from GPLNG, environmental assessment, and special permit conditions are available in Docket No. PHMSA-2018-0042 at: www.regulations.gov. PHMSA did not receive any public comments

concerning the special permit request, including the environmental assessment and special permit conditions.

9.0 Finding of No Significant Impact

In consideration of the safety conditions explained above, PHMSA finds that no significant negative impact will result from the issuance and full implementation of the above-described special permit to waive the requirements of 49 CFR 193.2603(a) and (b), 193.2607, 193.2609, 193.2619(c) and (e), 193.2631, and 193.2635(e) for the GPLNG Terminal located on the Sabine Neches Waterway, in Jefferson County, Texas. This permit requires GPLNG to implement additional conditions on the purging, construction, maintenance, and recommissioning at the GPLNG Terminal in Jefferson County, Texas.

PHMSA believes that implementation of this special permit is not inconsistent with safety and will not result in a significant impact to the human environment.

Completed by PHMSA in Washington, DC on: June 3, 2019

10.0 APPENDIX A

	Justification for Variance	Execution of 49 CFR 193.2603 (a) and (b) during the hydrocarbon free period would be ineffective and create unnecessary safety risk. Equipment maintenance is intended to ensure component reliability and safe facility operation. Maintaining components which are not being used for the purpose of safe facility operation would be ineffective. Additionally, all work, including component maintenance has inherent safety risks. GPLNG is committed to reducing risk to the lowest practical level. Cutting out unnecessary work increases efficiency and reduces the potential for injuries by preventing unnecessary work. As a condition of this Special Permit, GPLNG is required to submit to PHMSA proof that components meet Part 193 return to service criteria prior to introduction of hazardous fluid into the GPLNG Terminal. Prior to reinstating equipment in active service, a plan will be in place to inspect all equipment and components at the GPLNG Terminal and repair or replace the components which cannot achieve its original function or integrity, or do not meet company specification, industry standards, and government regulations. The plan will also include procedures which will guide Operators through the re-commissioning process. GPLNG will conduct additional tests to ensure long term integrity and reliability of the components as indicated in Section 4 Alternatives.	49 CFR 193.2603 (a) and (b) will be met prior to the reintroduction of hazardous fluids into the equipment and components and as part of the pre-commissioning process. All equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.	49 CFR 193.2603 in its entirety will be fully reinstated upon the reintroduction of hazardous fluids in the GPLNG Terminal.	Execution of 49 CFR Part 193.2607(a) during the hydrocarbon free period would be ineffective and create unnecessary safety risk. During the hydrocarbon free period, there will be no ice from product lines or equipment as the facility will be non-operational with no hazardous fluids. Dust and potentially other similar foreign materials can be anticipated in and around non-operational equipment and components as part of the normal construction process from mobile equipment travel and other construction related work. Avoiding or controlling the presence of foreign materials is intended to help maintain the operational safely of components. Preventing the presence of foreign materials from components, which are not being used for the purpose of safe facility operation would be ineffective. Additionally, all work, including the work required to keep all components adequately sealed has inherent safety risks. GPLNG is committed to reducing risk to the lowest practical level. As a condition of this Special Permit, GPLNG is required to submit to PHMSA proof that components meet Part 193 return to service, riteria before facility commissioning. Prior to reinstating equipment in active service, a plan will be in place to remove the presence of foreign material, contaminants, or ice to maintain the operational safety of each component. Additionally, GPLNG will maintain the LNG plant grounds free from rubbish, debris, and other material which present a fire hazard. All grass areas on the LNG plant ground must be maintained in a manner that does not present a fire hazard.
3 Requirements from which Applicant Seeks Relief	REGULATION TEXT	 (a) Each component in service, including its support system, must be maintained in a condition that is compatible with its operational or safety purpose by repair, replacement, or other means. (b) An operator may not place, return, or continue in service any component which is not maintained in accordance with this subpart. 			 (a) The presence of foreign material, contaminants, or ice shall be avoided or controlled to maintain the operational safety of each component. (b) LNG plant grounds must be free from rubbish, debris, and other material which present a fire hazard. Grass areas on the LNG plant grounds must be maintained in a manner that does not present a fire hazard.
Appendix A: Specific 49 CFR 193 Requirements from which	REGULATION (for which waiver being requested)	§ 193.2603 General.			§ 193.2607 Foreign material.

	Justification for Variance	Execution of 49 CFR 193.2609 during the hydrocarbon free period would be ineffective and create unnecessary safety risk. Component support systems and foundations are intended to ensure components are safely supported during facility operation. Inspecting support systems, which are not being used for the purpose of safely supporting operational equipment would be ineffective. Additionally, all work, including support system inspection has inherent safety risks. Cutting out unnecessary work increases efficiency and reduces the potential for injuries by preventing unnecessary work. As a condition of this Special Permit, GPLNG is required to submit to PHMSA proof that components, including support systems, meet 49 CFR Part 193	return to service criteria prior to introduction of hazardous fluid into the GPLNG terminal. Prior to reinstating equipment in active service, a plan will be in place to inspect and repair all support systems that show any detrimental change that could impair support systems longterm integrity and reliability.		Execution of 49 CFR 193.2619(c) and (e) during the hydrocarbon free period would be ineffective and create unnecessary safety risk. Control systems such as relief valves & automatic shutdown devices are intended to ensure safe facility operation. Inspecting and testing control systems, which are not being used for the purpose of safe facility operation would be ineffective. Additionally, all work, including control system inspection festing has inherent safety risks. Cutting out unnecessary work increases efficiency and reduces the potential for injuries by preventing unnecessary work as a condition of this Special Permit, GPLNG is required to submit to PHMAAA proof that control system such as relief valves and automatic shutdown devices meet Part 193 return to service criteria prior to introduction of hazardous fluid in to the GPLNG Terminal. Prior to reinstating equipment in active service, a plan will be in place to inspect all control systems and repair or replace components which cannot achieve its original function or integrity, or do not meet company specification, industry standards, and government regulation. The testing of valves must account for the full range of operation based on manufacturer's specifications. GPLNG will conduct additional tests to ensure long term integrity and reliability of the control system as indicated in Section 4 Alternatives. The plan will also include procedures which will guide Operators through the recommissioning process.
Appendix A: Specific 49 CFR 193 Requirements from which Applicant Seeks Relief	REGULATION TEXT	Each support system or foundation of each component must be inspected for any detrimental change that could impair support.			(c) Control systems in service, but not normally in operation, such as relief valves and automatic shutdown devices, and control systems for internal shutoff valves for bottom penetration tanks must be inspected and tested once each calendar year, not exceeding 15 months, with the following exceptions: (1) Control systems used seasonally, such as for liquefaction or vaporization, must be inspected and tested before use each season. (2) Control systems that are intended for fire protection must be inspected and tested at regular intervals not to exceed 6 months. (e) Relief valves must be inspected and tested for verification of the valve seat lifting pressure and reseating
Appendix A: Specific 49 CFR 19.	REGULATION (for which waiver being requested)	§ 193.2609 Support systems.			§ 193.2619 Control systems.

	Justification for Variance	ensure all applicable regulations in 49 CFR Part 193 are met. All equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.	Internal corrosion protection is intended to protect components while the equipment and components are in operation. Installing corrosion resistant component material or coatings for equipment and components, which are not currently being used for hazardous fluid transfer in an operational facility would be ineffective. Equipment or components in the GPLNG Terminal could be temporarily exposed to the atmosphere while being modified or under replacement.	As a condition of this Special Permit, GPLNG is required to submit to PHMSA proof that components, including internal corrosion protection, meets Part 193 return to service criteria prior to introduction of hazardous fluid into the GPLNG terminal. Prior to reinstating equipment in active service, a plan will be in place to inspect all equipment and components in the GPLNG Terminal and repair or replace components which cannot achieve its original function or integrity, or do not meet company specification, industry standards, and government regulations. The plan will also include procedures which will guide Operators through the re-commissioning process.	49 CFR 193.2631 will be reinstated upon the reintroduction of hazardous fluids in the GPLNG Terminal. Prior to the reintroduction of hydrocarbons into the equipment and components in the GPLNG Terminal and as part of the Pre-Commissioning process, GPLNG will ensure all applicable regulations in 49 CFR Part 193 are met. GPLNG will undergo inspection for 49 CFR Part 193 and recommissioning plan compliance. GPLNG will conduct non-destructive tests (NDT) to verify that piping and equipment, that will be exposed to the atmosphere, will maintain the designed minimum wall thickness. All equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.
3 Requirements from which Applicant Seeks Relief	REGULATION TEXT		Each component that is subject to internal corrosive attack must be protected from internal corrosion by - (a) Material that has been designed and selected to resist the corrosive fluid involved; or	(b) Sultable coating, innibitor, or other means.	
Appendix A: Specific 49 CFR 193 Requirements from which	REGULATION (for which waiver being requested)		§ 193.2631 Internal corrosion control.		

	Justification for Variance	Monitoring for Internal corrosion and any subsequent maintenance is intended to protect components while the equipment and components are in operation. Monitoring internal corrosion & subsequent maintenance on equipment and components, which are not currently being used for hazardous fluid transfer in an operational facility would be ineffective. Equipment or components could be temporarily exposed to the atmosphere while being modified or under replacement. As a condition of this Special Permit, GPLNG is required to submit to PHMSA proof that components, including internal corrosion protection, meets Part 193 return to service criteria prior to introduction of hazardous fluid into the GPLNG Terminal. Prior to reinstating equipment in active service, a plan will be in place to inspect all equipment and components in the GPLNG Terminal and repair or replace components which cannot achieve its original function or integrity, or do not meet company specification, industry standards, and or government regulations. The plan will also include procedures which will guide Operators through the re-commissioning process. GPLNG will conduct adequate non-destructive tests (NDT) to verify that piping and equipment, that will be exposed to the atmosphere, will maintain the designed minimum wall thickness.
93 Requirements from which Applicant Seeks Relief	REGULATION TEXT	(e) If a component is protected from internal corrosion, monitoring devices designed to detect internal corrosion, such as coupons or probes, must be located where corrosion is most likely to occur. However, monitoring is not required for corrosion resistant materials if the operator can demonstrate that the component will not be adversely affected by internal corrosion during its service life. Internal corrosion control monitoring devices must be checked at least two times each calendar year, but with intervals not exceeding 7 1/2 months
Appendix A: Specific 49 CFR 193 Requirements from which A	(for which waiver being requested)	§ 193.2635 Monitoring corrosion control.

11.0 APPENDIX B

Appendix B: Specific 49 CFR Part 193 Requirements GPLNG w	193 Requirements GPLNG will Continue to Follow during the Special Permit Period	Special Permit Period
Subpart G - Maintenance		
REGULATION: 49 CFR PART 193	APPLICABLE REGULATION TEXT	SPECIFIC PORTION OF REGULATION TO BE FOLLOWED
§ 193.2605 Maintenance procedures.	(a) Each operator shall determine and perform, consistent with generally accepted engineering practice, the periodic inspections or tests needed to meet the applicable requirements of this subpart and to verify that components meet the maintenance standards prescribed by this subpart.	49 CFR 193.2605 will be applicable to 49 CFR Part 193.2613, 193.2627, 193.2629, 193.2633 and 193.2635 during the special permit period and while the GPLNG Terminal is purged free of all hydrocarbons.
	(b) Each operator shall follow one or more manuals of written procedures for the maintenance of each component, including any required corrosion control. The procedures must include	49 CFR Part 193.2605 will be reinstated in its entirety prior to the reintroduction of hazardous fluids in the GPLNG Terminal. Prior to the reintroduction of Hydrocarbons into the equipment and components in the GPLNG Terminal and as part of the Pre-Commissioning process, GPLNG will ensure all applicable regulations in 49 CFR Part 193 are met. All equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes
	(1) The details of the inspections or tests determined under paragraph (a) of this section and their frequency of performance; and	by repair or replacement.
	(2) A description of other actions necessary to maintain the LNG plant according to the requirements of this subpart.	
	(c) Each operator shall include in the manual required by paragraph (b) of this section instructions enabling personnel who perform operation and maintenance activities to recognize conditions that potentially may be safety-related conditions that are subject to the reporting requirements of 49 CFR 191.23 of this subchapter.	
§ 193.2613 Auxiliary power sources.	Each auxiliary power source must be tested monthly to check its operational capability and tested annually for capacity. The capacity test must take into account the power needed to start up and simultaneously operate equipment that would have to be served by that power source in an emergency.	Repairs on Essential Generator will be made as necessary to ensure backup power source functionality. 49 CFR 193.2613 will be reinstated in its entirety upon the reintroduction of hazardous fluids in
		the GPLNG Terminal. Prior to the reintroduction of Hydrocarbons into the equipment and components in GPLNG Terminal and as part of the Pre-Commissioning process, GPLNG will ensure all applicable regulations in 49 CFR Part 193 are met. All equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.

g the Special Permit Period		SPECIFIC PORTION OF REGULATION TO BE FOLLOWED	Brior to the reintroduction of hydrocarbons into the equipment and components in the GPLNG git Terminal and as part of the Pre-Commissioning process, GPLNG will ensure all applicable regulations in 49 CFR Part 193 are met. All equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.	49 CFR 193.2623(a) specifically related to foundation & tank movement after a major meteorological or geophysical disturbance. 49 CFR Part 193.2623 in its entirety will be reinstated prior to the reintroduction of hazardous fluids in the GPLNG Terminal. Prior to the reintroduction of Hydrocarbons into the equipment and components in the GPLNG Terminal and as part of the Pre-Commissioning process, GPLNG will ensure all applicable regulations in 49 CFR Part 193 are met. All equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.	49 CFR 193.2625(b), as it applies to 49 CFR 193.2627, 193.2629, 193.2633 & 193.2635. 49 CFR 193.2625 in its entirety will be reinstated prior to the reintroduction of hazardous fluids in the GPLNG Terminal. Prior to the reintroduction of Hydrocarbons into the equipment and components in the GPLNG Terminal and as part of the Pre-Commissioning process, GPLNG will ensure all applicable regulations in 49 CFR Part 193 are met. All equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.
93 Requirements GPLNG will Continue to Follow during the Special Permit Period		APPLICABLE REGULATION TEXT	(b) If a control system is out of service for 30 days or more, it must be inspected and tested for operational capability before returning it to service.	Each LNG storage tank must be inspected or tested to verify that each of the following conditions does not impair the structural integrity or safety of the tank: (a) Foundation and tank movement during normal operation and after a major meteorological or geophysical disturbance.	 (b) Components whose integrity or reliability could be adversely affected by corrosion must be either - (1) Protected from corrosion in accordance with 49 CFR 193.2627 through 193.2635, as applicable; or (2) Inspected and replaced under a program of scheduled maintenance in accordance with procedures established under 49 CFR. 193.2605
Appendix B: Specific 49 CFR Part 193 Requirements GPLNG	Subpart G - Maintenance	REGULATION: 49 CFR PART 193	§ 193.2619 Control systems.	§ 193.2623 Inspecting LNG storage tanks	§ 193.2625 Corrosion protection

Appendix B: Specific 49 CFR Part 193 Requirements CPLNG will Continue to Follow during the Special Permit Period Subpart G - Maintenance REGULATION: 49 CFR PART 193 **BECULATION: 40 CF	SPECIFIC PORTION OF REGUIATION TO BE FOLLOWED Components will be protected and maintained to 49 CFR 193.2627 (a) and (b) and in accordance with 49 CFR 193.2637. ALL
--	---

Appendix B: Specific 49 CFR Part 193 Requirements GPLNG	93 Requirements GPLNG will Continue to Follow during the Special Permit Period	Special Permit Period
Subpart G - Maintenance		
REGULATION: 49 CFR PART 193	APPLICABLE REGULATION TEXT	SPECIFIC PORTION OF REGULATION TO BE FOLLOWED
§ 193.2635 Monitoring corrosion control.	Corrosion protection provided as required by this subpart must be periodically monitored to give early recognition of ineffective corrosion protection, including the following, as applicable:	49 CFR 193.2635 (a) – (c); 193.2635(d) will also be completed during the Special Permit period for those components which are available during the annual atmospheric corrosion monitoring period (some components may be removed or temporarily unavailable during construction work in the CDI NGT Computer and components and components are selected to the components of the co
	(a) Each buried or submerged component under cathodic protection must be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of 49 CFR 192.463 of this chapter.	In the Of Live Termina). Equipment and components anavariance during the annophrate corresion monitoring period will be documented and kept on-file. The removed components will be evaluated and inspected prior to being re-installed in the GPLNG Terminal. If remedial measures are required, all remediation will occur prior to introduction of hazardous fluids.
	(b) Each cathodic protection rectifier or other impressed current power source must be inspected at least 6 times each calendar year, but with intervals not exceeding 2 1/2 months, to ensure that it is operating properly.	
	(c) Each reverse current switch, each diode, and each interference bond whose failure would jeopardize component protection must be electrically checked for proper performance at least 6 times each calendar year, but with intervals not exceeding 2 1/2 months. Each other interference bond must be checked at least once each calendar year, but with intervals not exceeding 15 months.	
	(d) Each component that is protected from atmospheric corrosion must be inspected at intervals not exceeding 3 years.	
§ 193.2637 Remedial measures	Prompt corrective or remedial action must be taken whenever an operator learns by inspection or otherwise that atmospheric, external, or internal corrosion is not controlled as required by this subpart.	49 CFR 193.2637 as the standard applies to the remedial measures associated with 49 CFR 193.2629, 193.2633 and 193.2635.

Appendix B: Specific 49 CFR Part 193 Requirements GPLNG Subnart G - Maintenance	93 Requirements GPLNG will Continue to Follow during the Special Permit Period	Special Permit Period
REGULATION: 49 CFR PART 193	APPLICABLE REGULATION TEXT	SPECIFIC PORTION OF REGULATION TO BE FOLLOWED
§ 193.2639 Maintenance records		49 CFR 193.2639 as it applies to 49 CFR 193.2613, 193.2619(b), 193.2623(a) (post major meteorological or geophysical disturbance only) and 49 CFR 193.2627, 193.2629, 193.2633, 193.2635 and 193.2637 during the special permit period and while the GPLNG Terminal is purged free of all hydrocarbons.
	records that NrFA-59A-2001 (incorporated by reference, see 49 CFR 193.2013) requires. Maintenance records, whether required by this part or NFPA-59A-2001, must be kept for a period of not less than five years	49 CFR 193.2639, in its entirety will be reinstated upon the reintroduction of hazardous fluids in the GPLNG Terminal. Prior to the reintroduction of Hydrocarbons into the equipment and components in the GPLNG Terminal and as part of the Pre-Commissioning process, GPLNG will ensure all applicable regulations in 49 CFR Part 193 are met. All equipment and
	(b) Each operator shall maintain records or maps to show the location of cathodically protected components, neighboring structures bonded to the cathodic protection system, and corrosion protection equipment.	components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.
	(c) Each of the following records must be retained for as long as the LNG facility remains in service: (1) Each record or map required by paragraph (b) of this section. (2) Records of each test, survey, or inspection required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures	

Appendix B: Specific 49 CFR Part 193 Requirements GPLN	ert 193 Requirements GPLNG will Continue to Follow during the Special Permit Period	e Special Permit Period
Subpart H - Training		
REGULATION: 49 CFR Part 193	APPLICABLE REGULATION TEXT	SPECIFIC PORTION OF REGULATION TO BE FOLLOWED
§ 193.2703 Design and fabrication.	For the design and fabrication of components, each operator shall use— (a) With respect to design, persons who have demonstrated competence by training or experience in the design of comparable components	49 CFR 193.2703 for personnel performing mitigation under 49 CFR 193.2637. Mitigation work under 49 CFR 193.2637 will occur as necessary upon execution of 49 CFR 193.2627, 193.2629, 193.2633 and/ or 193.2635.
	(b) With respect to fabrication, persons who have demonstrated competence by training or experience in the fabrication of comparable components.	49 CFR Part 193.2703, in its entirety will be reinstated upon the reintroduction of hazardous fluids in the GPLNG Terminal. Prior to the reintroduction of Hydrocarbons into the equipment and components in the GPLNG Terminal and as part of the Pre-Commissioning process, GPLNG will ensure all applicable regulations in 49 CFR Part 193 are met. All equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.
§ 193.2705 Construction, installation, inspection, and testing.	(a) Supervisors and other personnel utilized for construction, installation, inspection, or testing must have demonstrated their capability to perform satisfactorily the assigned function by appropriate construction of a supervisor of a construction of a supervisor of a construction of a supervisor of	49 CFR 193.2705 for personnel performing mitigation under 49 CFR 193.2637. Mitigation work under 193.2637 will occur as necessary upon execution of 49 CFR 193.2627, 193.2629, 193.2633 and/ or 193.2635.
	naming in the memors and equipment to be used or related expensive and accomplishments.	49 CFR 193.2705, in its entirety will be reinstated upon the reintroduction of hazardous fluids in the CDI NG Terminal Drior to the reintroduction of Hydrocarbons into the equinment and
	(b) Each operator must periodically determine whether inspectors performing construction, installation, and testing duties required by this part are satisfactorily performing their assigned functions.	in the Office of Commission of the Commission of Aryanova construction of Aryanova components in the GPLNG Terminal and as part of the Pre-Commissioning process, GPLNG will ensure all applicable regulations in 49 CFR Part 193 are met. All equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.
§ 193.2707 Operations and maintenance.	(a) Each operator shall utilize for operation or maintenance of components only those personnel who have demonstrated their capability to perform their assigned functions by	49 CFR 193.2707 for the performance of maintenance procedures specified under 49 CFR 193.2605.
:	(1) Successful completion of the training required by 49 CFR 193.2713 and 193.2717, and	49 CFR 193.2707, in its entirety will be reinstated upon the reinfroduction of hazardous fluids in the GPLNG Terminal. Prior to the reintroduction of Hydrocarbons into the equipment and components in the GPLNG Terminal and as part of the Pre-Commissioning process, GPLNG results are all examinal and the components of the pre-Commissioning process, GPLNG results are all examinations in the GPLNG results are all examinations and the GPLNG results are all examinations are all examinations and the GPLNG results are all examinations a
	(2) Experience related to the assigned operation or maintenance function; and	will chause an applicable regulations in 45 Curvi are 155 are inc. Fur equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.
	(3) Acceptable performance on a proficiency test relevant to the assigned function.	
	(b) A person who does not meet the requirements of paragraph (a) of this section may operate or maintain a component when accompanied and directed by an individual who meets the requirements.	
	(c) Corrosion control procedures under 49 CFR 193.2605(b), including those for the design, installation, operation, and maintenance of cathodic protection systems, must be carried out by, or under the	

Appendix B: Specific 49 CFR Part 193 Requirements GPLN	rt 193 Requirements GPLNG will Continue to Follow during the Special Permit Period	e Special Permit Period
Subpart H - Training		
REGULATION: 49 CFR Part 193	APPLICABLE REGULATION TEXT	SPECIFIC PORTION OF REGULATION TO BE FOLLOWED
	direction of, a person qualified by experience and training in corrosion control technology.	
§ 193.2711 Personnel health.	Each operator shall follow a written plan to verify that personnel assigned operating, maintenance, security, or fire protection duties at the LNG plant do not have any physical condition that would impair performance of their assigned duties. The plan must be designed to detect both readily observable disorders, such as physical handicaps or injury, and conditions requiring professional examination for discovery.	49 CFR 193.2711 as this relates to the performance of maintenance procedures specified under 49 CFR 193.2605. 49 CFR 193.2711, in its entirety will be reinstated upon the reintroduction of hazardous fluids in the GPLNG Terminal. Prior to the reintroduction of Hydrocarbons into the equipment and components in the GPLNG Terminal and as part of the Pre-Commissioning process, GPLNG will ensure all applicable regulations in 49 CFR Part 193 are met. All equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.

he Special Permit Period		SPECIFIC PORTION OF REGULATION TO BE FOLLOWED	49 CFR 193.2713(a)(1) (ii) and (iii), and 193.2713(b) for the performance of maintenance procedures specified under 49 CFR 193.2605.	49 CFR 193.2713, in its entirety will be reinstated upon the reintroduction of hazardous fluids in the GPLNG Terminal. Prior to the reintroduction of Hydrocarbons into the equipment and components in the GPLNG Terminal and as part of the Pre-Commissioning process, GPLNG will ensure all amplicable reculations in 49 CFR Part 193 are met. All equipment and	components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.						
rt 193 Requirements GPLNG will Continue to Follow during the Special Permit Period		APPLICABLE REGULATION TEXT	(a) Each operator shall provide and implement a written plan of initial training to instruct	(1) All permanent maintenance, operating, and supervisory personnel (ii) About the potential hazards involved in operating and maintenance activities; and	(iii) To carry out aspects of the operating and maintenance procedures under 49 CFR 193.2503 and 193.2605 that relate to their assigned functions; and	(b) A written plan of continuing instruction must be conducted at intervals of not more than two years to keep all personnel current on the knowledge and skills they gained in the program of initial instruction.					
Appendix B: Specific 49 CFR Part 193 Requirements GPLN	Subpart H - Training	REGULATION: 49 CFR Part 193	§ 193.2713 Training: operations and maintenance.								

the Special Permit Period		SPECIFIC PORTION OF REGULATION TO BE FOLLOWED	49 CFR 193.2719 for the training related to the performance of maintenance procedures specified under 49 CFR 193.2605. Records will also be maintained for the following training:		49 CFR 193.2719, in its entirety will be reinstated upon the reintroduction of hazardous fluids in the GPLNG Terminal. Prior to the reintroduction of Hydrocarbons into the equipment and	components in the GPLNG Terminal and as part of the Pre-Commissioning process, GPLNG will ensure all applicable regulations in 49 CFR Part 193 are met. All equipment and components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.	
Appendix B: Specific 49 CFR Part 193 Requirements GPLNG will Continue to Follow during the Special Permit Period		APPLICABLE REGULATION TEXT	(a) Each operator shall maintain a system of records which	(1) Provide evidence that the training programs required by this subpart have been implemented; and	(2) Provide evidence that personnel have undergone and satisfactorily completed the required training programs.	(b) Records must be maintained for one year after personnel are no longer assigned duties at the LNG plant.	
Appendix B: Specific 49 CFR Pa	Subpart H - Training	REGULATION: 49 CFR Part 193	§ 193.2719 Training: records			,	