Background Information for Emergency Response Officials

“Identified Sites”

And

Natural Gas Pipeline Integrity Management

This document contains background information about natural gas pipeline integrity management programs and “Identified Sites”. This information is intended to provide emergency response officials with an overview of why pipeline companies are asking emergency responders about identified sites.

Excerpts from the Federal Regulations are included on pages 2 and 3. Pages 4 through 8 contain an advisory notice issued by DOT in July of 2003. Information of particular interest to emergency responders is shown in bold type. Additional information can be found on the Office of Pipeline Safety website at:  http://primis.rspa.dot.gov/gasimp/

Prepared by Pipeline Association for Public Awareness
September 28, 2004
Subpart O—Pipeline Integrity Management

§ 192.903 What definitions apply to this subpart?
The following definitions apply to this subpart:
Assessment is the use of testing techniques as allowed in this subpart to ascertain the condition of a covered pipeline segment. Confirmatory direct assessment is an integrity assessment method using more focused application of the principles and techniques of direct assessment to identify internal and external corrosion in a covered transmission pipeline segment. Covered segment or covered pipeline segment means a segment of gas transmission pipeline located in a high consequence area. The terms gas and transmission line are defined in § 192.3. 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 covered pipeline segment’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 an area established by one of the methods described in paragraphs (1) or (2) as follows:
(1) An area defined as—
(i) A Class 3 location under § 192.5; or
(ii) A Class 4 location under § 192.5; or
(iii) Any area in a Class 1 or Class 2 location where the potential impact radius is greater than 660 feet (200 meters), and the area within a potential impact circle contains 20 or more buildings intended for human occupancy; or
(iv) Any area in a Class 1 or Class 2 location where the potential impact circle contains an identified site.
(2) The area within a potential impact circle containing—
(i) 20 or more buildings intended for human occupancy, unless the exception in paragraph (4) applies; or
(ii) An identified site.
(3) Where a potential impact circle is calculated under either method (1) or (2) to establish a high consequence area, the length of the high consequence area extends axially along the length of the pipeline from the outermost edge of the first potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy to the outermost edge of the last contiguous potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy. (See Figure E.I.A. in appendix E.)
(4) If in identifying a high consequence area under paragraph (1)(iii) of this definition or paragraph (2)(i) of this definition, the radius of the potential impact circle is greater than 660 feet (200 meters), the operator may identify a high consequence area based on a prorated number of buildings intended for human occupancy within a distance 660 feet (200 meters) from the centerline of the pipeline until December 17, 2006. If an operator chooses this approach, the operator must prorate the number of buildings intended for human occupancy based on the ratio of an area with a radius of 660 feet (200 meters) to the area of the potential impact circle (i.e., the prorated number of buildings intended for human occupancy is equal to [20 x (660 feet [or 200 meters] / potential impact radius in feet [or meters])] 2).
Identified site means each of the following areas:
(a) An outside area or open structure that is occupied by twenty (20) or more persons on at least 50 days in any twelve (12)-month period. (The days need not be consecutive.) Examples include but are not limited to, beaches, playgrounds, recreational facilities, camping grounds, outdoor theaters, stadiums, recreational areas near a body of water, or areas outside a rural building such as a religious facility; or
(b) A building that is occupied by twenty (20) or more persons on at least five (5) days a week for ten (10) weeks in any twelve (12)-month period. (The days and weeks need not be consecutive.) Examples include, but are not limited to, religious facilities, office buildings, community centers, general stores, 4-H facilities, or roller skating rinks; or
(c) A facility occupied by persons who
are confined, are of impaired mobility, or would be difficult to evacuate. Examples include but are not limited to hospitals, prisons, schools, day-care facilities, retirement facilities or assisted-living facilities.

*Potential impact circle* is a circle of radius equal to the potential impact radius (PIR).

*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 \( r = 0.69 \times \sqrt{p \times d^2} \), where ‘\( r \)’ is the radius of a circular area in feet surrounding the point of failure, ‘\( p \)’ is the maximum allowable operating pressure (MAOP) in the pipeline segment in pounds per square inch and ‘\( d \)’ is the nominal diameter of the pipeline in 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–2001 (Supplement to ASME B31.8; ibv, see § 192.7) to calculate the impact radius formula.

*Remediation* is a repair or mitigation activity an operator takes on a covered segment to limit or reduce the probability of an undesired event occurring or the expected consequences from the event.

§ 192.905 How does an operator identify a high consequence area?

(a) General. To determine which segments of an operator’s transmission pipeline system are covered by this subpart, an operator must identify the high consequence areas. An operator must use method (1) or (2) from the definition in § 192.903 to identify a high consequence area. An operator may apply one method to its entire pipeline system, or an operator may apply one method to individual portions of the pipeline system. An operator must describe in its integrity management program which method it is applying to each portion of the operator’s pipeline system. The description must include the potential impact radius when utilized to establish a high consequence area. (See appendix E.I. for guidance on identifying high consequence areas.)

(b)(1) Identified sites. An operator must identify an identified site, for purposes of this subpart, from information the operator has obtained from routine operation and maintenance activities and from public officials with safety or emergency response or planning responsibilities who indicate to the operator that they know of locations that meet the identified site criteria. These public officials could include officials on a local emergency planning commission or relevant Native American tribal officials.

(2) If a public official with safety or emergency response or planning responsibilities informs an operator that it does not have the information to identify an identified site, the operator must use one of the following sources, as appropriate, to identify these sites.

(i) Visible marking (e.g., a sign); or
(ii) The site is licensed or registered by a Federal, State, or local government agency; or
(iii) The site is on a list (including a list on an internet web site) or map maintained by or available from a Federal, State, or local government agency and available to the general public.

(c) New identified areas. When an operator has information that the area around a pipeline segment not previously identified as a high consequence area could satisfy any of the definitions in § 192.903, the operator must complete the evaluation using method (1) or (2). If the segment is determined to meet the definition as a high consequence area, it must be incorporated into the operator’s baseline assessment plan as a high consequence area within one year from the date the area is identified.
SUMMARY: On August 6, 2002, RSPA/OPS published a final rule on how to identify the populated areas near a pipeline for which additional protections would be required (67 FR 50824). These ‘‘high consequence areas’’ (HCAs) include not only population areas already identified by pipeline operators through the longstanding Class location definitions, but also ‘‘identified sites,’’ 49 CFR 192.761(f). Inclusion of identified sites is intended to pick up isolated population areas which are not picked up through the Class location process. These could include isolated nursing homes, schools, and campgrounds that may be close enough to the pipeline to be at risk should there be a pipeline failure. Commenters expressed concerns that what was intended to be a relatively simple task, identifying certain sites as high consequence areas, could become a never-ending search. RSPA/OPS is providing guidance in this advisory bulletin to provide the necessary clarification. With this guidance, operators can identify sites in preparation for required assessments and integrity management programs. The public will receive the assurance that the search for ‘‘identified sites’’ for inclusion in integrity management programs is clearly understood and thorough. The advisory bulletin provides guidance on a good faith effort in conducting this search. Further, at a meeting of the Technical Pipeline Safety Standards Committee scheduled for July 31, 2003, RSPA/OPS has added to the agenda further discussion about the advisability of modifying the final rule language to include this advice.

ADDRESSES: You may contact the Dockets Facility by phone at (202) 366–9329, for copies of the proposed rule or other material in the docket. All materials in this docket may be accessed electronically at http://dms.dot.gov/search. Once you access this address, type in the last four digits of the docket number shown at the beginning of this notice (in this case 7666), and click on search. You will then be connected to all relevant information.

FOR FURTHER INFORMATION CONTACT: Mike Israni by phone at (202) 366–4571, by fax at (202) 366–4566, or by e-mail at mike.israni@rspa.dot.gov, regarding the subject matter of this advisory bulletin. General information about the RSPA/OPS programs may be obtained by accessing RSPA’s Home page at http://www.rspa.dot.gov.

SUPPLEMENTARY INFORMATION:
I. Advisory Bulletin (ADB– 03– 03)
To: Operators of gas transmission pipelines.
Subject: Identified sites for possible inclusion as high consequence areas (HCAs) in gas integrity management programs.
Purpose: To provide guidance to operators on what RSPA/OPS considers to be a good faith effort to discover ‘‘identified sites’’ as defined by 49 CFR 192.761(f).
Advisory: High consequence areas for gas transmission pipelines are defined to include certain buildings and outside areas, not located within Class 3 or 4 locations, but which nonetheless contain people who could be at risk in the event of a pipeline failure. These areas, known as ‘‘identified sites,’’ are specified in 49 CFR 192.761(f).
Paragraphs (5) and (6) of the section provide the substantive features of the sites; paragraphs (1) through (4) list the sources an operator is to explore to discover these sites. This guidance addresses the sources in paragraphs (1) through (4) rather than the substantive features found in paragraphs (5) and (6). As written, the rule requires an operator to include as an ‘‘identified site’’ a building or outside area meeting
the substantive features of paragraphs (5) or (6) if the site:
(1) Is visibly marked;
(2) is licensed or registered by a Federal, State or local agency;
(3) is known by public officials; or
(4) is on a list or map maintained by or available from a Federal, State, or local agency or a publicly or commercially available database.

Although it is possible to read this language as requiring an operator to perform an exhaustive search of every possible source for such sites, RSPA/OPS does not intend that an operator perform an exhaustive search, only a good faith one.

Obviously, an operator will already know of many sites that meet the criteria of paragraphs (5) and (6) through the operation and maintenance activities on the pipeline right-of-way, including patrolling, the operator conducts on a routine basis. An operator would, of course, include these sites as “identified sites.” However, there will be sites which are not likely to be known through routine operation and maintenance activities. RSPA/OPS believes that the best way for operators to locate sites they are unlikely to discover through routine activities is to consult the entities responsible for safety and emergency response in the vicinity of the pipeline.

Accordingly, RSPA/OPS will accept, as a good faith search in satisfaction of §192.761(f)(1)–(4), a search by an operator that discovers “identified sites” based on knowledge gained by routine operation and maintenance activities as well as sites identified through consultation with appropriate public officials. The appropriate public officials are those with safety or emergency response or planning responsibilities who indicate to the operator that they know the location of sites that meet the substantive description of §192.761(f)(5) or §192.761(f)(6). This could include officials on a local emergency planning commission or relevant Native American tribal officials.

Consultation with public officials having safety or emergency response or planning responsibilities may result in an end of the search for “identified sites”. If, however, an operator consults public officials with safety or emergency response or planning responsibilities and these officials inform the operator that they do not have the needed information, then an operator must do more. However, the task of locating these sites is not endless. RSPA/OPS will accept as adequate the operator’s use of one of the other means spelled out in paragraphs (1), (2), and (4) of §192.761(f) so long as the operator documents a rationale for the choice that demonstrates that the operator is truly trying to locate the “identified sites.” For example, if public officials with safety or emergency response or planning responsibilities indicate that they believe that they know about all of the areas except for assisted-living facilities, an operator might decide that the most fruitful alternative source of information would be a county or State licensing authority. As another example, if public officials with safety or emergency response or planning responsibilities indicate little knowledge about the location of outside recreation facilities, the operator might decide that county and State websites that listed recreational activities in the county would be the best source. RSPA/OPS will not expect an operator to conduct an endless iterative search of all possible sources.

A similar rule of reasonableness applies with regard to an operator’s use of the means spelled out in 192.761(f)(4); namely, “Is on a list or map maintained by or available from a Federal, State, or local agency or a publicly or commercially available database.” Although it is possible to read this language as requiring an operator to perform an exhaustive search of every on-line map or database, this is not what RSPA/OPS intends. RSPA/OPS expects an operator to consult those lists or maps that are readily known to the operator and readily available to the public at large. Good examples for information available about assisted-living, nursing, and elder care facilities and schools.
would be the Federal Government’s official Web portal (http://www.Firstgov.gov) and telephone directories. Official State Web sites would also be appropriate. An operator might find sources such as Geographic Data Technology or MapQuest helpful in locating particular sites.

In the process of locating “‘identified sites’” as HCAs, RSPA/OPS will require that an operator conduct a good faith search, not an exhaustive one.

II. Background

On August 6, 2002, RSPA/OPS published a final rule on how to identify the populated areas near a pipeline for which additional protections would be required (67 FR 50824). These HCAs include not only population areas already identified by pipeline operators through the longstanding Class location definitions, but also “‘identified sites’”, 49 CFR 192.761(f). Inclusion of “‘identified sites’” is intended to pick up isolated population areas which are not picked up through the Class location process. These could include isolated nursing homes, schools, and campgrounds that may be close enough to the pipeline to be at risk should there be a pipeline failure.

Identification of HCAs is a necessary precondition to the establishment of integrity management plans. The Pipeline Safety Improvement Act of 2002 (PSIA) requires operators to begin conducting assessments by June 17, 2004, and to have integrity management programs in place by December 17, 2004. Trade associations representing pipeline companies transporting the majority of natural gas delivered to customers in the United States, state and public representatives, as well as the Federal advisory committee for pipeline safety regulations, have raised questions about how to implement the identified sites aspect of the HCA definition. RSPA/OPS initiated a related rulemaking with a notice of proposed rulemaking (NPRM) published January 28, 2003, (68 FR 4278), responsive to a mandate of the PSIA. The NPRM proposed substantive requirements to establish integrity management programs that would provide additional protections for HCAs. In addition, the NPRM proposed to modify the HCA definition to better identify population potentially impacted by a pipeline failure.

RSPA/OPS conducted four public meetings to discuss aspects of the NPRM, two of which focused on the need to clarify how to locate outdoor areas where people congregate and facilities which housed populations that were mobility impaired. Discussions mentioned the burdens of identifying these sites. The proposed definition of HCAs did not contain the term “‘identified site’” (67 FR 1108, January 9, 2002). Instead, the proposed definition simply stated that operators would have to identify facilities containing persons of impaired mobility and buildings and areas occupied by at least 20 persons 50 days per year. Industry commenters frequently noted that an inflexible rule that required operators to identify these sites would be burdensome, and the term “‘identified site’” became generally understood through these discussions. Operators could not get the information from public officials during the liaison already required by 49 CFR part 192 because public officials did not have the necessary information. Operators would have no choice but to change both the manner and the frequency of their patrols of the right-of-way, a very costly proposition.

At the four public meetings following publication of the NPRM, various other persons raised concerns about the clarity of the definition. A representative of Safe Bellingham, which represents citizens concerned about pipeline safety, stressed the need to cover areas where people congregate outdoors.

On May 26–28, the Technical Pipeline Safety Standards Committee considered the NPRM in this related rulemaking. The Committee urged that RSPA/OPS look for clarity over complexity, seek public understandability of the rule, and focus the greatest effort on the potential for greatest harm. Members of the Committee strongly urged the Committee to examine the clarity of the “‘identified site’” definition. Industry representatives pointed to their petition.
for reconsideration of the HCA final rule for their concerns. (The petition is addressed in a separate response published today in the Federal Register.) Industry representatives described in detail the difficulties of applying the current definition of “identified site.”

The Committee also heard from Mr. Steve Halford, the Fire Chief for the City of Nashville, who was representing the International Association of Fire Chiefs, in discussing a study on excess flow valves not related to the integrity management rulemakings. Although Chief Halford made a presentation to the advisory committee on another topic, he graciously agreed to answer impromptu questions about the knowledge of public officials with respect to locations that RSPA/OPS intends to be “identified sites.” Chief Halford readily asserted that fire departments and other public safety and emergency response officials would normally have information about these sites. Chief Halford also suggested that local planning bodies and the local emergency planning committees would be good sources for the information.

Based on the discussion, the Committee advised RSPA/OPS to clarify the meaning of the rule. RSPA/OPS did not intend that identification of locations outside of Class 3 and 4 be burdensome and decided to provide relief. Industry commenters, including petitioners NYGAS and INGAA, had suggested that use of available sources such as licensing and publicly available lists would be a good avenue. Thus the HCA definition includes a definition of “identified sites” that provides both the types of areas to be identified and the means for an operator to locate these sites. Although the regulation is stated as a list of steps, RSPA/OPS has never intended that an operator perform an exhaustive search of every possible source of information that may be available. RSPA/OPS requires only a good faith effort to discover “identified sites.” As discussed in the advisory, pipeline operators who consult public safety or emergency response or planning officials who indicate that they have knowledge of the identified sites need not do more.

Further, at a meeting of the Committee scheduled for July 31, RSPA/OPS has added to the agenda further discussion about the advisability of modifying the final rule language to include this advice.

Subsequent to the publication of the HCA final rule, and in support of the need to assure that “identified sites” are clearly known, RSPA/OPS initiated extensive efforts to involve local and State officials in sharing responsibility for pipeline safety. We believe that public safety and emergency response officials are likely to have the knowledge needed on “identified sites.” In addition, RSPA/OPS expects that the knowledge of these officials will improve for several reasons. First, section 5 of the Pipeline Safety Improvement Act of 2002 requires pipeline operators to review and enhance their public education programs by December 17, 2003. Among other things, these public education programs will provide better information to officials from municipalities and school districts about the possible hazards from an unintended release from a pipeline. This enhanced information about the risks will improve local emergency response planning efforts.

Further, under its Community Assistance and Technical Service Program, RSPA/OPS has already hired at least one senior inspector in each Federal region who is providing local officials briefings and data to enhance their efforts to protect pipelines from damage, target community awareness programs, and improve the response capabilities in the event of a pipeline failure. In addition, RSPA/OPS provides grant funding to the National Association of State Fire Marshals and the Common Ground Alliance for public education initiatives among other things. These initiatives will result in local officials who are better informed about where pipelines are located, how to avoid damaging them, how to recognize and report emergencies that
may arise, and the need to determine isolated population areas near pipelines that need additional protection.
In addition, RSPA/OPS realizes that some tribal lands may not have traditional, readily identifiable safety or emergency response officials. Thus RSPA/OPS intends to consult with the Council of Energy Resource Tribes, a coalition of tribes who have energy resources, about the best way to locate “identified sites” on these tribal lands. RSPA/OPS will then share the results of that consultation with the affected pipeline operators and provide any additional guidance that may be needed before the effective date of a final rule imposing substantive requirements for integrity management programs.
Issued in Washington, DC, on July 11, 2003.

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Associate Administrator for Pipeline Safety.