

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

Special Permit Information:

Docket Number: PHMSA-2018-0042
Requested By: Golden Pass LNG Terminal LLC
Operator ID#: 32220
Original 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(e)

Grant of Special Permit:

By this order, subject to the terms and conditions set forth below, the Pipeline and Hazardous Materials Safety Administration (PHMSA) Office of Pipeline Safety (OPS)¹ grants this special permit to Golden Pass LNG Terminal LLC (GPLNG), waiving compliance from certain regulations under 49 Code of Federal Regulations (CFR) Part 193 Subpart G – Maintenance for the Liquefied Natural Gas (LNG) for the Regasification Import Receiving Terminal (GPLNG Terminal) located on the Sabine Neches Waterway, in Jefferson County, Texas. The specific regulations being waived include 49 CFR 193.2603(a) and (b), 193.2607, 193.2609, 193.2619(c) and (e), 193.2631, and 193.2635(e), which specify the maintenance, inspection, and testing provisions requirements for LNG facilities.²

I. Purpose and Need:

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 vapor. GPLNG plans to

¹ Throughout this special permit the usage of “PHMSA” or “PHMSA OPS” means the U.S. Department of Transportation’s Pipeline and Hazardous Materials Safety Administration Office of Pipeline Safety.

² LNG facility is defined in 49 CFR 193.2007 as a pipeline facility that is used for liquefying natural gas or synthetic gas or transferring, storing, or vaporizing liquefied natural gas.

modify the existing GPLNG Terminal to interconnect it with export facilities.³ To maximize safety of the interconnection construction, GPLNG will create a hydrocarbon-free environment in the existing GPLNG Terminal prior to construction of the new export project. Existing equipment will be kept at ambient temperature, and hydrocarbons will be purged and displaced with nitrogen. The hydrocarbon-free environment will provide safer conditions to interconnect new equipment/facilities to existing equipment and to modify certain existing equipment. The GPLNG Terminal will be isolated from the transmission lines by blinds. While the GPLNG Terminal is out of service and purged of hazardous fluid,⁴ performing certain maintenance, inspection, and testing activities required in 49 CFR Part 193, subpart G, would not increase safety and reliability for the GPLNG Terminal facility. Appendix A includes the GPLNG Terminal site map. Appendix B includes a table that provides the requested maintenance regulations and justification for the variance, and Appendix C includes the regulations that GPLNG must continue to perform at the GPLNG Terminal. On the condition that GPLNG complies with the terms and conditions set forth below, this special permit waives the maintenance requirements in 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 only when the LNG facilities are purged free of hydrocarbon.

The GPLNG Terminal facility and all components must comply fully with 49 CFR Part 193 prior to the reintroduction of hydrocarbons. Prior to returning 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.

PHMSA grants this special permit based on the findings set forth in the “Special Permit Analysis and Findings” and “Final Environmental Assessment and Finding of No Significant Impact” documents, which can be read in their entirety in Docket No. PHMSA-2018-0042 in the Federal Docket Management System (FDMS) located online at www.regulations.gov.

II. Special Permit Inspection Area:

Golden Pass LNG Terminal LLC’s Regasification Import Receiving Terminal (GPLNG Terminal) which is located on the Sabine Neches Waterway in Jefferson County, Texas, is defined as the *special*

³ On December 21, 2016, the Federal Energy Regulatory Commission issued an “Order Granting Authorizations Under Sections 3 and 7 of the Natural Gas Act” for GPLNG to site, construct and operate LNG export facilities.

⁴ 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 oil) used for construction equipment at the GPLNG Terminal.

permit inspection area.

The special permit waives regulations defined in the “Grant of Special Permit” section of this permit for the *special permit inspection area* and is applicable during construction of the export project and while the existing GPLNG Terminal is purged of all hydrocarbons.

III. Conditions:

PHMSA OPS grants this special permit for the *special permit inspection area* subject to the following conditions:

- 1) No later than 30 days after the grant 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 in 49 CFR 193.2013). The drawings must 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, 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 C.
- 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 these 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;
 - b. specification for additional tests, per 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, Associate Administrator for Pipeline Safety, with copies to the Deputy Associate Administrator, Field Operations; Deputy Associate Administrator, Policy and Programs; Southwest Region Director; Director, Standards and Rulemaking Division; Director, Engineering and Research Division; and to the Federal Register Docket (PHMSA 2018-0042) at www.Regulations.gov.

IV. Limitations:

This special permit is subject to the limitations set forth in 49 CFR 190.341 as well as the following limitations:

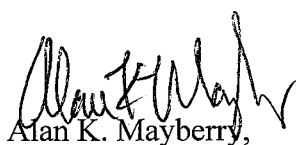
- 1) PHMSA has the sole authority to make all determinations on whether GPLNG has complied with the specified conditions of this special permit. Failure to comply with any condition of this special permit may result in revocation of the permit.
- 2) Any work plans and associated schedules for the GPLNG Regasification Import Receiving Terminal during the hydrocarbon-free stage are automatically incorporated into this special permit and are enforceable in the same manner.
- 3) Failure by GPLNG to submit the certifications required by **Condition 6** within the time frames specified may result in revocation of this special permit.
- 4) As provided in 49 CFR 190.341, PHMSA may issue an enforcement action for failure to comply with this special permit. The terms and conditions of any corrective action order, compliance

order, or other order applicable to the GPLNG Terminal will take precedence over the terms of this special permit.

- 5) If GPLNG sells, merges, transfers, or otherwise disposes of all or part of the assets known as the GPLNG Terminal, GPLNG must provide PHMSA with written notice of the change within 30 days of the consummation date. In the event of such transfer, PHMSA reserves the right to revoke, suspend, or modify the special permit if the transfer constitutes a material change in conditions or circumstances underlying the permit.
- 6) PHMSA grants this special permit for a term of no more than six (6) years from the date of issuance. If GPLNG elects to seek renewal of this special permit, GPLNG must submit its renewal request at least 180 days prior to expiration of the six (6) year period to the PHMSA Associate Administrator for Pipeline Safety, with copies to the Deputy Associate Administrator, Field Operations; Deputy Associate Administrator, Policy and Programs; Southwest Region Director; Director, Standards and Rulemaking Division; and Director, Engineering and Research Division. All requests for a renewal must include a summary report and must demonstrate that the special permit is still consistent with pipeline safety. PHMSA may seek additional information from GPLNG prior to granting any request for special permit renewal.

AUTHORITY: 49 U.S.C. 60118 (c)(1) and 49 CFR 1.97.

Issued in Washington, DC on JUN 3 2019 .

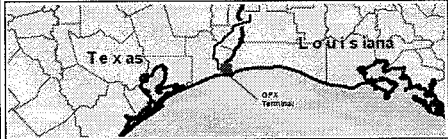
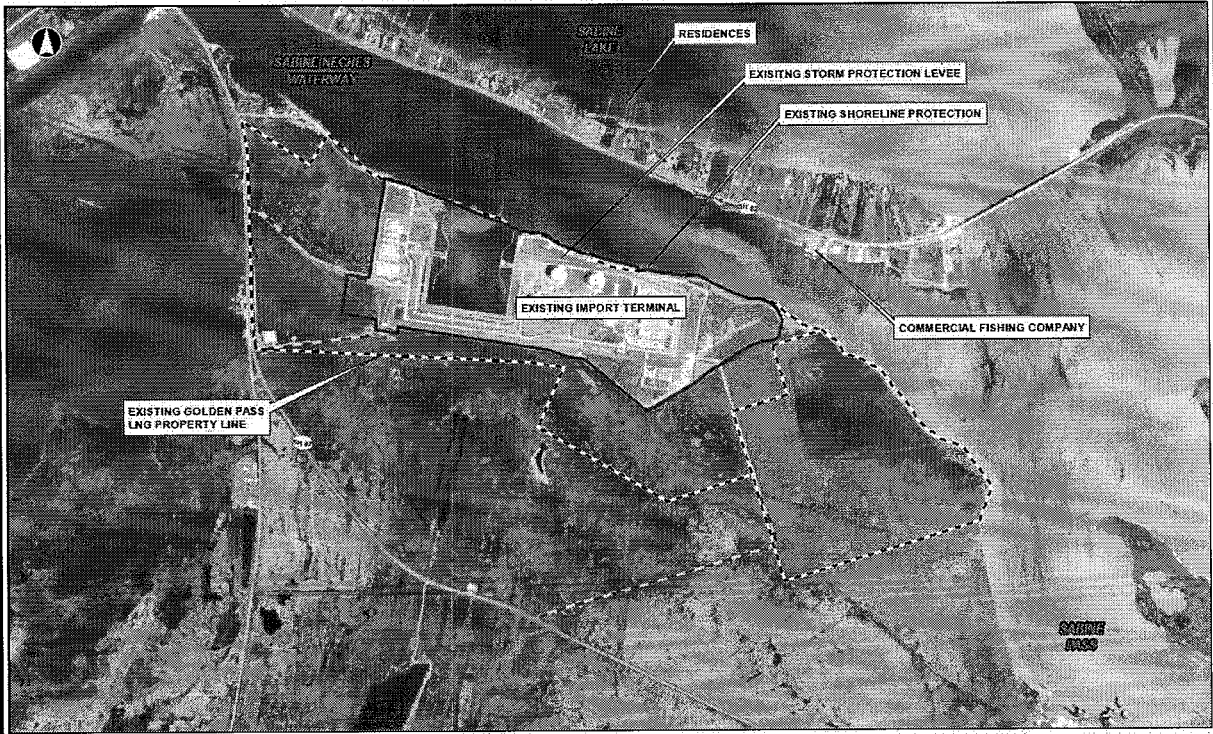


Alan K. Mayberry,

Associate Administrator for Pipeline Safety

Appendix A – Golden Pass LNG Regasification Import Receiving Terminal

LIQUEFACTION PROJECT SITE MAP



LEGEND

- PERMANENT ACCESS ROAD
- ▬ EXISTING STORM PROTECTION LEVEE
- ▭ EXISTING GOLDEN PASS TERMINAL FACILITY
- ▭ GOLDEN PASS LNG PROPERTY BOUNDARY

GOLDEN PASS LNG TERMINAL LIQUEFACTION PROJECT SITE MAP

DATE:	DATE:
BY:	BY:
APP. NO.:	APP. NO.:
SCALE:	SCALE:
REV.:	REV.:

GOLDEN PASS PRODUCTS LNG EXPORT PROJECT

Appendix B – 49 CFR Part 193 Requirements Which GPLNG Seeks Relief

Appendix B - 49 CFR Part 193 Requirements Which GPLNG Seeks Relief

REGULATION (for which waiver being requested)	REGULATION TEXT	Justification for Variance
§ 193.2603 General.	<p>(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.</p> <p>(b) An operator may not place, return, or continue in service any component which is not maintained in accordance with this subpart.</p>	<p>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.</p> <p>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.</p> <p>49 CFR 193.2603 in its entirety will be fully reinstated upon the reintroduction of hazardous fluids in the GPLNG Terminal.</p>

Appendix B - 49 CFR Part 193 Requirements Which GPLNG Seeks Relief

REGULATION (for which waiver being requested)	REGULATION TEXT	Justification for Variance
<p>§ 193.2607 Foreign material.</p>	<p>(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.</p>	<p>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 safety 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 criteria 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.</p>
<p>§ 193.2609 Support systems.</p>	<p>Each support system or foundation of each component must be inspected for any detrimental change that could impair support.</p>	<p>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 long-term integrity and reliability.</p>

Appendix B - 49 CFR Part 193 Requirements Which GPLNG Seeks Relief

REGULATION (for which waiver being requested)	REGULATION TEXT	Justification for Variance
§ 193.2619 Control systems.	<p>(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:</p> <p>(1) Control systems used seasonally, such as for liquefaction or vaporization, must be inspected and tested before use each season.</p> <p>(2) Control systems that are intended for fire protection must be inspected and tested at regular intervals not to exceed 6 months.</p> <p>(e) Relief valves must be inspected and tested for verification of the valve seat lifting pressure and reseating</p>	<p>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/testing 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 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 re-commissioning process.</p> <p>49 CFR 193.2619 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 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.</p>

Appendix B - 49 CFR Part 193 Requirements Which GPLNG Seeks Relief

REGULATION (for which waiver being requested)	REGULATION TEXT	Justification for Variance
<p>§ 193.2631 Internal corrosion control.</p>	<p>Each component that is subject to internal corrosive attack must be protected from internal corrosion by -</p> <p>(a) Material that has been designed and selected to resist the corrosive fluid involved; or</p> <p>(b) Suitable coating, inhibitor, or other means.</p>	<p>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.</p> <p>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.</p> <p>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.</p>

Appendix B - 49 CFR Part 193 Requirements Which GPLNG Seeks Relief

REGULATION (for which waiver being requested)	REGULATION TEXT	Justification for Variance
§ 193.2635 Monitoring corrosion control.	<p>(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</p>	<p>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.</p> <p>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.</p>

Appendix C – 49 CFR Part 193 Regulations Which GPLNG Continues to Perform

Appendix C – 49 CFR Part 193 Regulations Which GPLNG Continues to Perform

Subpart G – Maintenance

REGULATION: 49 CFR PART 193	APPLICABLE REGULATION TEXT	SPECIFIC PORTION OF REGULATION TO BE FOLLOWED
<p>§ 193.2605 Maintenance procedures.</p>	<p>(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.</p> <p>(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</p> <p>(1) The details of the inspections or tests determined under paragraph (a) of this section and their frequency of performance; and</p> <p>(2) A description of other actions necessary to maintain the LNG plant according to the requirements of this subpart.</p> <p>(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</p>	<p>49 CFR 193.2605 will be applicable to 49 CFR 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.</p> <p>49 CFR 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 by repair or replacement.</p>
<p>§ 193.2613 Auxiliary power sources.</p>	<p>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</p>	<p>Repairs on Essential Generator will be made as necessary to ensure backup power source functionality.</p> <p>49 CFR 193.2613 will be reinstated in its entirety upon the reintroduction of</p>

Appendix C – 49 CFR Part 193 Regulations Which GPLNG Continues to Perform

Subpart G – Maintenance

REGULATION: 49 CFR PART 193	APPLICABLE REGULATION TEXT	SPECIFIC PORTION OF REGULATION TO BE FOLLOWED
	operate equipment that would have to be served by that power source in an emergency.	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.
§ 193.2619 Control systems.	(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.	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.
§ 193.2623 Inspecting LNG storage tanks	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.	49 CFR 193.2623(a) specifically related to foundation & tank movement after a major meteorological or geophysical disturbance. 49 CFR 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.
§ 193.2625 Corrosion protection	(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	49 CFR 193.2625(b), as it applies to 193.2627, 193.2629, 193.2633 and 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

Appendix C – 49 CFR Part 193 Regulations Which GPLNG Continues to Perform

Subpart G – Maintenance

REGULATION: 49 CFR PART 193	APPLICABLE REGULATION TEXT	SPECIFIC PORTION OF REGULATION TO BE FOLLOWED
	<p>(2) Inspected and replaced under a program of scheduled maintenance in accordance with procedures established under 49 CFR 193.2605</p>	<p>components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.</p>
<p>§ 193.2627 Atmospheric corrosion control.</p>	<p>Each exposed component that is subject to atmospheric corrosive attack must be protected from atmospheric corrosion by -</p> <p>(a) Material that has been designed and selected to resist the corrosive atmosphere involved; or</p> <p>(b) Suitable coating or jacketing</p>	<p>Components will be protected and maintained to 193.2627 (a) and (b) and in accordance with 193.2637.</p>
<p>§ 193.2629 External corrosion control: buried or submerged components.</p>	<p>(a) Each buried or submerged component that is subject to external corrosive attack must be protected from external corrosion by -</p> <p>(1) Material that has been designed and selected to resist the corrosive environment involved; or</p> <p>(2) The following means:</p> <p>(i) An external protective coating designed and installed to prevent corrosion attack and to meet the requirements of 49 CFR 192.461 of this chapter; and</p> <p>(ii) A cathodic protection system designed to protect components in their entirety in accordance with the requirements of 49 CFR 192.463 of this chapter and placed in operation before October 23, 1981, or within 1 year after the component is constructed or installed, whichever is later.</p> <p>(b) Where cathodic protection is applied, components that are electrically interconnected must be protected as a unit.</p>	<p>ALL</p>
<p>§ 193.2633 Interference currents</p>	<p>(a) Each component that is subject to electrical current interference must be protected by a continuing program to minimize the detrimental effects of currents.</p>	<p>ALL</p>

Appendix C – 49 CFR Part 193 Regulations Which GPLNG Continues to Perform

Subpart G – Maintenance

**REGULATION:
49 CFR PART 193**

APPLICABLE REGULATION TEXT

SPECIFIC PORTION OF REGULATION TO BE FOLLOWED

(b) Each cathodic protection system must be designed and installed so as to minimize any adverse effects it might cause to adjacent metal components.

(c) Each impressed current power source must be installed and maintained to prevent adverse interference with communications and control systems.

§ 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:

(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 § 192.463 of this chapter.

(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.

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 GPLNG Terminal). Equipment and components unavailable during the atmospheric corrosion 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.

Appendix C – 49 CFR Part 193 Regulations Which GPLNG Continues to Perform

Subpart G – Maintenance

REGULATION: 49 CFR PART 193	APPLICABLE REGULATION TEXT	SPECIFIC PORTION OF REGULATION TO BE FOLLOWED
§ 193.2637 Remedial measures	<p>(d) Each component that is protected from atmospheric corrosion must be inspected at intervals not exceeding 3 years.</p> <p>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.</p>	<p>49 CFR 193.2637 as the standard applies to the remedial measures associated with 49 CFR 193.2629, 193.2633 and 193.2635.</p>
§ 193.2639 Maintenance records	<p>(a) Each operator shall keep a record at each LNG plant of the date and type of each maintenance activity performed on each component to meet the requirements of this part. For each LNG facility that is designed and constructed after March 31, 2000 the operator shall also maintain related periodic inspection and testing records that NFPA-59A-2001 (incorporated by reference, see § 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</p> <p>(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.</p> <p>(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</p>	<p>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 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.</p> <p>49 CFR Part 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 components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.</p>

Appendix C – 49 CFR Part 193 Regulations Which GPLNG Continues to Perform

Subpart H – Training REGULATION: 49 CFR Part 193	APPLICABLE REGULATION TEXT	SPECIFIC PORTION OF REGULATION TO BE FOLLOWED
§ 193.2703 Design and fabrication.	<p>For the design and fabrication of components, each operator shall use—</p> <p>(a) With respect to design, persons who have demonstrated competence by training or experience in the design of comparable components.</p> <p>(b) With respect to fabrication, persons who have demonstrated competence by training or experience in the fabrication of comparable components.</p>	<p>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.</p> <p>49 CFR 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.</p>
§ 193.2705 Construction, installation, inspection, and testing.	<p>(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 training in the methods and equipment to be used or related experience and accomplishments.</p> <p>(b) Each operator must periodically determine whether inspectors performing construction, installation, and testing duties required by this part are satisfactorily performing their assigned functions.</p>	<p>49 CFR 193.2705 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.</p> <p>49 CFR 193.2705, 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.</p>
§ 193.2707 Operations and maintenance.	<p>(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</p> <p>(1) Successful completion of the training required by 49 CFR 193.2713 and 193.2717; and</p> <p>(2) Experience related to the assigned operation or</p>	<p>49 CFR 193.2707 for the performance of maintenance procedures specified under 193.2605 in Appendix B of the Special Permit.</p> <p>49 CFR 193.2707, 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</p>

Appendix C – 49 CFR Part 193 Regulations Which GPLNG Continues to Perform

Subpart H – Training	REGULATION: 49 CFR Part 193	APPLICABLE REGULATION TEXT	SPECIFIC PORTION OF REGULATION TO BE FOLLOWED
		<p>maintenance function; and</p> <p>(3) Acceptable performance on a proficiency test relevant to the assigned function.</p> <p>(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.</p> <p>(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 direction of, a person qualified by experience and training in corrosion control technology.</p>	<p>components in the GPLNG Terminal will be compatible with its operational or safety purposes by repair or replacement.</p>
§ 193.2711	Personnel health.	<p>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.</p>	<p>49 CFR 193.2711 as this relates to the performance of maintenance procedures specified under 49 CFR 193.2605.</p> <p>49 CFR Part 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.</p>
§ 193.2713	Training: operations and maintenance.	<p>(a) Each operator shall provide and implement a written plan of initial training to instruct</p> <p>(1) All permanent maintenance, operating, and supervisory personnel</p> <p>(ii) About the potential hazards involved in operating and maintenance activities; and</p>	<p>49 CFR 193.2713(a)(1) (ii) and (iii), and 193.2713(b) for the performance of maintenance procedures specified under 193.2605.</p> <p>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</p>

Appendix C – 49 CFR Part 193 Regulations Which GPLNG Continues to Perform

Subpart H – Training

REGULATION: 49 CFR

Part 193

APPLICABLE REGULATION TEXT

SPECIFIC PORTION OF REGULATION TO BE FOLLOWED

	<p>(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</p> <p>(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.</p> <p>(a) Each operator shall maintain a system of records which</p> <p>(1) Provide evidence that the training programs required by this subpart have been implemented; and</p> <p>(2) Provide evidence that personnel have undergone and satisfactorily completed the required training programs.</p> <p>(b) Records must be maintained for one year after personnel are no longer assigned duties at the LNG plant.</p>	<p>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.</p>
<p>§ 193.2719 Training: records</p>		<p>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 193.2703 and 193.2705 pertaining only to remedial work under 49 CFR 193.2637; 193.2707, 193.2711, 193.2713(a)(i)(ii) and (iii), and 193.2713(b) pertaining only to the performance of maintenance procedures specified under 49 CFR 193.2605.</p> <p>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.</p>