

impact zones which are covered in this proposed rule. We have put the proposed potential impact zones definition under the same section 192.761, where HCAs are defined.

The petitioners argued it would be difficult to identify a building or outside area that is frequented by 20 or more persons on at least 50 days in any 12-month period, and would include isolated and infrequently occupied buildings. RSPA/OPS does not know how many rural buildings would be covered by the HCA definition or how many miles of pipeline segments would have to be added to the assessment plans to include these buildings which are populated for a short time relative to the other populated areas. We are trying to focus on high risk areas for assessment. Instead of including rural buildings, such as rural churches as High Consequence Areas, we could designate them as Moderate Risk Areas requiring less frequent assessment or requiring enhanced preventive and mitigative measures only. We would like public comment on this issue. We are proposing to define a Moderate Risk Area as an area located within a Class 3 or Class 4 location, but not within the potential impact zone.

This proposed rule presents requirements to improve the integrity of pipelines located in areas of potentially high consequences that go beyond those HCAs. The proposed IMP rule proposes to expand the definition of HCA by adding consideration of people living at distances greater than 660 feet from large diameter high pressure pipelines. Populated areas at distances less than 660 feet are already accounted for under Class 3 and 4 locations, however, populated areas beyond 660 feet were left out of the HCA final rule of August 6, 2002 (67 FR 50824). In this proposed rule, we are adding a new proposed HCA component of populated areas in paragraph 192.761 (g). We are proposing to require that an operator consider 20 or more buildings intended for human occupancy within an potential impact circle of radius 1000 feet or larger. We calculated that 20 buildings within a circular area of a 1000-foot radius represent a resident density equivalent to 46 buildings within a rectangular area one mile long and 1320 feet wide (current Class 3 location definition). Therefore, by using 20 or more buildings within circular area of radius 1000 feet we are, including areas having the same density of population as Class 3 locations.

To understand the provisions of this proposed rule, it is necessary to understand both the pipe segments covered by the proposal and the ranking

of integrity improvement requirements for those pipe segments. The approach involves the six steps that rely on the definitions below: (1) Identify all HCAs for the pipeline using the HCA definitions as expanded by this proposed rule; (2) calculate the Potential Impact Radius (PIR) for each segment in the pipeline; (3) determine the Threshold Radius associated with the PIR for each segment; (4) identify Potential Impact Circles for the pipeline; (5) identify Potential Impact Zones (PIZ) for the pipeline and in Class 3 and Class 4 locations, identify the moderate risk areas; and (6) determine the priority of each segment covered by this proposed rule—covered segments located within a potential impact zone are considered higher priority, whereas those located outside a PIZ are considered lower priority.

The following proposed definitions help to understand these six steps:

Potential Impact Circle (PIC)—PIC is a circle of radius equal to the threshold radius used to establish higher priority areas within HCAs. A potential impact circle contains any of the following (for greater clarity see the diagram in Appendix E):

- 20 or more buildings intended for human occupancy within a circle of radius 1000 feet, or larger if the threshold radius is greater than 1000 feet;
- A facility that houses people who are difficult to evacuate as defined in § 192.761; or
- A place where people congregate as defined in § 192.761.

Potential Impact Radius (PIR)—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).

Potential Impact Zone (PIZ)—PIZ is a rectangular area along the pipeline derived from the potential impact circle. The potential impact zone extends axially along the length of the pipeline from the center of the first potential impact circle to the center of the last contiguous potential impact circle, and extends perpendicular to the pipe out to

the threshold radius on either side of the centerline of the pipe. For greater clarity see the diagram in Appendix E.

Threshold Radius—Threshold Radius is a bounding radius intended to provide an additional margin of safety beyond the distance calculated to be the potential impact radius. If the calculated potential impacted radius is less than 300 feet, the operator must use a threshold of 300 feet. If the calculated potential impacted radius exceeds 300 feet but is less than 660 feet, the threshold is 660 feet. If the calculated potential impacted radius exceeds 660 feet, but is less than 1000 feet, the threshold is 1000 feet. And, if the calculated potential impact radius exceeds 1000 feet, the threshold is 15% greater than the actual calculated impacted radius.

Pipeline Integrity Management in High Consequence Areas—Proposed Section 192.763

The proposed new § 192.763 titled “Pipeline integrity management in high consequence areas” imposes integrity management program requirements on all gas transmission pipelines covered under Part 192 that impact high consequence areas.

The proposed rule requires an operator of a transmission line to develop and follow an integrity management program that provides for continually assessing the integrity of all pipeline segments in the high consequence areas using internal inspection, pressure testing, direct assessment or other equally effective assessment means. The proposed rule further requires that the program provide for evaluating the entire range of threats to the integrity of each pipeline segment through comprehensive information analysis. Further, for each covered pipeline segment, the operator must provide additional protection to a pipeline segment’s integrity through remedial actions and enhanced preventive and mitigative measures.

(a) Which Operators Must Comply? Proposed § 192.763(a)

The rule proposes that any operator of a gas transmission pipeline must comply with the integrity management program requirements.

(b) Which Pipeline Segments are Covered? Proposed § 192.763(b)

Any gas transmission pipeline located in a high consequence area, including transmission pipelines transporting petroleum gas, hydrogen, and other gas products covered under Part 192. Gas transmission is defined in § 192.3, and