Information for NAS Study on Petroleum Gas Regulations

Information on the development of the current language in 192.11

61 FR 28770, June 6, 1996, or DOT Docket PS-124, Amdt. 192-78

Section 192.11, Petroleum Gas Systems (Including Changes to §§192.1 and 192.3).

RSPA proposed several changes to the special rules in §192.11 for petroleum gas systems: First, we proposed to require that peak shaving plants supplying petroleum gas by pipeline to a natural gas distribution system as well as pipeline systems transporting only petroleum gas or petroleum gas/air mixtures comply with part 192 standards and the National Fire Protection Association (NFPA) Standards 58 and 59. Downstream from the point where a peak shaving plant injects petroleum gas into a natural gas distribution system, only part 192 would apply. Next, we proposed that the NFPA Standards prevail in the event of a conflict between part 192 and NFPA Standards 58 or 59. At the same time, we said that a conflict does not exist when NFPA Standards 58 and 59 are silent or nonspecific on a subject (such as for corrosion protection or leak detection). In this case, the operator would have to comply with any applicable part 192 rule. Finally, we proposed to add a definition of "petroleum gas" to §192.3, and to clarify under §192.1(b)(4) which petroleum gas systems are excepted from part 192.

Ten TPSSC members voted for the proposal, one member supported it with a recommended change, three members opposed it, and one abstained. Two TPSSC members disagreed with the proposal that NFPA standards should prevail in the event of a conflict with part 192. One TPSSC member voted yes, but recommended that in the event of conflict the most stringent requirement should prevail.

We explained in the NPRM why we believe the NFPA standards should have priority in direct conflict situations. The main reason is that in contrast to part 192, the NFPA Standards specifically cover petroleum gas transportation. Also, NFPA Standards 58 and 59 reflect current petroleum gas technology and safety practices. Given this special attention to petroleum gas, we do not think there is sufficient reason to require operators to follow part 192 instead of the NFPA Standards in the event of conflict, even if part 192 is more stringent.

RSPA received eight comments in favor and three comments in opposition to the proposed changes to §192.11. Those commenters who opposed the proposal were concerned that compliance with NFPA Standards 58 and 59 would involve significant capital expenditures. However, §192.11 already requires petroleum gas systems to meet NFPA Standards 58 and 59. And, in accordance with 49 U.S.C. §60104(b), none of the design, installation, construction, initial testing, or initial inspection requirements of NFPA Standards 58 and 59 would apply under part 192 to peak shaving plants now in existence. So, retrofitting existing plants would not be required. Although all plants would have to comply with the operation and maintenance requirements of NFPA Standards 58 and 59, overall compliance costs should be small because, as NFPA stated in its petition, most, if not all, existing plants already comply with NFPA Standards 58 and 59 to qualify for insurance coverage. Thus, §192.11 is revised as proposed in the NPRM.
Proposed §192.1(b)(4)(i) would exclude from part 192 pipeline systems that transport only petroleum gas or petroleum gas/air mixtures to fewer than 10 customers, if no portion of the system is located in a public place. This exclusion is in the present §192.11(a), but in proposing to relocate it to §192.1(b)(4)(i), we omitted the parenthetical phrase "(such as a highway)." One commenter objected to the omission, saying it would leave the meaning of "public place" open to interpretation. However, our experience has been that the parenthetical phrase has hindered more than helped the understanding of public place. We have consistently interpreted "public place" to mean a place which is generally open to all persons in a community as opposed to being restricted to specific persons. We consider churches, schools, and commercial property as well as any publicly owned right-of-way or property which is frequented by persons to be public places. Although §192.11(a) refers to a highway as an example of a public place, many operators have incorrectly considered the example to restrict, rather than define, the coverage of petroleum gas systems with fewer than 10 customers.

Proposed §192.1(b)(4)(ii) would clarify that part 192 does not apply to single-tank, single-customer petroleum gas systems located entirely on the customer's premises, but partially in a public place. These systems exist, for example, at churches or restaurants, where the gas is used for heating or cooking. The proposal was based on the jurisdiction of part 192 over the distribution of gas. As indicated by the definition of "service line" (§192.3), part 192 does not apply to gas distribution beyond the point where metered gas enters customer piping. For single-tank, single-customer systems on the customer's premises, this point normally occurs at the tank.

Three commenters protested that part 192 would still apply to single-customer, multi-tank systems on the customer's premises, regardless of tank size. For example, the proposed rule would not exclude a two-tank system partly in a public place, even if the total quantity of stored gas is less than in a large single-tank system. Because the proposed exclusion did not rest on the quantity of gas delivered to the customer, we agree that the number of tanks should not be a factor in the exclusion of single-customer systems on the customer's premises. Therefore, final §192.1(b)(4)(ii) omits the term "single-tank."

The proposed definition of "petroleum gas" drew no objections from either the TPSSC or commenters. So the definition is adopted as proposed.

74 FR 63905 has information on the development of “Small LPG Operator”

Amdt. 192-113, December 4, 2009

https://www.phmsa.dot.gov/portal/site/PHMSA/menuitem.6f23687cf7b00b0f22e4c6962d9c8789/?vgnextoid=a70835837da55210VgnVCM1000001ecb7898RCRD&vgnextchannel=c021d95c4d037110VgnVCM1000009ed07898RCRD&vgnextfmt=print
Part 192 items that need addressed in the petroleum gas regulations.

1. 192.11(a) is currently written so that compliance with both NFPA standards and Part 192 is required.
2. There is not a clear line of demarcation between NFPA 58 and 59. This has resulted in confusion in the enforcement of regulations. Since NFPA has not addressed this problem, should part 192 address it, by only referencing NFPA 59 on petroleum gas/air systems and NFPA 58 on all others?
3. There is no exception, from Part 195, for short liquid lines that carry liquefied petroleum gas.
4. 192.327 depth of cover causes confusion for LP Gas storage facilities. If a flow line from a tank is classified as a transmission line it is required to be buried 30 – 36 inches deep. If it is classified as a main then the depth may be 24 inches.
5. 192.503 (b) should be changed to allow the use of petroleum gas for leak testing
7. 192.11(c) is known as the primacy provision. When this was originally put in the regulations, the consensus was that NFPA had more knowledge and experience of petroleum gas systems.
8. 192.1(b)(5) sets the requirement for which systems are jurisdictional and which are not. Raising the current numbers could leave systems, in some areas, uninspected. Lowering the numbers would increase the number of jurisdictional systems by thousands and may not result in more inspections because agencies are all-ready working at capacity
9. Welding requirements in NFPA 58, 59 and 192 are not consistent. As currently written, the primacy provision covers this. If primacy is given back to 192 then this would need to be addressed.
10. 192.11 uses the term “plant” but there is no definition of “plant” in NFPA or Part 192.

Some NFPA information to consider

1. The scope of NFPA 59 has changed from 1200 gallons in 1949, to 2000 gallons in 1979 and then to 4000 gallons in 1992. This results in identical installations that were installed in different years where one is required to meet NFPA 58 and the other NFPA 59. If NFPA 59 were to cover only propane/air systems, the tank size and installation date would be eliminated because the tank size is normally much larger than 4000 gallon.
2. NFPA and 192 requirements overlap. Should there be a line of demarcation, a chart indicating primacy, or a statement indicating the stricter of the two shall apply.
3. NFPA 59 systems require testing of container relief devices every 5 years regardless of tank size or relief configuration. This creates an additional expense and hazards when small containers are involved. It is not required for most systems falling under NFPA 58 (see NFPA 58 E2.3). One option would be to exempt tanks 4000 gallon or less.
4. **NFPA 59** requires a 7 ft. relief valve stack on underground containers regardless of size. **NFPA 58** only requires the 7 ft. stack on underground containers more than 2000 gallon capacity.

5. NFPA 59 does not require compliance with ASCE 7, wind load or seismic requirements for vertical containers of less than 10,000 gallon capacity.

6. NFPA 59 does not allow vehicles within 50 ft. of an LP gas container. This creates an enforcement problem when containers of less than 2000 gallon are allowed to be set within 25 ft. of a property line.

7. NFPA 59 requires portable fire extinguishers to have a BC rating. NFPA 58 says ABC and NFPA 10 states that fire extinguishers that have more than one letter classification are considered as meeting the requirements of each letter class shown.

8. NFPA 58 covers all sections in 59 but 59 does not cover all sections in 58

9. NFPA 59 coverage ends at the first connection to the distribution piping.

10. NFPA 58 limits the service pressure for PE pipe to 30 PSI. Part 192 and 59 do not. This means that an NFPA 59 system should also comply with NFPA 58 in order to be safe.

11. If a system is required to meet 58, 59 and 192 requirements, which one takes precedent for the training requirements? 59 is annually, 58 is every 3 years and 192.805 says the operator shall identify the intervals.

12. NFPA 59 has no prohibition of an electric line above a container. 58 does.

13. NFPA 59 has no requirement for clearance from weeds, dry grass or combustibles from an above ground container.

14. NFPA 59 is currently in a revision cycle for the 2018 edition. If a later edition is to be adopted, should the 2018 be considered.
The following comment was made by Don Murphy, PHMSA Inspector, Southern Region, in response to a question about exempting propane systems with less than 10 customers.

Some things to consider:

- Outright exempting the systems with <10 customers will give operators a clear path to eliminate all jurisdictional systems by limiting systems to 9 customers. The result would be more systems that have fewer requirements and that no longer get any regulatory inspections. The number of people affected by the systems would not change.

  From a Qualitative Risk perspective (Risk = Consequence x Likelihood), the Risk goes up because the Likelihood (of an event) increases due to fewer requirements and loss of an objective 3rd party looking at the systems, even if the Consequences (of an event) stay the same.

- Many of the <10 systems are commercial in nature and have a greater potential impact on an unknowing public.

- Removing the Part 192 requirements from <10 systems:
  
  o Removes a lot of record keeping requirements for the design, construction, and installation of the pipeline distribution systems. Operators are likely to end up with systems for which they don’t know the pipe, coating, and cathodic protections characteristics of the pipe in the ground.

  o Removes maintenance, operation, and associated recordkeeping requirements for patrolling, leak survey, odorization, cathodic protection, and valve maintenance.

- As far as states looking at the <10 systems, not all states look beyond the storage. Even if they are looking at the initial design, construction, and installation, they are not looking at ongoing maintenance and operation of the pipeline systems. My experience with operators is that when no one is checking, they are not doing a lot of the requirements.
Federal Inspection of LPG Systems

Southern Region (Florida) Jurisdictional LP Gas Systems breakdown by size

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<tr>
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<tr>
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Central Region

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<tr>
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Western Region

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<tr>
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South West Region

None

Eastern Region

None