**DEPARTMENT OF TRANSPORTATION** 

**Research and Special Programs Administration** 

49 CFR Part 193

[Docket No. RSPA-03-14456; Amdt. 193-18]

**RIN 2137-AD80** 

Pipeline Safety: Liquefied Natural Gas Facilities; Clarifying and Updating Safety

**Standards** 

**AGENCY:** Research and Special Programs Administration (RSPA), DOT.

**ACTION:** Final rule.

**SUMMARY:** This final rule clarifies that the operation, maintenance, and fire protection

requirements of the Research and Special Programs Administration's (RSPA) Office of Pipeline

Safety's (OPS) regulations for liquefied natural gas (LNG) facilities apply to LNG facilities in

existence or under construction as of March 31, 2000. An earlier final rule made the

applicability of these requirements unclear. Additional changes to the regulations remove

incorrect cross-references, clarify fire drill requirements, and require reviews of plans and

procedures. Lastly, the final rule changes the regulations so that cross-references to the National

Fire Protection Association standard, NFPA 59A, refer to the 2001 edition of that standard rather

than the 1996 edition. These clarifications and changes will improve the clarity and effectiveness

of the regulations.

DATES: This final rule takes effect [INSERT DATE 30 DAYS AFTER DATE OF

PUBLICATION IN THE FEDERAL REGISTER]. However, LNG plants existing on March 31, 2000, need not comply with provisions of § 193.2801 on emergency shutdown systems, water delivery systems, detection systems, and personnel qualification and training until [INSERT DATE 18 MONTHS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Incorporation by reference of certain publications in this rule is approved by the Director of the Federal Register as of [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**FOR FURTHER INFORMATION CONTACT:** L. M. Furrow by phone at 202-366-4559, by fax at 202-366-4566, by mail at U.S. Department of Transportation, 400 7th St., SW, Washington, D.C., 20590, or by e-mail at buck.furrow@rspa.dot.gov.

#### **SUPPLEMENTARY INFORMATION:**

Background

On March 1, 2000, we published a final rule document amending the safety regulations in 49 CFR Part 193, which apply to LNG facilities used in gas pipeline transportation (65 FR 10950). That document replaced many Part 193 siting, design, construction, equipment, and fire protection requirements with references to a consensus standard, NFPA 59A, "Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG)" (1996 edition). Until then, Part 193 referenced NFPA 59A (1996 edition) in only a few instances concerning siting, design,

and fire protection.

An amendment to § 193.2005, "Applicability," inadvertently implied that LNG facilities existing on March 31, 2000 (hereafter, "existing LNG facilities") were exempt from Part 193 operation, maintenance, and fire protection standards. After recognizing this ambiguity, we published a notice of proposed rulemaking (NPRM) to revise § 193.2005 (68 FR 23272; May 1, 2003). In the NPRM, we also proposed to revise incorrect cross-references that resulted from the March 1, 2000, final rule to establish minimum standards for fire drills used in fire protection training, and to require that operators review their Part 193 plans and procedures at least once a year. We further proposed to update all Part 193 references to NFPA 59A to the 2001 edition of that standard. Interested persons were invited to submit written comments on the proposed rules before July 1, 2003.

# **Advisory Committee**

The Technical Pipeline Safety Standards Committee (TPSSC) considered the NPRM and the associated evaluation of costs and benefits at a meeting in Washington, D.C. on May 30, 2003, and again in a teleconference held on July 31, 2003. TPSSC is a statutory advisory committee that advises RSPA/OPS on proposed safety standards and other policies for gas pipelines. It has an authorized membership of 15 persons, five each representing government, industry, and the public. Each member has qualifications to consider the technical feasibility, reasonableness, cost-effectiveness, and practicability of proposed pipeline safety standards. Transcripts of the

meeting and teleconference are available in Docket No. RSPA-98-4470.

At the May 30 meeting, TPSSC voted unanimously to support our proposal to update references to NFPA 59A (2001 edition) for purposes of LNG facility siting, design, and construction. However, some members and audience participants were concerned that applying NFPA 59A (2001 edition) provisions on fire protection retroactively, as we proposed, would unnecessarily increase operating costs and conflict with current plant procedures. So TPSSC postponed discussion of updating the reference to NFPA 59A in the fire protection rule, § 193.2801. This fire protection issue and the proposed rules on fire drills and reviews of plans and procedures were discussed later at the teleconference. The next section of this preamble contains our treatment of TPSSC's advice on these matters.

Disposition of Comments and TPSSC Advice on the Proposed Rules

This section of the preamble summarizes significant public comments and TPSSC advice we received on rules proposed in the NPRM. It also explains how we treated those comments and advice in developing the final rules. Subheadings correspond with new or amended rules proposed in the NPRM. We have not discussed all favorable comments or comments that suggested additional rulemaking actions. Changes proposed to §§ 193.2019(a), 193.2503, 193.2507, 193.2509(b), 193.2605(b)(2), and 193.2717(a) did not receive direct comment or TPSSC advice, so we adopted the proposed changes as final.

Nine entities submitted written comments: American Gas Association (AGA), Columbia Gas
Transmission Corporation (Columbia), Distrigas of Massachusetts LLC (Distrigas), Duke Energy
Gas Transmission (Duke), KeySpan Energy (KeySpan), Paiute Pipeline Company (Paiute),
Peoples Gas Light and Coke Company (Peoples Gas), Sound Energy Solutions (Sound), and
Williams Gas Pipeline (Williams). All comments are in the docket and available at
<a href="http://dms.dot.gov">http://dms.dot.gov</a>. Most commenters favored the proposal to update references to the 2001
edition of NFPA 59A, but either opposed or offered alternatives to other proposals.

§ 193.2005 Applicability. As revised by the March 1, 2000 Final Rule, § 193.2005(a) reads as follows:

Safety requirements mandating compliance with standard ANSI/NFPA 59A and other changes in this part governing siting, design, construction, equipment, fire protection, operation and maintenance apply to LNG facilities placed in service after March 31, 2000 unless otherwise noted.

This rule implies that the changes made to Part 193 fire protection, operation, and maintenance requirements do not apply to existing LNG facilities. However, as explained in the NPRM, this implication was inadvertent and contrary to RSPA's/OPS's long-standing policy of applying Part 193 operation, maintenance, and fire protection regulations retroactively. We proposed to remove the implication by amending § 193.2005(a) to read as follows:

Standards in this part governing siting, design, installation, or construction of LNG facilities do not apply to LNG facilities existing or under construction before the date such standards take effect under this part.

The proposed change to § 193.2005(a) was based on former § 193.2005(a)(1), which exempted from siting, design, installation, or construction standards "LNG facilities under construction before the date such standards are published." Former § 193.2005 did not exempt any facilities from operation, maintenance, or fire protection standards.

Although it was never an issue under former § 193.2005(a)(1), AGA and Distrigas were concerned that proposed § 193.2005(a) would disrupt planned LNG facilities that have received government approval for construction but are not yet under construction. These commenters thought that once LNG facilities receive such approval, they should be exempt from any new siting, design, installation, or construction standard adopted after the approval. As support for this view, AGA cited former § 193.2005(a)(2) that was in effect prior to March 31, 2000. This former section exempted LNG facilities from such new standards if the operator had filed an approval application with the appropriate government agency before March 1, 1978.

Former § 193.2005(a)(2) merely stated the filing-based exemption that Congress included in Section 152 of Public Law 96-129 (Nov. 30, 1979). This law directed DOT to establish new siting, design, and construction regulations within 180 days after enactment. Congress intended the exemption to ease the impact of these new regulations on LNG facilities planned before March 1, 1978. However, Congress did not establish a similar exemption for LNG facilities planned subsequently. Instead, it chose to apply a construction-based exemption to these facilities. Under this exemption, new design, installation, and construction regulations do not apply to LNG facilities "existing when the standard is adopted" (49 U.S.C. 60103(c)(3)).

Because Congress limited the filing-based exemption to facilities planned before March 1, 1978, and established a construction-based exemption for later-planned facilities, we do not think that establishing a filing-based exemption for these later-planned facilities would be appropriate.

Moreover, LNG plant operators can apply for waivers of any regulation as provided in 49 U.S.C. 60118.

Several commenters were concerned that if we amended § 193.2005(a) as proposed, the fire protection requirements of § 193.2801, which reference NFPA 59A provisions, would have an adverse impact on existing LNG facilities. AGA and Paiute said that the fire protection provisions of NFPA 59A (2001 edition) were very different from the previous requirements of Subpart I, and that industry needs more time to consider the impact of compliance. To illustrate this point, AGA and Paiute referred to section 9.7.2 of NFPA 59A (2001 edition), which reads:

Those employees who are involved in emergency activities, as determined in accordance with 9.1.2, shall be equipped with the necessary protective clothing and equipment and qualified in accordance with NFPA 600, *Standard on Industrial Fire Brigades*.

AGA and Paiute said many operators relied on local fire departments and did not use plant fire brigades. Duke had a similar concern, saying that NFPA 600 is inconsistent with Part 193 training requirements and would prevent plant personnel from carrying out firefighting duties.

As another illustration of differences, AGA and Paiute referred to section 9.3.4 of NFPA 59A

(2001 edition), which reads:

The detection systems determined from the evaluation in 9.1.2 shall be designed, installed, and maintained in accordance with NFPA 72, *National Fire Alarm Code*, or NFPA 1221, Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems, as applicable.

AGA and Paiute said many LNG plant operators could not test and maintain their systems under NFPA 72 requirements. Similarly, Williams commented that because some NFPA 72 provisions call for the use of licensed or certified personnel, experienced plant technicians could no longer install and maintain detection systems. Williams was concerned that LNG plant operators would have to hire outside contractors who may be unfamiliar with plant systems and hazards.

We think these comments do not accurately reflect the impact of applying § 193.2801 retroactively. Concerning the NFPA 600 issue, section 9.7.2 provides that employees who are involved in emergency activities, as determined in accordance with 9.1.2, must be qualified under NFPA 600. Two provisions of section 9.1.2 require determinations about employees involved in emergencies. Section 9.1.2(8) requires operators to determine "the availability and duties of individual plant personnel . . . during an emergency." Under the second provision, section 9.1.2(9), operators must determine "the protective equipment, special training, and qualification needed by individual plant personnel as specified by NFPA 600, *Standard on Industrial Fire Brigades*, for his or her respective emergency duties." However, an asterisk next to section 9.1.2(9) refers to section A.9.1.2(9), which reads:

Plant fire brigades are not required by this standard. Where the facility elects to

have a fire brigade, NFPA 600, *Standard on Industrial Fire Brigades*, is required for protective equipment and training.

The sum of these interconnected NFPA 59A provisions is that the reference to NFPA 600 in section 9.7.2 applies to determinations made under section 9.1.2(9), which apply only to personnel involved in fire brigades. Thus it is reasonable to conclude that the NFPA 600 qualifications required by 9.7.2 apply only to plant personnel who carry out emergency duties as part of a fire brigade. So section 9.7.2 would not affect the many LNG plants that AGA and Paiute said rely on local fire departments instead of personnel fire brigades for fire fighting.

As for NFPA 72, Subpart I has indirectly referenced this NFPA standard for years. Before the March 1, 2000, final rule took effect, former §§ 193.2819 and 193.2821 required operators to "provide and maintain" gas and fire detection systems in existing LNG plants according to applicable NFPA 59A provisions. Section 9-4.4 of the 1979 edition of NFPA 59A, the first edition referenced in §§ 193.2819 and 193.2821, required that the design, installation, and maintenance of detection systems meet various NFPA 72 standards. In a document published May 24, 1996, (Amdt. 193-11; 61 FR 26121), we updated these NFPA 59A references to the 1996 edition of NFPA 59A. Like the 1979 edition, section 9-4.4 of the 1996 edition references NFPA 72 for the design, installation, and maintenance of detection systems. The 2001 edition of NFPA 59A, proposed in the NPRM as the latest update of NFPA 59A references, contains a similar reference to NFPA 72 in section 9.3.4. In short, our proposal to clarify that operators of existing LNG facilities must comply with the fire protection provisions of NFPA 59A, including its references to NFPA 72, is not a new regulatory approach. The proposal would simply

continue an approach that has been in effect since the inception of Part 193.

Nevertheless, in view of the comments, we believe many operators may need additional time to meet NFPA 72 qualification and training provisions referenced in section 9.3.4 of NFPA 59A (2001 edition). Some operators may also need additional time to meet NFPA 600 qualification and training provisions related to personnel assigned to fire brigades. Therefore, final § 193.2801 allows operators until [INSERT DATE 18 MONTHS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] to meet these qualification and training requirements. This additional compliance time should alleviate commenters' concerns that their personnel do not meet NFPA 72 personnel qualification provisions.

Duke said operators could only accomplish many fire prevention and control provisions of NFPA 59A during plant design and construction. It also said retrofitting existing fire protection equipment to meet these provisions would be very difficult and not always possible. KeySpan had similar concerns, particularly about provisions in NFPA 59A, Chapter 9, concerning emergency shutdown systems; gas, fire, and leak detection systems; and water delivery systems. Duke suggested existing LNG facilities should only have to meet section 9.6, "Maintenance of Fire Protection Equipment," of NFPA 59A (2001 edition). Because some members, particularly a Duke representative, were concerned about applying the fire protection provisions of NFPA 59A retroactively, TPSSC voted unanimously that the proposed update of the NFPA 59A reference in § 193.2801 should apply only to new LNG facilities.

The Duke and Keyspan comments and TPSSC advice raise the issue of whether operators of existing LNG facilities should have to upgrade their fire protection systems to meet the current NFPA 59A standards or just maintain the existing systems. However, we think this issue was settled long ago. In authorizing safety standards for the operation and maintenance of LNG facilities, Congress gave DOT specific authority to establish requirements for fire prevention and containment equipment (49 U.S.C.60103(d)(2)). Moreover, Congress did not exclude existing facilities from application of any operation or maintenance standard, although it did exclude these facilities from application of other safety standards (i.e., standards on design, location, installation, construction, initial inspection, and initial testing) (49 U.S.C.60103(c)). As a result, when we established the fire protection rules in Subpart I of Part 193, it applied them to both new and existing facilities, and allowed operators of existing LNG facilities more than a year to retrofit their water delivery systems and gas and fire detection systems according to NFPA 59A standards (45 FR 70390; Oct. 23, 1980). Since then, whenever the references to NFPA 59A were updated to later published editions, operators have had to upgrade these systems as necessary to meet the later edition.

The most recent update - to the 1996 edition of NFPA 59A - occurred May 24, 1996 (61 FR 26121), almost 4 years before we published the March 1, 2000, final rule. When that update occurred, LNG plant operators did not say that upgrading their fire protection systems would be difficult, although there was no question that the references to NFPA 59A in Subpart I applied retroactively. This lack of expressed concern about compliance with the 1996 edition is an important consideration in the present upgrading issue, because the provisions of the 1996 and

2001 editions on fire protection systems are very similar. Neither the commenters nor TPSSC pointed to any significant differences between the 1996 and 2001 editions on fire protection systems. Moreover, in spite of Duke's comments about possible compliance difficulties, a recent inspection of Duke's sole LNG plant by RSPA engineers found all the fire protection systems in full compliance with NFPA 59A (1996 edition) requirements. Therefore, we have decided to continue to apply § 193.2801 retroactively as proposed.

Nevertheless, we must recognize that before the March 1, 2000, final rule took effect, Subpart I of Part 193 did not require that LNG plants meet the fire protection provisions of NFPA 59A on emergency shutdown systems or detection systems other than gas and fire detection systems. In addition, the subsequent confusion over whether § 193.2801 applies to existing LNG facilities may have caused some operators to delay bringing their water delivery and gas and fire detection systems into compliance with the 1996 edition of NFPA 59A. Therefore, final § 193.2801 allows operators until [INSERT DATE 18 MONTHS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] to bring these systems into compliance with the 2001 edition. The overall compliance burden should not be great because we see little difference between the 1996 and 2001 editions of NFPA 59A regarding fire protection systems. Also, Part 193 requires that LNG plants on which construction began after February 11, 1980, must have emergency shutdown systems.

Columbia disagreed with the conclusion of the draft Regulatory Evaluation that applying operation, maintenance, and fire protection standards retroactively would have little cost impact

on operators. One cost it mentioned was having to review and amend its operation and maintenance procedures. Our response to this comment is in the final Regulatory Evaluation, a copy of which is in the docket. As stated below under the heading "Regulatory Analyses and Notices," the Regulatory Evaluation concludes that operators would incur only minimum compliance cost.

Distrigas said the reference to NFPA 59A in § 193.2801 was unclear. This rule provides that "[e]ach LNG facility must meet fire prevention and fire control provisions of ANSI/NFPA 59A." Distrigas stated that operators are confused whether the reference to NFPA 59A includes all provisions of NFPA 59A related to fire prevention and control, all provisions of Chapter 9 - Fire Protection, Safety, and Security, or just particular provisions of Chapter 9. Similarly, KeySpan suggested we change § 193.2801 to state exactly which provisions of NFPA 59A (2001 edition) would apply. In consideration of these comments, we have changed § 193.2801 to state: "Each operator must provide and maintain fire protection at LNG plants according to sections 9.1 through 9.7 and section 9.9 of ANSI/NFPA 59A." The remaining section in Chapter 9, section 9.8 - Security, relates to matters that Part 193 covers in Subpart J–Security.

Williams asked us to clarify that the proposed term "standards in this part"means Part 193 standards rather than NFPA standards. Williams was concerned that proposed § 193.2005(a) could be interpreted to require that existing LNG facilities meet operation and maintenance provisions of NFPA 59A (2001 edition). In response to this comment, in final § 193.2005(a) we changed "standards" to "regulations." We also added a parenthetical expression to explain that

the term "regulations" includes any materials, such as NFPA 59A provisions, that are incorporated by reference in the regulations.

§ 193.2017 Plans and procedures. We proposed to require that operators review and update their Part 193 plans and procedures at intervals not exceeding 15 months, but at least once each calendar year. This proposed interval between reviews was based on a similar requirement applicable to gas pipelines under 49 CFR 192.605(a).

Although Williams supported annual reviews, AGA, Columbia, Distrigas, and Paiute argued that LNG plants do not experience significant enough changes in their operations from year to year to justify annual reviews of plans and procedures. AGA, Distrigas, and Paiute suggested review intervals of 2 years, not to exceed 27 months, noting that § 193.2713(b) requires operations and maintenance personnel to receive refresher training in procedures every 2 years. AGA and Distrigas also suggested reviews would be appropriate whenever a significant change in facilities occurs. However, Distrigas thought reviews should not include drawings, prints, schematics, and other items that are not subject to change. Finally, TPSSC voted unanimously to recommend reviews at two-year intervals.

After carefully considering these comments and TPSSC's advice, we agree that LNG plant

<sup>&</sup>lt;sup>1</sup>Part 193 requires plans for personnel health (§ 193.2711) and training (§§ 193.2713-193.2719), and procedures for operations (§ 193.2503), emergencies (§ 193.2509(b)), fluid transfers (§ 193.2513(a)), maintenance (§ 193.2605(b)), and security (§ 193.2903).

operations generally do not change as frequently as gas pipeline operations. So fewer reviews of plans and procedures for LNG plants would be acceptable. We also agree that the 2-year interval for refresher training on operating and maintenance procedures is a suitable guide to how often operators should review their Part 193 plans and procedures. Still, as Distrigas suggested, if a significant change in plant facilities occurs in the interim, a 2-year interval could allow too much time to pass before updating related plans and procedures. Therefore, in final § 193.2017(c), we have increased the proposed maximum interval between reviews from 1 to 2 years but also required reviews whenever a component<sup>2</sup> is changed significantly or a new component is installed. Reviews would have to include drawings, prints, schematics, and other items that have not changed only to the extent necessary to assure that plans and procedures are consistent with current plant operations.

Based on its own comprehensive operations and maintenance procedures, Columbia disagreed with our assessment in the draft Regulatory Evaluation that annual reviews would have a minimal impact on operators. Our response to this comment is in the final Regulatory Evaluation, a copy of which is in the docket. As stated below under the heading "Regulatory Analyses and Notices," the Regulatory Evaluation concludes that operators would incur only minimum compliance cost.

<sup>&</sup>lt;sup>2</sup>Section 193.2007 defines "component" as any part, or system of parts functioning as a unit, including, but not limited to, piping, processing equipment, containers, control devices, impounding systems, lighting, security devices, fire control equipment, and communication equipment, whose integrity or reliability is necessary to maintain safety in controlling, processing, or containing a hazardous fluid.

§ 193.2705 Construction, installation, inspection, and testing. This rule requires operators to determine periodically if their inspectors are satisfactorily performing duties assigned under § 193.2307 regarding inspection of construction, installation, and testing activities. However, in the Final Rule of March 1, 2000, we removed § 193.2307 as no longer necessary in view of similar inspections required by NFPA 59A. So, in the NPRM, we proposed to eliminate the cross-reference to § 193.2307, but still require that operators determine if required inspections of construction, installation, and testing activities are being done satisfactorily.

Only Distrigas commented on proposed § 193.2705(b). It said the proposed rule was unclear because it does not define the inspections operators would have to evaluate. Distrigas also said it was unclear that Part 193 even requires inspections of construction, installation, and testing activities.

We do not think Distrigas's comments warrant changing proposed § 193.2705(b). The inspections operators would have to evaluate are those done by "inspectors performing construction, installation, and testing duties required by [Part 193]." Although Part 193 may not directly require such inspections, it indirectly requires them through cross-references to NFPA 59A. For example, § 193.2303, "Construction acceptance," requires that components pass all applicable inspections prescribed by NFPA 59A. And section 4.1.1 of NFPA 59A (2001 edition) provides that operators must inspect LNG containers (a type of component) "to ensure compliance with the engineering design and material, fabrication, assembly, and test provisions of this standard." Therefore, we have adopted proposed § 193.2705(b) as final.

§ 193.2717 Training; fire protection. Under § 193.2717, operation and maintenance personnel and their immediate supervisors must undergo initial and continuing fire prevention and control training according to an instruction plan that includes fire drills. To clarify that a fire drill means more than a tabletop exercise, we proposed that fire drills include "evacuation of buildings" and "personnel performing fire control duties."

Peoples Gas asked if fire drills have to include persons other than operator personnel. Fire drills are a mandatory component of fire protection training under § 193.2717. The first sentence of § 193.2717(a) describes who is subject to fire protection training: "All personnel involved in maintenance and operation of an LNG plant, including their immediate supervisors. . . . ."

Affected personnel would include individuals and contractors hired by operators to perform operation or maintenance functions on plant facilities. Other people who may be on site, such as visitors, vendors, or government safety or emergency personnel, are not subject to training under § 193.2717. Still the training of operator personnel must cover procedures established under § 193.2509 for promptly notifying appropriate local officials of emergencies and then cooperating with them in evacuations and emergencies that require mutual assistance. Given this connection between fire emergency procedures and local officials, we believe some fire drills at LNG plants must include appropriate local officials.

AGA, Columbia, Distrigas, KeySpan, and Williams objected to the proposed fire drill standards as too restrictive considering the various ways of effectively training personnel. These commenters suggested the rule should merely list acceptable fire drill methods and allow

operators to decide which methods to use. In support of this view, they stated that local fire departments and state agencies recognize tabletop fire drills nationally, and that such drills could be adequate for LNG plants, depending on plant size, siting, and design. In addition, they said that many classroom courses and hands-on training opportunities are available for LNG operator personnel.

Several TPSSC members also considered the proposed standards too restrictive. They suggested the final rule should allow operators discretion to choose among a variety of options to satisfy the fire drill training requirement. As a result, TPSSC voted unanimously that operators should have discretion to use appropriate options that address fire prevention and response objectives.

Other commenters foresaw difficulties in carrying out the proposed fire drill standards. Distrigas questioned whether "evacuation of buildings" would apply to all buildings at a plant, since a plant-wide drill may not always be feasible. In this regard, Columbia and Paiute were concerned about the potential consequences of leaving vital equipment unmonitored during a drill if technicians had to leave control buildings. Paiute suggested hands-on fire fighting combined with tabletop drills would be an adequate fire drill for these technicians. AGA, KeySpan, and Williams found the term "personnel performing fire control duties" confusing. AGA and Williams thought it could mean that fire control personnel must either control a fire while participating in a drill or just participate in the drill. Similarly, KeySpan questioned whether the proposed standard would require actual operation of water, dry chemical, and foam equipment.

In evaluating these comments and TPSSC advice, we noted that an important purpose of fire protection training under § 193.2717 is to assure that personnel can properly respond to fire emergencies according to plant procedures established under § 193.2509. These procedures cover various practical activities, such as notifying plant personnel and local officials of fires, using appropriate fire control equipment, and evacuating the plant or nearby areas. Because fire drills test how personnel would handle these activities during a real emergency, we proposed that, at a minimum, fire drills include actual evacuations and performance of fire control duties. However, upon further consideration, we agree with commenters and TPSSC that the proposed standards are not easy to understand and may not be necessary for all LNG plants.

Therefore, in the final rule, we replaced the proposed prescriptive standards with a performance standard. We think this approach will accomplish the objectives of the proposal while providing the discretion sought by commenters and TPSSC. Final § 193.2717(c) merely requires that fire drills provide personnel hands-on experience in carrying out their duties under the fire emergency procedures required by § 193.2509. To meet this requirement, operators could use a variety of activities that simulate emergency conditions. Tabletop exercises would be acceptable if, as one commenter suggested, they are supplemented by some hands-on experience related to carrying out assigned emergency duties. Under final § 193.2717(c), operators may decide whether to include actual operation of fire control equipment as part of hands-on experience in using the equipment.

Appendix A to Part 193 - Incorporation by Reference. Part 193 incorporates by reference

provisions of various consensus standards, such as NFPA 59A.<sup>3</sup> These documents, along with applicable editions and names and addresses of publishing organizations, are now listed in Appendix A to Part 193. In addition, § 193.2013, "Incorporation by reference," provides general information about incorporation by reference. However, the Office of the Federal Register, National Archives and Records Administration, has developed a new policy on the information federal agencies should publish about referenced materials. To conform to this policy, we are deleting Appendix A and transferring its contents to § 193.2013. As a result, all information about NFPA 59A and other documents referenced in Part 193 will appear in one location. Section 193.2013 will also include cross-references to Part 193 sections that incorporate the referenced materials.

This final rule adopts in § 193.2013 our proposal to reference the 2001 edition of NFPA 59A, rather than the 1996 edition now in use. Except as discussed above concerning § 193.2801, none of the commenters opposed this update. AGA commented that updating to the 2001 edition would positively affect the outlook for energy supplies. Moreover, because of the renewed national interest in LNG, Sound urged that we expeditiously adopt the proposed update. It said the update would enable operators to avoid the higher costs, delays, and potential constraints on gas supply attendant to designing new LNG facilities under both the 1996 and 2001 editions. Therefore, we are adopting the update as proposed.

<sup>&</sup>lt;sup>3</sup>NFPA 59A is referenced in §§ 193.2019, 193.2051, 193.2057, 193.2059, 193.2101, 193.2301, 193.2303, 193.2401, 193.2521, 193.2639, and 193.2801.

To accommodate the update, in §§ 193.2057 and 193.2059 we are changing the referenced sections of the 1996 edition to the corresponding sections of the 2001 edition. Also, throughout Part 193, we are changing the designation "ANSI/NFPA 59A" to "NFPA 59A," as the 2001 edition of NFPA 59A does not bear the designation ANSI/NFPA 59A, although the document is an approved American National Standard.

Regulatory Analyses and Notices

Executive Order 12866 and DOT Policies and Procedures. We do not consider this rulemaking to be a significant regulatory action under Section 3(f) of Executive Order 12866 (58 FR 51735; Oct. 4, 1993). Therefore, the Office of Management and Budget (OMB) has not received a copy of this rulemaking to review. We also do not consider this rulemaking to be significant under DOT regulatory policies and procedures (44 FR 11034: February 26, 1979).

We prepared a Regulatory Evaluation of the final rules and a copy is in the docket. The evaluation concludes operators would incur only a minimum amount of cost, if any, to comply with the rules.

Regulatory Flexibility Act. Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), RSPA must consider whether rulemaking actions would have a significant economic impact on a substantial number of small entities. This final rule is consistent with customary practices in the gas pipeline industry. Therefore, based on the facts available about the anticipated impacts of

this rulemaking, I certify that this rulemaking will not have a significant impact on a substantial number of small entities.

Executive Order 13175. We have analyzed the final rules according to the principles and criteria contained in Executive Order 13084, "Consultation and Coordination with Indian Tribal Governments." Because the rules would not significantly or uniquely affect the communities of the Indian tribal governments nor impose substantial direct compliance costs, the funding and consultation requirements of Executive Order 13084 do not apply.

### Paperwork Reduction Act.

Title: Recordkeeping for LNG Facilities

Summary: Section 193.2017(c) adds a minor information collection requirement to existing information collection requirements. Under this new requirement, LNG plant operators must review and update their Part 193 plans and procedures at least once every 2 calendar years. They must also do so whenever a plant component changes significantly. However, we believe most operators routinely carry out reviews and updates while carrying out their plans and procedures. So we believe the burden of complying with the new review-and-update requirement would be minimal. Because the additional paperwork burden of this rule is likely to be minimal, we believe that submitting an analysis of the burdens to OMB under the Paperwork Reduction Act is unnecessary.

Use: Records are kept to facilitate personnel training and other LNG plant activities.

Respondents (including the number of): There are 150 gas pipeline operators.

OMB Control Number: 2137-0048.

Average burden estimate per operator: 126.7 hours per year.

Annual Burden Estimate: 19,000 hours per year.

Frequency: Biennial and on occasion.

Unfunded Mandates Reform Act of 1995. This rulemaking does not impose unfunded mandates under the Unfunded Mandates Reform Act of 1995. It does not result in costs of \$100 million or more to either State, local, or tribal governments, in the aggregate, or to the private sector, and is the least burdensome alternative that achieves the objective of the rule.

National Environmental Policy Act. We have analyzed the final rules for purposes of the National Environmental Policy Act (42 U.S.C. 4321 et seq.). Because the rules parallel present requirements or practices, we have decided they will not significantly affect the quality of the human environment. An environmental assessment document is available for review in the docket.

Executive Order 13132. We have analyzed the final rules according to the principles and criteria contained in Executive Order 13132 ('Federalism'). None of the rules (1) has substantial direct effects on the States, the relationship between the national government and the States, or the distribution of power and responsibilities among the various levels of government; (2) imposes substantial direct compliance costs on State and local governments; or (3) preempts state law. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

Executive Order 13211. This rulemaking is not a "Significant energy action" under Executive Order 13211. It is not a significant regulatory action under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Further, this rulemaking has not been designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action.

List of Subjects in 49 CFR Part 193

Fire prevention, Incorporation by reference, Pipeline safety, Reporting and recordkeeping requirements, Security measures.

Accordingly, RSPA is making the following amendments to 49 CFR part 193:

1. The authority citation for part 193 continues to read as follows:

Authority: 49 U.S.C. 5103, 60102,60103, 60111, 60118 and 49 CFR 1.53.

2. Revise § 193.2005(a) to read as follows:

## § 193.2005 Applicability.

(a) Regulations in this part governing siting, design, installation, or construction of LNG facilities (including material incorporated by reference in these regulations) do not apply to LNG facilities in existence or under construction when the regulations go into effect.

\*\*\*\*

3. Revise § 193.2013 to read as follows:

§ 193.2013 Incorporation by reference.

- (a) This section lists materials all or part of which are incorporated by reference in the corresponding sections noted. Applicable editions are in parentheses following the titles of the materials. Earlier editions listed in previous editions of this part may be used for components manufactured, designed, or installed in accordance with those earlier editions at the time they were listed, unless otherwise provided in this part. The Director of the Federal Register has approved these incorporations by reference under 5 U.S.C. 552(a) and 1 CFR part 51. The materials are incorporated as they exist on the date of the approval, and notice of any change in these materials will be published in the Federal Register. All materials are available for inspection at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC, and at the Office of Pipeline Safety, Research and Special Programs Administration, 400 Seventh Street, SW, Washington, DC.
- (b) The material listed below is available for purchase from the American Gas Association, 400 N. Capitol St., NW, Washington, D.C. 20001 or from ILI Infodisk, Inc., 610 Winters Avenue, Paramus, New Jersey 07652:
- (1) "Purging Principles and Practices"(1975), incorporation by reference approved for §§ 193.2513, 193.2517, and 193.2615.
- (c) The material listed below is available for purchase from the American Society of Civil Engineers (ASCE), Parallel Centre, 1801 Alexander Bell Drive, Reston, VA 20191-4400:
- (1) ASCE 7-95 "Minimum Design Loads for Buildings and Other Structures" (1995), incorporation by reference approved for § 193.2067.

<sup>&</sup>lt;sup>1</sup>The user must refer to an appropriate previous edition of 49 CFR for a listing of the earlier editions.

- (d) The material listed below is available for purchase from the American Society of Mechanical Engineers (ASME), Three Park Ave., New York, NY 10016-5990:
- (1) ASME Boiler and Pressure Vessel Code, Section VIII, Divisions 1 and 2 (1998), incorporation by reference approved for § 193.2321.
- (e) The materials listed below are available for purchase from the Gas Technology Institute (formerly Gas Research Institute (GRI)), 1700 S. Mount Prospect Road, Des Plaines, IL 60018:
- (1) GRI-89/0176 "LNGFIRE: A Thermal radiation Model for LNG Fires" (June 29, 1990), incorporation by reference approved for § 193.2057.
- (2) GRI-89/0242 "LNG Vapor Dispersion Prediction with the DEGADIS Dense Gas Dispersion Model" (April 1988-July 1990), incorporation by reference approved for § 193.2059.
- (3) GRI-96/0396.5 "Evaluation of Mitigation Methods for Accidental LNG Releases, Volume 5: Using FEM3A for LNG Accident Consequence Analyses" (April 1997), incorporation by reference approved for § 193.2059.
- (f) The material listed below is available for purchase from the National Fire Protection Association (NFPA), 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101:
- (1) NFPA 59A "Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG)" (2001 edition), incorporation by reference approved for §§ 193.2019, 193.2051, 193.2057, 193.2059, 193.2101, 193.2301, 193.2303, 193.2401, 193.2521, 193.2639, and 193.2801.
  - 4. Add § 193.2017(c) to read as follows:

§ 193.2017 Plans and procedures.

\*\*\*\*

- (c) Each operator must review and update the plans and procedures required by this part --
- (1) When a component is changed significantly or a new component is installed; and
- (2) At intervals not exceeding 27 months, but at least once every 2 calendar years.
- 5. In § 193.2019(a), remove "1996 edition" and in its place add "incorporated by reference, see § 193.2013".
  - 6. Amend § 193.2051 as follows:
- a. In the first sentence, immediately after "ANSI/NFPA 59A" add "(incorporated by reference, see § 193.2013)"; and
- b. Remove "ANSI/NFPA 59A" wherever it appears in the section, and in its place add "NFPA 59A".
  - 7. Amend § 193.2057 as follows:
- a. In the introductory text, remove "section 2-2.3.1 of ANSI/NFPA 59A" and in its place add "section 2.2.3.2 of NFPA 59A (incorporated by reference, see § 193.2013)"; and
- b. In paragraph (a), immediately after "GRI-89/0176" add "(incorporated by reference, see § 193.2013)".
  - 8. Amend § 193.2059 as follows:
- a. In the introductory text, remove "section 2-2.3.2 of ANSI/NFPA 59A" and in its place add "sections 2.2.3.3 and 2.2.3.4 of NFPA 59A (incorporated by reference, see § 193.2013)";
- b. In paragraph (b), add "(incorporated by reference, see § 193.2013)" immediately after "GRI-89/0242", and remove "GRI 96/0396.5" and in its place add "GRI-96/0396.5 (incorporated by reference, see § 193.2013)"; and
  - c. In paragraph (c), remove "section 2-2.3.3 of ANSI/NFPA 59A" and in its place add "section

- 2.2.3.5 of NFPA 59A (incorporated by reference, see § 193.2013)".
  - 9. Amend § 193.2101 as follows:
- a. In the first sentence, immediately after "ANSI/NFPA 59A" add "(incorporated by reference, see § 193.2013)"; and
- b. Remove "ANSI/NFPA 59A" wherever it appears in the section, and in its place add "NFPA 59A".
  - 10. Amend § 193.2301 as follows:
- a. In the first sentence, immediately after "ANSI/NFPA 59A" add "(incorporated by reference, see § 193.2013)"; and
- b. Remove "ANSI/NFPA 59A" wherever it appears in the section, and in its place add "NFPA 59A".
- 11. In § 193.2303, remove "ANSI/NFPA 59A" and in its place add "NFPA 59A (incorporated by reference, see § 193.2013)".
  - 12. Amend § 193.2401 as follows:
- a. In the first sentence, immediately after "ANSI/NFPA 59A" add "(incorporated by reference, see § 193.2013)"; and
- b. Remove "ANSI/NFPA 59A" wherever it appears in the section, and in its place add "NFPA 59A".
  - 13. Amend § 193.2503 as follows:
  - a. In paragraph (e), remove the semicolon and in its place add a period;
- b. In paragraph (g), remove the semicolon and the word "and" and add a period in the place of the removed semicolon; and

- c. Remove paragraph (h).
- 14. Revise the first sentence of § 193.2507 to read as follow:

## § 193.2507 Monitoring operations.

Each component in operation or building in which a hazard to persons or property could exist must be monitored to detect fire or any malfunction or flammable fluid that could cause a hazardous condition. \* \* \*

15. Revise the first sentence of § 193.2509(b) to read as follows:

# § 193.2509 Emergency procedures.

\*\*\*\*

- (b) To adequately handle each type of emergency identified under paragraph (a) of this section and each fire emergency, each operator must follow one or more manuals of written procedures.

  \*\*\*
  - 16. Amend § 193.2521 as follows:
- a. In the second sentence, immediately after "ANSI/NFPA 59A" add "(incorporated by reference, see § 193.2013)"; and
- b. Remove "ANSI/NFPA 59A" wherever it appears in the section, and in its place add "NFPA 59A".
  - 17. Revise § 193.2605(b)(2) to read as follows:

# § 193.2605 Maintenance procedures.

\*\*\*\*

- (b) \*\*\*
- (2) A description of other actions necessary to maintain the LNG plant according to the

requirements of this subpart.

\*\*\*\*

- 18. Amend § 193.2639 as follows:
- a. In the second sentence, immediately after "ANSI/NFPA 59A" add "(incorporated by reference, see § 193.2013)"; and
- b. Remove "ANSI/NFPA 59A" wherever it appears in the section, and in its place add "NFPA 59A".
  - 19. Revise § 193.2705(b) to read as follows:
- § 193.2705 Construction, installation, inspection. and testing.

\*\*\*\*

- (b) Each operator must periodically determine whether inspectors performing construction, installation, and testing duties required by this part are satisfactorily performing their assigned functions.
  - 20. In § 193.2717, revise paragraph (a) and add paragraph (c) to read as follows:

## § 193.2717 Training: fire protection.

- (a) All personnel involved in maintenance and operations of an LNG plant, including their immediate supervisors, must be trained according to a written plan of initial instruction, including plant fire drills, to:
  - (1) Know the potential causes and areas of fire;
  - (2) Know the types, sizes, and predictable consequences of fire; and
- (3) Know and be able to perform their assigned fire control duties according to the procedures established under § 193.2509 and by proper use of equipment provided under § 193.2801.

\*\*\*\*

- (c) Plant fire drills must provide personnel hands-on experience in carrying out their duties under the fire emergency procedures required by § 193.2509.
  - 21. Revise § 193.2801 to read as follows:

# § 193.2801 Fire protection.

Each operator must provide and maintain fire protection at LNG plants according to sections 9.1 through 9.7 and section 9.9 of NFPA 59A (incorporated by reference, see § 193.2013). However, LNG plants existing on March 31, 2000, need not comply with provisions on emergency shutdown systems, water delivery systems, detection systems, and personnel qualification and training until [INSERT DATE 18 MONTHS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

22. Remove Appendix A to Part 193.

Issued in Washington, D.C. on	
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Samuel G. Bonasso,

**Deputy Administrator**