

Although the effects of the proposed rule will likely lead to fewer incidents, gas pipeline leaks that lead to adverse environmental impacts are rare under current conditions. Although the damage from failures could be reduced, the environmental damage resulting from gas pipeline failures is usually minor under current conditions. The effects are typically negligible, but can consist of localized, temporary damage to the environment in the immediate vicinity of the failure location on the pipeline.

Some operators covered by the proposed rule already have integrity assessment programs. These operators typically consider the pipeline's proximity to populated areas when making decisions about where and when to inspect and test pipelines. As a result, some pipeline segments that could impact high consequence areas have already been recently assessed, and others would be assessed in the next several years without the provisions of the proposed rule. The primary effect of the proposed rule—accelerating integrity assessment in some high consequence areas—shifts increased integrity assurance forward for a few years for some segments that could affect high consequence areas. Because pipeline failure rates are low, shifting the time at which these segments are assessed forward by a few years has only a small effect on the likelihood of pipeline failure in these locations.

The proposed rule does require operators to conduct an integrated assessment of the potential threats to pipeline integrity, and to consider additional preventive and mitigative risk control measures to provide enhanced protection. If there is a vulnerability to a particular failure cause, these assessments should result in additional risk controls to address these threats. However, without knowing the specific high consequence area locations, the specific risks present at these locations, and the existing operator risk controls (including those that surpass the current minimum regulatory requirements), it is difficult to determine the impact of this requirement.

Some gas pipeline operators already perform integrity evaluations or risk assessments that consider the environmental and population impacts. These evaluations have already led to additional risk controls beyond existing requirements to improve protection for these locations. For many segments, it is probable that operators will determine that the existing preventive and mitigative activities provide adequate

protection to high consequence areas, and that the small additional risk reduction benefits of additional risk controls are not justified.

The primary benefit of the proposed rule will be to establish requirements for conducting integrity assessments and periodic evaluations of integrity of segments that could impact high consequence areas. This will codify the integrity management programs and assessments operators are currently implementing. It will also require other operators, who have little, or no, integrity assessment and evaluation programs to raise their level of performance. Thus, the proposed rule is expected to ensure a more consistent, and overall higher level of protection for high consequence areas across the industry.

The Environmental Assessment of this proposed rule is available for review in the docket.

List of Subjects in 49 CFR Part 192

High consequence areas, potential impact areas, pipeline safety, and record-keeping requirements.

In consideration of the foregoing, RSPA/OPS proposes to amend part 192 of title 49 of the Code of Federal Regulations as follows:

PART 192—[AMENDED]

1. The authority citation for part 192 continues to read as follows:

Authority: 49 U.S.C. 5103, 60102, 60104, 60108, 60109, 60110, 60113, and 60118; and 49 CFR 1.53.

2. In subpart M, under the undesignated centerheading "High Consequence Areas," in § 192.761, in the definition beginning "A high consequence area," the word "A" is removed, paragraphs (a) and (b) are revised, paragraph (g) is added, and new definitions of Confirmatory direct assessment, Direct assessment, Moderate risk area, Potential impact circle, Potential impact radius, Potential impact zone, and Threshold radius are added alphabetically to read as follows:

§ 192.761 Definitions.

The following definitions apply to this section and § 192.763:

Confirmatory direct assessment is a streamlined integrity assessment method that utilizes process steps similar to direct assessment to evaluate for the presence of corrosion and third party damage.

Direct assessment is an integrity assessment method that utilizes a process to evaluate certain threats (*i.e.*, external corrosion, internal corrosion and stress corrosion cracking) to a

pipeline's integrity. The process includes the gathering and integration of risk factor data, indirect examination or analysis to identify areas of suspected corrosion, direct examination of the pipeline in these areas, and post assessment evaluation.

High consequence area means any of the following areas:

(a) An area defined as a Class 3 location under § 192.5, except for an area within the class 3 location defined as a moderate risk area.

(b) An area defined as a Class 4 location under § 192.5, except for an area with the class 4 area defined as a moderate risk area.

(c) * * *

(d) * * *

(e) * * *

(f) * * *

(g) An area of a circle of threshold radius 1000 feet or larger that has a cluster of 20 or more buildings intended for human occupancy. The threshold radius is measured from the centerline of the pipeline to the nearest building in the cluster.

Moderate risk area means an area located within a Class 3 or Class 4 location, but not within the potential impact zone.

Potential impact circle is a circle of radius equal to the threshold radius and is used to establish the higher priority area within a Class 3 or 4 area of a high consequence area. A potential impact circle contains any of the following within its radius (refer to the diagram in Appendix E):

(1) Twenty or more buildings intended for human occupancy within a 1000-foot or larger circle of radius;

(2) A facility that is occupied by persons who are hard to evacuate as defined in § 192.761 no matter the size of the circle of radius; or

(3) A place where people congregate as defined in § 192.761, no matter the size of the circle of radius.

Potential impact radius (PIR) means the radius of a circle within which the potential failure of a pipeline could have significant impact on people or property. PIR is determined by the formula $r = 0.69 * (\text{square root of } (p * d^2))$, where "r" is the radius of a circular area surrounding the point of failure (ft), "p" is the maximum allowable operating pressure (MAOP) in the pipeline segment (psi) and "d" is the diameter of the pipeline (inches). **Note:** 0.69 is the factor for natural gas. This number will vary for other gases depending upon their heat of combustion. An operator transporting gas other than natural gas must use Section 3.2 of ASME/ANSI B31.8S to calculate the impact radius formula.