

NEW JERSEY BOARD OF PUBLIC UTILITIES

Adopted Amendments to the Natural Gas Pipeline Rules

N.J.A.C. 14:7-1.4, 1.8, 1.9, 1.11, 1.12, 1.14, 1.20, 1.24, 1.25, and 2.3

Docket No. GX08121086

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PUBLIC UTILITIES

Natural Gas Pipelines

Adopted Amendments:	N.J.A.C. 14:7-1.4, 1.8, 1.9, 1.11, 1.12, 1.14, 1.20, 1.24, 1.25, and 2.3
Adopted Repeal:	N.J.A.C. 14:7-1.19
Proposed:	March 2, 2009 at 41 N.J.R. 997(a)
Adopted:	July 29, 2009, by the Board of Public Utilities, Jeanne M. Fox, President, and Frederick F. Butler, Joseph Fiordaliso, Nicholas Asselta, and Elizabeth Randall, Commissioners.
Filed:	August 14, 2009 as R. _____, with substantive and technical changes not requiring additional public notice and comment under N.J.A.C. 1:30-6.3.
Authority:	N.J.S.A. 48:2-13, 48:9-33, 48:10-2 et seq.
BPU Docket Number:	GX08121086
Effective Date:	September 8, 2009
Expiration Date:	January 29, 2014

The New Jersey Board of Public Utilities (Board) is herein adopting amendments to its natural gas pipeline safety rules (N.J.A.C. 14:7), which address the construction, operation, and maintenance of natural gas transmission and distribution pipelines. The Board readopted the natural gas pipeline safety rules on January 24, 2009. However, based on comments received on that readoption proposal, the Board determined that additional changes to the natural gas pipeline rules were necessary. Those changes could not be made on adoption because they were substantive changes that required additional notice and comment, and so further amendments were proposed as a companion to the readoption. This adoption finalizes those additional amendments.

Summary of Public Comments and Agency Responses:

The following commenters submitted timely comments on the proposal:

1. Robert A. Briant, Jr., Utility and Transportation Contractors Association of New Jersey (UCTANJ); and
2. Sheree L. Kelly, Public Service Electric and Gas Company; Mary Patricia Keefe, Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas; Tracey Thayer, New Jersey Natural Gas Company; John Stanziola, South Jersey Gas Company -- collectively the "Gas Distribution Companies" (GDCs).

Comments:

1. **COMMENT:** We appreciate the significant effort and understanding demonstrated by Bureau of Pipeline Safety staff ("Board Staff") in their approach to code enforcement and in preparation of the rule adoption document. For the most part, the proposed rules in the companion proposal accomplish these objectives. (GDCs)
RESPONSE: The Board appreciates this comment in support of its rulemaking efforts.

14:7-1.9(e) Distribution system valve requirements

2. **COMMENT:** With regard to the requirement that all sectionalizing valves installed for emergency purposes as designated by the pipeline operator shall be maintained in accordance with 49 CFR 192.747, we request that the Board clarify that it is the intent of this section to affect only those valves that the Operator has determined to be utilized for sectionalization purposes during emergency operations, and not all valves installed in the course of business in the Operator's distribution system. We offer the following language to accomplish this clarification:
14:7-1.9(e) All sectionalizing valves installed under (a) above for emergency purposes as designated by the pipeline operator, shall be maintained in accordance with the requirements of 49 CFR 192.747. (GDCs)
RESPONSE: The Board agrees that this provision as proposed is confusing regarding the class of valves covered by the requirement at N.J.A.C. 14:7-1.9(e). The cross references to the Federal code create the erroneous impression that the Board is attempting to expand the scope of the Federal requirements at 49 CFR 192.747. Therefore, the rule has been clarified upon adoption to indicate that, in accordance with the cross reference to N.J.A.C. 14:7-1.9(a), the cited Federal

provision and the Federal provision added upon adoption, the requirements apply only to sectionalizing valves used for isolating portions of a pipeline in emergency situations.

3. **COMMENT:** We request the inclusion of sand as an approved backfill material in addition to clean soil or select fill under N.J.A.C. 14:7-1.11. Using sand as the backfill material to surround the pipeline on all sides will help to alert a contractor to the presence of a natural gas pipeline. The sand will distinguish the area from the surrounding soil to further reduce accidents on the job site. This will significantly reduce the danger and uncertainty that exists when digging near natural gas pipelines. (UTCANJ)

RESPONSE: The Board agrees that sand is an appropriate backfill material for natural gas pipelines, and can help alert excavators to the presence of a pipeline. However, a rule change is not needed to reflect this, as sand is included in the scope of the terms “clean soil” and “select fill,” which are already listed in the provision as suitable backfill.

4. **COMMENT:** If a natural gas pipeline is made from a non-metallic material that is difficult to detect, a metallic trench marker should be placed over the pipeline to make it detectable. This will significantly reduce the danger and uncertainty that exists when digging near natural gas pipelines. (UTCANJ)

RESPONSE: The Board believes that the rules as written provide sufficient protection. A requirement for tracer wire is found in the Federal Code at 49 CFR 192.321(e), which is incorporated by reference into these Board rules at N.J.A.C. 14:7-1.2. The Board’s existing natural gas pipeline rules also contain requirements for tracer wire at N.J.A.C. 14:7-1.11(e), which apply in addition to the Federal Code requirements. Finally, the Board’s rules, at N.J.A.C. 14:7-1.11(f), require marking or warning tape. The Board believes that these requirements, taken together, provide adequate warning of the presence of pipelines, while maintaining an appropriate balance of competing interests.

5. **COMMENT:** We suggest the following changes to proposed N.J.A.C. 14:7-1.11(c): “Backfill around gas pipelines shall consist of a minimum six inch cushion [~~that surrounds~~] **above and below** the pipeline [~~on all sides~~] with smooth, clean soil or select fill. It shall be free from rock, stones, cinders, paving material, construction debris, wood, contaminated soil, frozen soil, rubbish, or other substances that may damage the pipeline or its **cathodic protection** coating. **This cushioning requirement shall not be required on pipelines where other suitable protective measures are employed.** Backfill material shall be well compacted under, over, and around the sides of the pipe. Compaction of backfill material may be accomplished by mechanical tamping, vibration tamping, or other methods approved by the pipeline operator.” (GDCs)

The commenters’ suggested exemption for “suitable protective measures” is vague and extremely broad, and would effectively nullify the cushioning requirement. Similarly, narrowing the scope of the provision by adding the words “cathodic protection” could result in increased damage to pipelines from inappropriate fill

material. Therefore, the Board has not adopted these suggested changes. Regarding the suggestion to allow an exception to the six inch cushion requirement, the Board acknowledges that there may be some situations in which widening a trench to meet the six inch cushion requirement on the sides of the pipeline could result in unnecessary costs that do not materially increase pipeline safety. However, the Board cannot create an exception to address this problem on adoption, as it would be a substantive change upon adoption in violation of N.J.A.C. 1:30-6.3. Therefore, the Board has published a companion proposed amendment to this provision, elsewhere in this issue of the New Jersey Register, to address the problem.

14:7-1.14(f) Pressure Testing

6. **COMMENT:** The proposal reads as follows: "Within one month after the completion date of the pressure test required in (a) above, the pipeline operator shall submit..." As proposed, the rule reads "...required in (a) above... We believe the correct reference is to section (e) and seek clarification of same. (GDCs)

RESPONSE: The Board has corrected this cross reference upon adoption.

7. **COMMENT:** Proposed N.J.A.C. 14:7-1.25(c) reads as follows: "The drawing shall depict all subsurface facilities in proximity to and/or crossing the proposed HDD alignment." We request that the word "known" be inserted before the word subsurface because it would be dependant on other operators to identify their facilities before the drawing are prepared. (GDCs)

RESPONSE: The intent of this provision is to ensure due diligence on the part of the pipeline operator in locating potential underground hazards. The Board did not intend this rule to hold operators to a strict liability standard. Therefore, the rule has been clarified upon adoption to indicate that it is sufficient if the operator performs the test-hole excavation required at N.J.A.C. 14:7-1.25(d).

8. **COMMENT:** We suggest the following change to proposed N.J.A.C. 14:7-1.25(g): "A pipeline operator shall ensure that any pipe that is to be pulled in a HDD operation is supported during the operation as follows:

1. All coiled pipe shall be supported by a turntable type device, **except that coiled pipe 2" or less in diameter may be supported above the ground by other suitable means;** and

2. All straight pipe shall be supported by roller assemblies." (GDCs)

RESPONSE: The Board acknowledges that there may be supportive devices that, while similar to a turntable device in function, do not technically fit the definition of a turntable. Therefore, the rule has been clarified upon adoption to indicate that similar devices that provide the same level of support may be used.

Federal Standards Analysis

Executive Order No. 27(1994), and P.L. 1995, c.65 (N.J.S.A. 52:14B-22 through 24), require State agencies that adopt State rules which exceed any Federal requirements to

include in the rulemaking document a comparison with Federal law. The Federal law that corresponds to these rules is found in the regulations of the United States Department of Transportation at 49 C.F.R. §§190, 191, 192, 193, 198, and 199. These amendments are comparable with the corresponding Federal law in all but the areas discussed below.

The Federal regulation for high-pressure distribution systems requires sectionalizing valves, spaced "so as to reduce the time to shut down a section of main in an emergency," and states that the spacing shall be determined by operating pressure, pipe size, and local physical conditions. The Board's rules governing the spacing of sectionalizing valves on distribution pipelines, found at N.J.A.C. 14:7-1.9(a) and (b), require the operator to consider additional and more specific factors not included in the corresponding Federal regulations at 49 C.F.R. §192.181. However, the amendments adopted herein will bring the Board's rules closer to those of the Federal code, by increasing the flexibility provided to natural gas pipeline operators in complying with the rules.

Amendments to N.J.A.C. 14:7-1.11(c) require all gas pipelines to be installed with at least a six inch cushion surrounding the pipeline. This is more stringent than the Federal regulations at 49 C.F.R. 192.319, which do not specify a cushion, but only require that the pipe and pipe coating be protected from damage from the backfill material. Previously existing N.J.A.C. 14:7-1.11(d)3 is deleted, in part to make the rules more consistent with the Federal code.

Amendments to N.J.A.C. 14:7-1.12(a) will reduce the required cover over gas distribution mains from 36 inches to 30, but the provision remains more stringent than the Federal code, which requires 24 inches of cover.

An amendment in the last sentence of N.J.A.C. 14:7-1.12(c) will reduce the scope of the shielding requirement so that it would apply only where a transmission pipeline had less than 42 inches of cover. This is more stringent than the Federal Code at C.F.R. 192.327, which requires additional protection if cover is less than 36 inches.

An amendment to N.J.A.C. 14:7-1.20(c) requires that leak detection surveys on bare and cathodically unprotected steel distribution lines be performed with equipment that is equivalent to flame ionization. The amendment applies this requirement only to surveys conducted outdoors, as the equipment is impractical to use indoors. The Federal regulations at 49 C.F.R. §192.723 require leak detector equipment, but do not specify the type of equipment.

Amendments to N.J.A.C. 14:7-1.25(f) require inspections for window excavations conducted on plastic pipe in horizontal directional drilling (HDD) operations. This requirement is not found in the Federal Code. However, the Board's experience with HDD indicates that this requirement is necessary for safety in New Jersey.

To the extent that these amendments may require an operator to install pipelines at increased depths of cover or use additional shielding, there will be some costs incurred. However, the Board has determined that these costs are justified as a measure of damage prevention and to ensure the protection of people, property and the environment, especially in densely populated areas.

Full text of the adopted amendments follows (additions indicated in boldface with asterisks ***thus***; deletions indicated in brackets with asterisks ***[thus]***):

CHAPTER 7. NATURAL GAS PIPELINES

SUBCHAPTER 1. CONSTRUCTION, OPERATION AND MAINTENANCE OF TRANSMISSION AND DISTRIBUTION NATURAL GAS PIPELINES

14:7-1.9 Distribution system valve requirements

(a) - (d) (No change.)

(e) Sectionalizing valves required under (a) above ***for emergency purposes*** shall be maintained in accordance with the requirements of 49 C.F.R. 192.747 ***and 49 CFR 192.181***.

14:7-1.14 Pressure testing

(a) - (e) (No change from proposal.)

(f) Within one month after the completion date of the pressure test required in ***[(a)]*** ***[e]*** above, the pipeline operator shall submit a report to the Board's Bureau of Pipeline Safety in accordance with N.J.A.C. 14:7-1.26, certifying that the pipeline meets the applicable requirements of 49 C.F.R. 192, Subpart J, 192.501 through 192.517 and this chapter. The report shall also include:

1. - 3. (No change from proposal.)

14:7-1.25 Directional drilling operations

(a) - (b) (No change.)

(c) Prior to beginning any natural gas pipeline HDD work that will be in proximity to and/or will cross gas pipelines subjected to or intended to be subjected to pressure in excess of 125 psig, the pipeline operator shall prepare proposed horizontal directional drilling (HDD) plan and profile drawings. The drawings shall depict all ***known*** subsurface facilities in proximity to and/or crossing the proposed HDD alignment ***,** **including those identified through test-hole excavation in accordance with (d) below***. The operator shall make these drawings available to Board staff for review upon request.

(d) - (f) (No change.)

Note: This is a courtesy copy of the adoption. The official version will be published in the New Jersey Register on 5 October 2009. Should there be any discrepancies between this courtesy copy and the official version, the official version will govern.

(g) A pipeline operator shall ensure that any pipe that is to be pulled in a HDD operation is supported during the operation as follows:

1. All coiled pipe shall be supported by a turntable type device ***or similar mechanism that provides equivalent support***; and
2. All straight pipe shall be supported by roller assemblies.

(h) (No change.)