# **NEW JERSEY BOARD OF PUBLIC UTILITIES**

Proposed Amendments to the Natural Gas Pipeline Rules
N.J.A.C. 14:7-1.11
Docket No. GX09070549

 PUBLIC UTILITIES
 1

 Summary
 2

 Social Impact
 3

 Economic Impact
 3

 Federal Standards Analysis
 3

 Jobs Impact
 4

 Agriculture Industry Impact
 4

 Regulatory Flexibility Statement
 4

 Smart Growth Impact
 4

 Housing Affordability Impact
 5

 Smart Growth Development Impact
 5

 CHAPTER 7. NATURAL GAS PIPELINES
 5

 SUBCHAPTER 1. CONSTRUCTION, OPERATION AND MAINTENANCE OF
 TRANSMISSION AND DISTRIBUTION NATURAL GAS PIPELINES
 5

 14:7-1.11 Installation of pipe
 5

#### **PUBLIC UTILITIES**

**Natural Gas Pipelines** 

Proposed Amendment: N.J.A.C. 14:7-1.11

Authorized By: Board of Public Utilities, Jeanne M. Fox, President, and

Frederick F. Butler, Joseph Fiordaliso, Nicholas V. Asselta, and Elizabeth Randall, Commissioners.

Calendar Reference: See Summary below for an explanation of exception to

calendar requirement.

Authority: N.J.S.A. 48:2-13, 48:9-33, 48:10-2 et seq.

BPU Docket Number: **GX09070549** 

Proposal Number: PRN -

Comments may be submitted through 4 December 2009 through either of the following methods:

? Electronically, <u>in Microsoft WORD format</u>, or in a format that can be <u>easily</u> <u>converted</u> to WORD, by e-mailing them to the following e-mail address: rule.comments@bpu.state.nj.us; or

? On paper to:

Kristi Izzo, Board Secretary New Jersey Board of Public Utilities **Attention Docket Number: GX09070549** Two Gateway Center Newark, New Jersey 07102

The agency proposal follows:

#### **Summary**

The New Jersey Board of Public Utilities (Board) is herein proposing an amendment to its rules regarding various aspects of natural gas pipelines (N.J.A.C. 14:7), which address the construction, operation, and maintenance of natural gas transmission and distribution pipelines. The Board proposed amendments to the natural gas pipeline safety rules on March 2, 2009 at 41 N.J.R. 997(a). The final adoption of those amendments appears elsewhere in this issue of the New Jersey Register. However, based on comments received on that proposal, the Board determined that one additional change to the natural gas pipeline rules was necessary. This change could not be made on adoption because it is a substantive change that requires additional notice and comment, and so this companion proposal incorporates that additional change.

The amendment proposed herein would create a limited exception to a requirement at N.J.A.C. 14:7-1.11(c) for a six inch cushion of backfill on all sides of a pipeline. As discussed below in the Federal Standards Analysis, the existing requirement at N.J.A.C. 14:7-1.11(c) is more stringent than corresponding Federal regulations, and will remain more stringent even with the exception proposed herein.

Pipelines are normally installed by trench excavation with backhoes, although other trench and trenchless installation methods are also used. In some cases, a trench into which a pipeline is being placed is not quite wide enough to provide a full six inches on both sides of the pipeline. However, the N.J.A.C. 14:7-1.11(c) does not allow an exception, even if the trench is only one-half inch too narrow. The logical remedy for this would be to choose a wider digging implement ("backhoe bucket") or make additional passes with the digging implement to widen the trench. However, buckets come in standard widths, and generally there is at least a six inch difference between each bucket and the next wider bucket. Therefore, it would be impossible for a pipeline installer with a slightly narrow trench to merely increase the bucket width by one-half or one inch. Also, widening the trench by making additional passes is cumbersome and impractical. Thus, in many cases the strict application of the six inch requirement on each side of a pipeline will result in either a significant and unnecessary increase in the width of the trench, or costly additional passes with heavy excavation equipment. In either case, the benefits gained cannot justify the increase in costs where public safety will not otherwise be affected. This is especially significant when these costs are passed through to natural gas customers through higher rates. The Board makes every effort not to impose any regulatory costs that are not necessary to ensure public safety and welfare. Therefore, the exception proposed herein will provide the flexibility necessary to ensure public safety, while minimizing unnecessary costs.

It should be noted that the proposed exception does not apply to the mandatory six inch cushion on the top and bottom of a pipeline. The potential for damage to pipelines from top and bottom pressure is greater than from pressure on the sides of a pipeline, due to loadings including the weight of the soil and pavement over the buried line, the loadings caused by traffic moving over the line, possible soil settlement, and the weight of the pipe. Further, unlike widening a trench, deepening a trench can be accomplished in small increments, more easily and at lower costs.

As the Board is providing a 60-day comment period on this proposed amendment, the proposal is exempt from the rulemaking calendar requirements set forth at N.J.A.C. 1:30-3.1 and 3.2, pursuant to N.J.A.C. 1:30-3.3(a)5.

#### **Social Impact**

The proposed amendment will have a significant positive social impact, in that it responds to an important issue raised by commenters, and will provide additional flexibility to natural gas pipeline operators to comply with the rules in the most efficient and cost-effective manner.

# **Economic Impact**

The proposed amendment will provide natural gas pipeline operators with additional flexibility in meeting the rules' cushioning requirement, which will have a positive economic impact on the operators, and on the citizens of New Jersey who use natural gas.

#### **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.

The amendment proposed to N.J.A.C. 14:7-1.11(c) will bring N.J.A.C. 14:7-1.11(c) closer to the Federal regulations, but N.J.A.C. 14:7-1.11(c) will remain somewhat 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. To the extent that the six inch cushion requirement may require an operator to install pipelines at increased depths of cover or use additional shielding, there will be some costs incurred. However, the proposed amendment will minimize these costs, and the Board has determined that the remaining 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.

### **Jobs Impact**

The proposed amendment is likely to have a negligible impact on jobs in New Jersey, if any. The primary effect of the amendment is an increase in flexibility for natural gas operators in how they comply with the six inch cushion requirement in the rules. By reducing the necessity for excessively wide trenches, the proposed amendment may very slightly reduce the number of excavation jobs. However, this is an unavoidable and justifiable result of reducing unnecessary costs for pipeline installers.

#### **Agriculture Industry Impact**

The proposed amendment will have no impact on the agriculture industry in New Jersey. While many natural gas pipelines cross agricultural areas, the proposed amendment will not change pipeline construction or maintenance practices in a way that will impact farms or farmers in New Jersey.

#### **Regulatory Flexibility Statement**

In accordance with the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq. (the Act), the Board has determined that the proposed amendment will not impose reporting, recordkeeping or other compliance requirements on any small businesses as that term is defined in the Act. Most intrastate pipelines located in New Jersey are operated by the four local distribution companies (LDCs) currently subject to the jurisdiction of the Board, all of which have more than 100 employees. Other pipelines may be operated by large industrial businesses such as power plants, which are also not small businesses under the Act. A small minority of pipeline operators in New Jersey are small businesses. However, because smaller pipelines are operated at lower pressures, these rules do not apply to them.

#### **Smart Growth Impact**

The Board anticipates that the proposed amendment will have no impact on either the achievement of smart growth or the implementation of the State Development and Redevelopment Plan. The State Plan is intended to "provide a coordinated, integrated and comprehensive plan for the growth, development, renewal and conservation of the State and its regions" and to "identify areas for growth, agriculture, open space conservation and other appropriate designations." N.J.S.A. 52:18A-199a. "Smart growth is based on the concepts of focusing new growth into redevelopment of older urban and suburban areas, protecting existing open space, conserving natural resources, increasing transportation options and transit availability, reducing automobile traffic and dependency, stabilizing property taxes, and providing affordable housing." While the location of infrastructure such as natural gas pipelines can significantly affect the location of new development, the proposed amendment applies only to pipeline installation procedures, and does not affect the location of future development, and will not impact smart growth or the State Plan.

#### **Housing Affordability Impact**

The proposed amendment will have an insignificant impact on affordable housing in New Jersey because the scope of the proposal is limited to trench width for natural gas pipelines. There is an extreme unlikelihood that the proposed amendment would evoke a change in the average costs associated with housing, because the cost of constructing, operating and maintaining natural gas transmission and distribution infrastructure is so small a component of housing prices as to have virtually no effect on the housing market.

## **Smart Growth Development Impact**

The proposed amendment will have an insignificant impact on smart growth in New Jersey because the scope of the proposal is limited to trench width for natural gas pipelines. The rules do not affect the location within the State of natural gas pipelines. Therefore, there is an extreme unlikelihood that the proposed amendment would evoke a change in housing production within Planning areas 1 or 2, or within designated centers, under the State Development and Redevelopment Plan.

**Full text** of the rule proposal follows (additions are indicated in boldface <u>thus</u>; deletions are indicated in brackets [thus]):

#### **CHAPTER 7. NATURAL GAS PIPELINES**

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

#### 14:7-1.11 Installation of pipe

- (a) (b) (No change.)
- (c) Backfill around gas pipelines shall consist of a minimum six inch cushion that surrounds 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 coating], except that:
  - 1. If the trench width makes it impractical to maintain a six inch cushion on the sides of the pipeline, the cushion on the sides of the pipeline may be narrower than six inches;
  - 2. This exception does not apply to the cushion above and below the pipeline, which shall be a minimum of six inches in all cases;
  - 3. If the cushion on either side of the pipeline is narrower than six inches:
    - i. The cushion shall extend fully to each side of the trench;
    - ii. Either the cushion shall be wide enough to prevent damage to the pipe and pipe coating from the soil material on each side of the pipe, or additional protective measures shall be installed to prevent damage to the pipe and pipe coating..

- (d) All backfill material required under (c) above 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 coating. 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 operator.
- (d) (f) Recodify as (e) (g), no change in text.