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

2. In § 192.309, paragraph (b) introductory text would be revised to read as follows:

§ 192.309 Repair of steel pipe.

* * * * *

(b) Each of the following dents must be removed from steel pipe to be operated at a pressure that produces a hoop stress of 20 percent, or more, of SMYS, unless the dent is repaired by a method that can permanently restore the serviceability of the pipe, as shown by reliable engineering tests and analyses:

* * * * *

3. Section 192.485(a) would be revised to read as follows:

§ 192.485 Remedial measures: Transmission lines.

(a) *General corrosion*. Each segment of transmission line with general corrosion and with a remaining wall thickness less than that required for the MAOP of the pipeline must be replaced or the operating pressure reduced commensurate with the strength of the pipe based on actual remaining wall thickness. However, corroded pipe may be repaired by a method that can permanently restore the serviceability of the pipe, as shown by reliable engineering tests and analyses. Corrosion pitting so closely grouped as to affect the overall strength of the pipe is considered general corrosion for the purpose of this paragraph.

* * * * *

4. Section 192.487(a) would be revised to read as follows:

§ 192.487 Remedial measures: Distribution lines other than cast iron or ductile iron lines.

(a) *General corrosion*. Except for cast iron or ductile iron pipe, each segment of generally corroded distribution line pipe with a remaining wall thickness less than that required for the MAOP of the pipeline, or a remaining wall thickness less than 30 percent of the nominal wall thickness, must be replaced.

However, corroded pipe may be repaired by a method that can permanently restore the serviceability of the pipe, as shown by reliable engineering tests and analyses. Corrosion pitting so closely grouped as to affect the overall strength of the pipe is considered general corrosion for the purpose of this paragraph.

* * * * *

5. Section 192.713 would be revised to read as follows:

§ 192.713 Transmission lines: Permanent field repair of imperfections and damages.

(a) Each imperfection or damage that impairs the serviceability of pipe in a steel transmission line operating at or above 40 percent of SMYS must be—

(1) Removed by cutting out and replacing a cylindrical piece of pipe; or

(2) Repaired by a method that can permanently restore the serviceability of the pipe, as shown by reliable engineering tests and analyses.

(b) Operating pressure must be reduced to a safe level during repair operations.

6. In 192.717, paragraph (a)(1) and paragraph (a)(2) introductory text would be revised to read as follows:

§ 192.717 Transmission lines: Permanent field repair of leaks.

(a) * * *

(1) Remove the leak by cutting out and replacing a cylindrical piece of pipe.

(2) Install a full encirclement welded split sleeve of appropriate design, unless the transmission line:

* * * * *

PART 195—[AMENDED]

7. The authority citation for Part 195 continues to read as follows:

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

8. Section 195.416(f) would be revised to read as follows:

§ 195.416 External corrosion control.

* * * * *

(f) Any pipe that is found to be generally corroded so that the remaining wall thickness is less than the minimum thickness required by the pipe specification tolerances must be replaced with coated pipe that meets the requirements of this part. However, generally corroded pipe need not be replaced if—

(1) The operating pressure is reduced to be commensurate with the limits on operating pressure specified in this subpart, based on the actual remaining wall thickness; or

(2) The pipe is repaired by a method that can permanently restore the serviceability of the pipe, as shown by reliable engineering tests and analyses.

* * * * *

Issued in Washington, D.C. on April 1, 1999.

Richard B. Felder,

Associate Administrator for Pipeline Safety.

[FR Doc. 99–8574 Filed 4–6–99; 8:45 am]

BILLING CODE 4910–60–P

DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

49 CFR Parts 192 and 195

[Docket No. RSPA–97–2762; Notice 2]

RIN 2137–AD24

Pipeline Safety: Corrosion Control on Gas and Hazardous Liquid Pipelines

AGENCY: Research and Special Programs Administration (RSPA), DOT.

ACTION: Notice of public meeting and request for comments.

SUMMARY: We are considering the need to modify our corrosion control standards for gas and hazardous liquid pipelines. To start, we are reviewing the gas standards to see if any need to be clarified, made more effective, or upgraded to be consistent with modern safety practices. The review will help us carry out the President's Regulatory Reinvention Initiative and determine if rule changes are needed to reduce the potential for corrosion-caused incidents. So far, we have held a public meeting and met with knowledgeable persons from industry and state regulatory agencies on the adequacy of the standards. Now, to get feedback on the results of these efforts, interested persons are invited to participate in a second public meeting and to submit written comments on the matters discussed in this notice. The public meeting will be in conjunction with the National Association of Corrosion Engineers (NACE) 54th Annual Conference and Exhibition, CORROSION/99, in San Antonio, Texas.

DATES: The public meeting will be on April 28, 1999, from 8:00 am to 12:00 noon at the Marriott Riverwalk Hotel in San Antonio, Texas. If you want to make an oral presentation at the meeting, please notify Jenny Donohue no later than April 23, 1999, by phone (202–366–4046) or by Internet e-mail (donohuej@rspa.dot.gov), and indicate the approximate length of your presentation. In addition, no later than June 30, 1999, you may submit written comments by mailing or delivering an original and two copies to the Dockets Facility, U.S. Department of Transportation, Room PL–401, 400 Seventh Street, SW, Washington, DC 20590–0001. Or you may submit written comments to the docket electronically. To do so, log on to the following Internet Web address: http://dms.dot.gov. Click on ''Help & Information'' for instructions on how to file a document electronically. All

written comments should identify the docket and notice numbers stated in the heading of this notice. Anyone who wants confirmation of mailed comments must include a self-addressed stamped postcard. Late filed comments will be considered so far as practicable.

ADDRESSES: The Marriott Riverwalk Hotel is located at 101 Bowie Street, San Antonio, TX 78205, phone: (210) 223–1000. The Dockets Facility is located on the plaza level of the Nassiff Building, Room PL–401, 400 Seventh Street, SW, Washington, DC. It is open from 10:00 a.m. to 5:00 p.m., Monday through Friday, except federal holidays when it is closed.

FOR FURTHER INFORMATION CONTACT: Richard Lopez by phone at 713–718–3956 or by Internet e-mail at richard.lopez@rspa.dot.gov. You can read comments and other material in the docket (RSPA–97–2762) at this Internet Web address: http://dms.dot.gov. General information about our pipeline safety program is available at this Internet Web address: http://ops.dot.gov. Graphs showing the rate of pipeline incidents due to corrosion will also be posted at that Web address.

SUPPLEMENTARY INFORMATION:

Background

Outside-force damage and corrosion are, respectively, the number one and number two causes of reported incidents on gas and hazardous liquid pipelines. Persons who participated in our Risk Assessment Prioritization (RAP) program, which we use to allocate our resources, rated the risk of outside-force damage as ''very high'' and the risk of corrosion as ''high.'' In an effort to reduce outside-force damage, we have established standards for operator programs designed to prevent excavation damage and for state programs that oversee one-call notification systems. Recently we began working with other concerned organizations to inform the public on ways to reduce damage to all underground utilities and to study and promote the use of the best practices in damage prevention. For the corrosion risk, RAP participants identified several risk mitigating activities, the more significant of which, such as creating risk-based inspection programs, establishing cathodic protection criteria for hazardous liquid pipelines, and defining electrical survey alternatives, are among the concerns mentioned below.

Our statistical analyses of the data that operators report under 49 CFR Parts 191 and 195 show that while corrosion remains the second leading cause of reported pipeline incidents, the rate of reportable incidents due to corrosion has declined in recent years. Also, as shown by the table below for the period 1986 through 1998, the likelihood of corrosion-caused incidents harming people or the environment continues to be relatively low. Still, we think the record warrants our attention and indicates there may be reasons to improve our corrosion control standards to reduce the potential for future incidents. We are especially interested in evaluating the best long-term corrosion control measures to determine if cost-effective means of further reducing corrosion can be implemented.

Pipeline	Percent of all incidents	Percent of all deaths	Percent of all injuries	Percent of all property damages
Gas transmission and gathering	22.7	0	3.7	13
Gas distribution (non-plastic)	4.9	5.6	7.0	3.9
Hazardous liquid	25.7	3.2	0.9	20

To evaluate alternative regulatory strategies and in further response to the President's Regulatory Reinvention Initiative [1], on September 8, 1997, we held a public meeting on how the corrosion control standards in 49 CFR Parts 192 and 195 might be improved (62 FR 44436; Aug. 21, 1997). The meeting was held in Oakbrook Illinois in conjunction with NACE's Fall Committee Meetings to attract participation by experts in corrosion control. NACE is an international organization that provides training and certification programs, conferences, standards, and reports on the prevention and control of materials corrosion.

The Oakbrook meeting focused primarily on whether our corrosion control standards should incorporate by reference NACE Standard RP0169–96, ''*Control of External Corrosion on Underground or Submerged Metallic Piping Systems*,'' as a substitute for all or some of the requirements, and whether the requirements should be the same for gas and hazardous liquid pipelines. Many participants and subsequent commenters opposed incorporating the NACE document by reference because it is not entirely written in regulatory, or mandatory, style. There was also general agreement that although some changes may be needed, our corrosion control standards for gas and hazardous liquid pipelines should be generally the same.

After the Oakbrook meeting, we began a detailed review of the corrosion control standards in 49 CFR Part 192, Subpart I. We began reviewing the gas pipeline standards rather than the standards for hazardous liquid pipelines in Part 195 because the gas standards provide more detailed criteria. To help in this effort, we have met from time to time with representatives from NACE, the pipeline industry, and state governments. The meetings have helped us assess whether the Subpart I standards are adequate for safety, need clarification, or allow the use of new technologies.

In order to have the same standards for gas and hazardous liquid pipelines, we are now considering whether the gas pipeline standards, possibly with some changes, would be suitable for hazardous liquid pipelines. The advantage of applying the gas standards to hazardous liquid pipelines is that the gas standards are less ambiguous than the hazardous liquid standards. However, changes besides those that may be needed for gas pipelines may be needed to accommodate the different operating characteristics of hazardous liquid pipelines, such as temperature and commodity corrosiveness.

To optimize our review process, we have assigned the following priorities to different segments of the nation's pipeline infrastructure: We are considering hazardous liquid pipelines first, because the current Part 195 corrosion control standards are ambiguous in many respects and because corrosion-caused failures on these lines pose risks to the

[1] On March 4, 1995, President Clinton issued a memorandum to heads of departments and agencies calling for a review of all agency regulations and elimination or revision of those that are outdated or in need of reform.

environment as well as public safety. Next in importance are gas transmission and non-rural gathering lines because of the continuing high percentage of corrosion-caused incidents. Finally comes gas distribution lines, because assessing the need to modify standards to account for operational differences between gas transmission and distribution lines and among gas distribution systems is more difficult, requiring more information about systems and possible alternatives to present standards. These three stages of review may result in publication of one or more notices of proposed rulemaking later this year after considering all the comments we receive as a result of this notice.

Guiding Principles

At our latest meetings with industry and state representatives, in Houston, Texas on February 16–19, 1999, at the Marriott Westside Hotel, and in Washington, DC on March 11, 1999, at our headquarters, the following principles were developed to guide our assessment of the need to improve or clarify the corrosion control standards:

- Evaluate existing data and use the evaluation to assess the need to change standards.
- Continue to improve public safety and environmental protection.
- Assess the need for corrosion control standards throughout the national pipeline system based on the risk associated with different parts of the system.
- Upgrade regulations to allow for future changes in pipeline industry technology and operating practices as appropriate.
- Strive for uniform interpretation/enforcement.
- To the extent practicable, involve all interested parties in assessing the need to change standards.
- Use the new cost/benefit policy framework being developed for RSPA's pipeline safety advisory committees in determining the costs and benefits of potential changes to standards.
- Achieve balance between performance and prescriptive language.
- Develop performance measures to assess the effectiveness of corrosion control programs.
- Focus on managing corrosion to maintain pipeline integrity.
- Provide adequate regulatory flexibility to allow operators to implement alternative measures that meet the performance requirements of the corrosion regulations.

RSPA Concerns

Besides the guiding principles, the meetings with industry and state representatives have helped us evaluate the following concerns we have about the adequacy of the gas pipeline corrosion control standards. These concerns relate generally to the clarity of the standards, whether the standards are effective, whether they are consistent with modern practices, and whether they are in the interest of safety. The list does not include § 192.459, for which we have already proposed changes to deal with the problem of the extent of corrosion on exposed pipelines (Docket PS–107; 54 FR 27041; June 27, 1989). If we were to propose changes to Part 195 based on the corrosion control standards in Subpart I of Part 192, we would include in the proposal any changes that may be necessary to make Part 195 consistent with any changes made to § 192.459 in Docket PS–107.

The concerns stated below relate to the Subpart I standards in 49 CFR Part 192, which apply to metallic gas gathering, transmission, and distribution lines. As mentioned above, we are considering both the need to change these standards in response to the concerns and whether to apply the standards, with or without changes, to hazardous liquid pipelines subject to 49 CFR Part 195.

Personnel Qualification (§ 192.453)

- In view of the proposed rules on qualification of pipeline personnel (63 FR 57269; Oct. 27, 1998), are more specific qualification standards needed for individuals who direct or carry out corrosion control procedures? (The proposed rules apply to personnel doing regulated operation and maintenance tasks, including corrosion control, on regulated pipeline facilities. However, the proposed rules do not apply to management personnel who may oversee but not perform corrosion-related tasks on a pipeline.)

External Corrosion: New Pipelines (§ 192.455)

- Should a cathodic protection system be installed on offshore pipelines in less than 1 year after the pipeline is constructed, for example, 60 days, because of the strong corrosiveness of salt water?
- Is it in the interest of safety to exempt pipelines in particular environments and temporary pipelines from the coating and cathodic protection requirements?

External Corrosion: Existing Pipelines (§ 192.457)

- Should existing compressor, regulator, and measuring station piping continue to be excluded from the requirement to cathodically protect effectively coated transmission line pipe?
- Is the present requirement to cathodically protect certain older existing pipelines only in areas of ''active corrosion'' adequate for public safety? If not, what would be a cost effective alternative standard?
- Is the meaning of ''active corrosion'' clear and technically sound? If not, how should it be changed?

External Corrosion: Coating (§ 192.461)

- Should the implicit requirement to coat field joints and repairs be expressly stated? Does coating need to be compatible with the anticipated service conditions, including the effects of temperature?
- For offshore pipelines, during installation, are special measures necessary to protect against damage to coating, including field joint coating; and, to avoid mechanical damage, are special coatings needed on J-tubes, I-tubes and pipelines installed by the bottom tow method?

External Corrosion: Cathodic Protection Criteria (§ 192.463)

- Are the cathodic protection system criteria in Appendix D of Part 192, 300 mV shift and E-log-I, obsolete, since they are not in NACE Standard RP0169–96? If so, should operators be allowed to continue to use them on existing pipe, but not new pipe?

External Corrosion: Monitoring (§ 192.465)

- Does the sampling basis prescribed for inspecting short sections of main or transmission lines not in excess of 100 feet and separately protected service lines provide effective corrosion control, particularly as it applies to service lines that supply gas to public buildings?

External Corrosion: Electrical Isolation (§ 192.467)

- What remedial action is needed when an electrical short in a casing results in inadequate cathodic protection of the pipeline outside the casing?
- Should newly constructed offshore pipelines be electrically isolated from bare steel platforms unless both are protected as a single unit?
- Is electrical isolation needed where contact with aboveground structures would adversely affect cathodic protection?

External Corrosion: Test Leads (§ 192.471)

- Are accessible test leads needed on offshore risers that are electrically isolated and not accessible for testing?

• For aluminum pipelines, should all test leads be insulated aluminum conductors and installed to avoid harm to the pipe?

External Corrosion: Interference Currents (§ 192.473)

• Where light rail systems exist, should operators specifically be required to identify and test for stray currents and keep records of the test results?

Internal Corrosion (§ 192.475)

• Are special requirements needed to deal with the problem of internal corrosion in storage field piping, as evidenced by piping leaks in West Virginia and several Midwestern states?

Atmospheric Corrosion: General (§ 192.479)

• Should new and existing pipelines be subject to the same protection requirements?

• Is protection needed where corrosion is a light surface oxide or where corrosion will not likely affect the safe operation of the pipeline before the next scheduled inspection?

• Is special protection needed in the splash zone of offshore pipelines and at soil to air interfaces of onshore pipelines?

Atmospheric Corrosion: Monitoring (§ 192.481)

• Should the inspection interval for onshore pipelines be extended beyond 3 years in view of the generally low incidence of serious problems on protected pipelines?

• For onshore pipelines, are more frequent inspections needed at soil to air interfaces, under thermal insulation, at disbonded coatings, and at pipe supports?

• For offshore pipelines, are more frequent inspections needed under poorly bonded coatings and at splash zones, support clamps, and deck penetrations?

Records (§ 192.491)

• Should operators keep records of findings of non-corrosive conditions if § 192.455 is changed to remove the benefit of such findings?

• Is the period for keeping corrosion control monitoring records, ''as long as the pipeline remains in service,'' necessary for safety or accident investigation? If not, what is an appropriate period?

Concerns of Others

National Association of Pipeline Safety Representatives (NAPSR).

Long before the Oakbrook meeting, NAPSR reported on an extensive review of Part 192 that included recommendations to change several of the standards for corrosion control. We published the report and requested public comment on its various recommended rule changes (Docket PS–124, Notice 2; 58 FR 59431, Nov. 9, 1993). We adopted one of NAPSR's corrosion standard recommendations (regarding § 192.475) in the final rule we published in Docket PS–124 (61 FR 28770; June 6, 1996). The others are discussed below:

• With regard to §§ 192.457 and 192.465, NAPSR recommended changes to clarify the meaning of ''electrical survey'' and where alternatives to electrical surveys may be used. But most commenters either opposed or wanted to modify the recommendation, feeling it would unreasonably limit an operator's ability to determine areas of active corrosion by alternative methods.

• With regard to § 192.459, NAPSR recommended we require operators to record the condition of protective coatings whenever they inspect exposed portions of buried pipelines, arguing the records would provide a useful history of the condition of the pipelines as well as evidence that exposed pipe had been inspected as required. Opponents argued the recommendation was unnecessary because § 192.491 already requires operators to keep records of required inspections.

• With regard to § 192.467(c), NAPSR recommended changes to require that operators annually test pipeline casings for electrical isolation, and to clarify what ''other measures'' must be taken to minimize pipeline corrosion if isolation is not achieved. There was strong opposition to this recommendation because studies have not correlated shorted casings and corrosion on the carrier pipe, or because a longer interval of inspection would be more appropriate.

• With regard to § 192.479(b), NAPSR recommended that regardless of the date of installation, all aboveground pipelines or portions of a pipeline that are exposed to the atmosphere be cleaned and either coated or jacketed with a material suitable for the prevention of atmospheric corrosion, unless the pipeline is in a non-corrosive atmosphere. Commenters who objected to this recommendation said the difficulty of proving a non-corrosive atmosphere could cause operators to coat older pipelines that have no harmful atmospheric corrosion.

• With regard to the provision in § 192.487(a) that permits the repair rather than replacement of pipe with a small area of general corrosion, NAPSR recommended that the provision refer to generally accepted guidelines for determining what corroded areas may be repaired. Although most commenters opposed the idea of requiring operators to apply the guidelines in every case, there was no objection to making the guidelines permissive as § 192.485 does.

• Finally, with regard to § 192.489(b), NAPSR recommended that we clarify that internal sealing is not an appropriate method of strengthening graphitized pipe. There was no opposition to this recommendation.

Gas Piping Technology Committee (GPTC)

In an April, 1995 rulemaking petition, GPTC requested the following:

• Remove from § 192.467 the requirement that pipe be electrically isolated from metallic casings. GPTC argued there are no safety benefits from clearing shorted casings.

• Amend §§ 192.465 and 192.481 to allow operators to take up to 39 months to carry out inspections of unprotected pipelines that must be done at 3-year intervals. GPTC said the extra time would add flexibility to the standards with no reduction in safety.

National Transportation Safety Board (NTSB)

As a result of a recent accident investigation, NTSB recommended two changes to the Part 195 corrosion standards:

• Revise Part 195 to require pipeline operators to determine the condition of pipeline coating whenever pipe is exposed and, if degradation is found, to evaluate the coating condition of the pipeline. (P–98–35)

• Revise Part 195 to include performance measures for the adequate cathodic protection of liquid pipelines. (P–98–36)

We will be considering all these recommendations in the present proceeding as we decide what changes, if any, to propose for the corrosion control standards.

Alternatives

Changing the current standards to satisfy the concerns discussed above may not be the only way to improve protection against corrosion. Some industry representatives have expressed a desire to employ new technologies or risk management concepts as more advanced solutions to corrosion

problems. So we are considering the following as alternatives to some or all of the standards:

• Corrosion Management Plans. Our experience shows that many operators get superior results by applying their own pipeline-specific plans for controlling corrosion. These plans often contain methods and corrosion management techniques not required by the standards. To encourage the development and use of these plans, we are considering whether to allow operators to comply with corrosion management plans as an alternative to the corrosion control standards. While we think such plans would have to meet the objectives of the standards if not the specifics, this regulatory approach would give operators more flexibility to tailor their corrosion control practices to meet varying conditions. Such plans would be subject to review by agency inspection personnel and possible change if deemed inadequate (49 CFR 190.237).

• NACE Standard RP0169–96. Another alternative to compliance with the standards that some persons may favor is incorporation by reference of all or part of NACE Standard RP0169–96. Although its advisory style affects the suitability of this NACE standard for regulatory use, it is, nonetheless, widely accepted as the most authoritative source of up-to-date pipeline corrosion control practices. In an analogous situation, we have recently proposed to incorporate by reference other industry documents that are drafted in an advisory style. In the proceeding on the safety of breakout of tanks, we proposed to reference four documents published by the American Petroleum Institute that are recommended practices: API Recommended Practice 651 ''Cathodic Protection of Aboveground Petroleum Storage Tanks,'' API Recommended Practice 652 ''Lining of Aboveground Petroleum Storage Tanks Bottoms,'' API Recommended Practice 2003 ''Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents,'' and API Recommended Practice 2350 ''Overfill Protection for Storage Tanks In Petroleum Facilities'' (Docket RSPA–97–2095; 63 FR 27903; May 21, 1998). Recognizing that API intended these documents to be advisory and not imperative, we proposed that operators follow the recommended practices unless they note in their procedural manuals why compliance with all or certain provisions is not necessary for the safety of a particular breakout tank or tanks. Any decisions not to follow certain provisions would be subject to review by agency inspection personnel and possible change if deemed inadequate (49 CFR 190.237). We could take a similar approach with respect to advisory provisions of NACE Standard RP0169–96 that operators may decide are unnecessary for the safety of particular pipelines.

Compliance Manual

We are also considering developing a Compliance Manual that would contain guidelines for federal and state inspectors in evaluating operator compliance with the corrosion standards. The manual would be available to the public, so operators could learn what inspectors look for in checking for compliance. We expect the manual to include explanations and illustrations that apply the standards to hypothetical pipelines, accounting for variations in operating conditions. For example, we plan to include details on how to perform field pipe-to-soil measurements, including connection of leads to the pipeline, voltmeter, and half cell. We also want to show how to apply the different cathodic protection criteria, and how to do a close-interval survey. We think such a manual would advance an effective and uniform understanding, interpretation, and application of the standards. It could also provide a basis for training government and operator personnel.

Public Participation

As stated in more detail above, interested persons are invited to attend the San Antonio public meeting and present oral or written statements about any of the principles, concerns, or alternatives discussed in this notice. Written statements not presented at the meeting may be submitted to the docket. If necessary, we may limit the time for oral presentations so that everyone who requests an opportunity to speak may do so. Those who do not request time for presentations may have an opportunity to speak as time allows.

We are particularly interested in receiving comments on the following:

1. Whether any existing standards deter or disallow the use of new technologies, and, if so, how.

2. The costs and benefits of any suggested changes to standards and alternatives to standards.

3. The amount of time operators may need to prepare for compliance with any suggested standards or alternatives.

4. With regard to the Corrosion Management Plan and NACE Standard alternatives—

a. The bases for evaluating the adequacy of corrosion management plans.

b. The best way to facilitate agency review of operator decisions under the alternatives (e.g., prior notification, reporting, recordkeeping).

c. Whether NACE Standard RP0169–96 is adequate for pipeline corrosion control and, if so, should we incorporate it by reference in our corrosion control standards?

5. For hazardous liquid pipelines—

a. Whether additional standards are needed to further reduce the possibility of damage to environmentally sensitive areas.

b. If Subpart I standards were applied to hazardous liquid pipelines, the changes, if any, that would be needed to account for differences between gas and liquid pipelines.

6. For gas distribution systems—

a. Root causes of corrosion leaks on coated, uncoated, protected, and unprotected metallic lines.

b. Descriptions of operating/maintenance practices to minimize corrosion leaks on cathodically unprotected lines.

c. Descriptions of risk-based corrosion management programs.

d. The best approach to monitoring corrosion control in urban wall-to-wall paved areas.

7. The amount of buried piping at compressor, regulator, and measuring stations that is not cathodically protected.

8. Explicit examples of adequate compliance with particular standards that have had varied interpretations.

9. To provide an acceptable level of safety on existing pipelines, must cathodic protection preserve the pipeline indefinitely or merely slow the rate of corrosion until the pipeline has to be rehabilitated or replaced?

Authority: 49 U.S.C. Chapter 601 and 49 CFR 1.53.

Richard B. Felder,

Associate Administrator for Pipeline Safety.

[FR Doc. 99–8628 Filed 4–6–99; 8:45 am]

BILLING CODE 4910–60–P