

[4910-60]

DEPARTMENT OF TRANSPORTATION

Materials Transportation Bureau

[49 CFR Part 191]

[Docket No. OPS-49; Notice 1]

TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE; REPORTS OF LEAKS**Leak Reporting Requirements**

AGENCY: Materials Transportation Bureau (MTB).

ACTION: Notice of proposed rulemaking.

SUMMARY: This Notice proposes to revise the existing gas pipeline leak reporting forms: Form DOT-F-7100.1-1, Annual Report—Distribution System (§ 191.11); Form DOT-F-7100.2-1, Annual Report—Transmission and Gathering Systems (§ 191.17); Form DOT-F-7100.1, Leak Report—Distribution System (Sec. 191.9); and Form DOT-F-7100.2, Leak Report—Transmission and Gathering Systems (§ 191.15). The revised forms would facilitate data processing, provide more appropriate data or data needed to administer new or amended statutes, and be easier to understand. In addition, the scope of Part 191 would be revised to (1) clarify and define the applicability of Part 191 to offshore pipelines and (2) revoke the present exception for gathering lines in rural areas. Also, the present exception for small petroleum gas systems from the annual reporting requirements of § 191.11 applicable to distribution systems would be revoked. At the same time, under the proposed new annual report for distribution systems, the information requested for systems that have less than 2,500 services would be significantly less than for larger systems.

DATE: Comments must be received by July 10, 1978. Late filed comments will be considered so far as practicable.

ADDRESS: Comments should identify the docket and notice numbers and be submitted in triplicate to the Docket Section, Materials Transportation Bureau, 2100 Second Street SW., Washington, D.C. 20590. Comments are available at MTB's Docket Room 6500.

FOR FURTHER INFORMATION CONTACT:

A. O. Garcia, 202-426-2082.

SUPPLEMENTARY INFORMATION:**BACKGROUND FOR FORM REVISION**

The objective of the proposed revised leak reporting forms is to provide the pipeline safety data that is now considered necessary for the analysis and evaluation of safety problems and the solutions to these problems by both this Department and industry.

The submission of the Individual Leak Report forms is currently required in accordance with 49 CFR 191.9 and 191.15. The Annual Report forms are submitted annually on or before February 15 for the previous calendar year in accordance with 49 CFR 191.11 and 191.17.

The Federal gas pipeline safety standards (49 CFR Part 192) and the reporting requirements of Part 191 were issued in 1970. The safety standards have been amended as needed to assure public safety and reflect new technology and changes in industry practices. Of significance is the recent amendment to Part 192, making the standards applicable to certain offshore gathering lines (41 FR 34605, August 16, 1976). While these changes were made, information collected via the existing leak reporting forms has not been changed. Furthermore, since the adoption of the existing forms, this Department has received from State regulatory agencies, Federal agencies, such as the National Transportation Safety Board (NTSB), pipeline industry organizations, and other professional and interested associations, suggestions for the revision of these forms.

The Department awarded a contract study (DOT-OS-30110) in 1973 to the University of Oklahoma (UO), Office of Research Administration, to continue operation of the existing Automated Leak Test Failure Reporting System and to analyze data which was then available in the system as well as data which would be reported during the course of the contract. The final report for this contractual effort was completed in October 1974 and one of the outcomes of this study was recognition of the need to redesign the four gas pipeline data collection forms used by the Department. This study recognized the following problems:

a. The data being obtained was not in all cases complete enough to permit a comprehensive evaluation of problems identified or in some cases to identify the problem and in other cases the data was of little value.

b. The reading comprehension level of the forms was considered to be too difficult. Therefore, some of the nomenclature used in the various sections of the forms needs to be clarified so that it could be more readily understood by operators completing the report.

c. The forms were not well designed with respect to the subsequent processing of the information by electronic data processing methods.

d. Some of the laws enacted by Congress relating to operations of the Department required changes in the design of the form, particularly as related to Federal lands with pipelines passing through these lands.

In order to gain further information on a proper revision of the existing

forms, in 1976 MTB solicited and received suggestions from various State agencies and pipeline industry associations. Also, in 1976, another contract (DOT-PS-70075) was issued to the UO Office of Research Administration to review MTB's draft revision of the existing forms. MTB worked closely with the UO in order to develop, among other things, the reading and comprehension level of the forms, and also the computerized format which reflects the present and future needs of both the pipeline industry and MTB. Further suggestions for revising the forms were solicited from the Technical Pipeline Safety Standards Committee, American Gas Association, and American Society of Mechanical Engineers' Pipeline Standards Committee. All suggestions have been evaluated and appropriate ones are incorporated into the proposed revised forms shown in this notice.

BACKGROUND FOR AMENDING TEXT OF RULES

NTSB has recommended that this Department promulgate Federal pipeline safety standards under the Hazardous Materials Transportation Act (49 U.S.C. 1804) for gas gathering lines located in rural onshore areas, similar to the action taken when 49 CFR Part 192 was applied to gas gathering lines offshore. In its response, the Department stated that more data was needed to identify the number and kinds of safety problems in rural gas gathering lines. MTB expects that the number and kinds of problems in these lines may have been increasing due to the increase in gas production activity since the advent of the energy shortage. Therefore, MTB is proposing to extend the applicability of the reporting requirements in Part 191 including the telephonic notice requirements of § 191.5, to include rural gas gathering lines located onshore. The information to be obtained is also needed to meet the requirements of subsections 28(w) (3) and (4) of the Mineral Leasing Act of 1920 regarding the reporting of certain safety problems on pipelines on Federal lands.

At the same time, the scope of Part 191 would be amended to make it clear that the reporting requirements apply to offshore pipelines, including gathering lines which are now subject to Part 192.

The hazards of liquefied petroleum gas have received a great deal of public attention and have been the subject of Congressional inquiries as a result of accidents causing deaths and injuries. To better assess the extent of any potential problems on small petroleum gas distribution systems, MTB is proposing that the current exception for these systems from the annual leak reporting requirements of § 191.11 be revoked. Similarly to rural gather-

ing lines, information is also needed on these systems to help fulfill the Mineral Leasing Act requirements mentioned above.

SIGNIFICANT CHANGES IN FORMS

An attempt has not been made in preparing this preamble to describe and discuss in detail every proposed change in the forms. Rather, it was decided that the following general description and discussion of proposed changes, together with publication of the proposed revised forms, would be sufficient to call attention to the various issues involved. This approach was adopted because a detailed listing of all the changes would be unnecessarily voluminous and also a much more tedious way to review the changes than simply comparing the proposed and present forms directly. Although the proposed revised forms are printed in this Notice, additional copies can be obtained from the Materials Transportation Bureau, 2100 Second Street SW., Washington, D.C. 20590.

The titles of the existing leak reporting forms are proposed to be changed as follows:

"Leak Report—Distribution System," DOT F 7100.1, is proposed to be entitled "Individual Leak Report—Gas Pipeline Distribution System," Form RSPA-1.

"Leak or Test Failure Report—Transmission and Gathering Systems," DOT F 7100.2, is proposed to be entitled "Individual Leak Report—Gas Pipeline Transmission and Gathering Systems," Form RSPA-2.

"Annual Report for Calendar Year 19—Distribution System," DOT F 7100.1-1, is proposed to be entitled "Annual Report for Calendar Year 19—Gas Pipeline Distribution System" Form RSPA-3.

"Annual Report for Calendar Year 19—Gas Transmission and Gathering Systems," DOT F 7100.2-1, is proposed to be entitled "Annual Report for Calendar Year 19—Gas Pipeline Transmission and Gathering Systems," RSPA-4.

Two types of substantive changes are being proposed for the forms. One is applicable to all four forms while the other is specific to each type of form. These two types of changes are described in the sections which follow:

A. Changes made to all four forms.

(1) In order to provide a better basis for insuring accurate data processing of the information contained in the forms, Roman numerals, letters, and small numerals are proposed to be assigned to each data entry where data is to be entered. The processing of the data can then be keyed to these letters or numerals for each data filed and thus facilitate accurate processing of the data, especially in performing various edits of such data.

(2) The reading comprehension level of the information categories of the forms is proposed to be lowered through a deliberate choice of words requiring a lower reading comprehen-

sion level. The proposed level would not require more than a high school education.

B. Changes made to each form.

(1) The following are changes included in the proposed Forms RSPA-1 and RSPA-2:

(a) In Part V of proposed Form RSPA-1 and proposed Form RSPA-2, additional information is requested in order to clarify the reason for submission of an Individual Leak Report. The criteria for submitting these reports are in 49 CFR Part 191, Section 191.5. This change should provide MTB a quick reference regarding the various reasons for the submission of a report and also guide the operators in properly completing the subject forms. Part V would also require operators to identify if a reported leak occurred on Federal lands. This information is needed in order to comply with the Mineral Leasing Act of 1920, as amended November 16, 1973 (Pub. L. 93-153, 30 U.S.C. 185).

(b) In Parts VIII, IX, and XI of proposed Form RSPA-1 and Parts VIII, X, and XII of proposed Form RSPA-2, additional information about leaks on plastic pipe is requested. Statistics resulting from the analysis performed by UO on data collected by this Department for the calendar years 1970-1973 have indicated that plastic pipe has a higher leak rate than pipe made of other materials. The additional information will permit a better understanding of the parts of the system constructed of plastic which leak or fail as well as the type of plastic used.

(c) Part 10 of the existing data collections forms is proposed to be revised in Part XIV of Form RSPA-1 and Part XIII of Form RSPA-2 in order to clarify the information related to personal injuries resulting from the escape of gas. This information, which is to be revised to more readily identify the party killed or injured, will permit a better analysis of data.

(d) Part B of the existing forms is proposed to be revised extensively in Part XVI-B of Form RSPA-1 and Part XVII-B of Form RSPA-2. The additional requested data will provide better information for analysis regarding the types of outside force leaks and the type of damage which results from outside forces. The analysis of pipeline safety data indicated that about half of the Individual Leak Reports are due to damage by outside forces.

(e) Part C of the existing forms is proposed to be revised in Part XVI-C of Form RSPA-1 and Part XVII-C of Form RSPA-2 to include additional construction defect or material failure information that MTB has determined to be pertinent to an adequate analysis of pipeline safety. Many data entries, which MTB has found to be of no use, have been deleted from Part C of the

existing form with the result that less information would be required to complete Part C of the proposed form.

(2) The following are changes included in the proposed Forms RSPA-3 and RSPA-4:

(a) The current requirement that distribution operators fill out the entire annual report form is proposed to be changed. Operators with less than 2,500 services would be required to complete approximately 10 percent of the information requested by RSPA-3. These operators comprise approximately 80 percent of the distribution operators which filed annual reports with MTB in 1977. This proposed relaxation of the reporting requirement for small operators will not appreciably affect the statistics relating to leaks reported to MTB because these operators still will be required to submit telephonic leak reports and because they provide gas service only to approximately 0.15 percent of the gas consumers in the country. The information requested from the small operators would be printed in blue for easy identification.

NOTE.—The proposed forms shown in this notice are printed in black and white, and, to aid interested persons in identifying which parts will be blue on the final form, solid vertical bars have been added to the left margin of Form RSPA-3. Also, for this Notice, the forms are divided into four pages each; however, the final forms will be printed one page each, 21 inches long. It is important to note that besides distribution companies, liquefied petroleum gas system operators and master meter system operators with less than 2,500 services would be able to take advantage of this proposed change.

(b) In Part I of RSPA-3, a new section relating to liquefied petroleum gas systems and master meter systems is proposed to be added. This information is needed in order for MTB to keep a current record of the leaks occurring in these systems. The existing requirement (Section 191.11(b)) which excludes petroleum gas systems serving less than 100 customers from a single source would be revoked.

(c) In order to assess the changes in pipelines in this country and Puerto Rico, Part III relating to the miles of mains and number of services, for proposed Form RSPA-3, and miles of transmission onshore/offshore, for proposed Form RSPA-4, would be revised to identify the type and location of the lines and to identify whether lines were added, retired, or replaced.

(d) In Part IV of proposed forms RSPA-3 and RSPA-4, the nomenclature would be changed regarding the description of pipe in order to make a better analysis of coated, bare, cathodically and noncathodically protected pipelines. This information is needed in order to have a better understanding of the sizes of various operators' systems and also to relate this request-

ed information to the average leaks for protected and nonprotected pipelines, and to compare the behavior among metallic and plastic pipe. In addition, these proposed changes will facilitate the completion of the proposed forms by the operators.

(e) Part V of RSPA-3 and RSPA-4 relates the cause of the leak to the specific location or type of component that leaked. The type of causes of leaks is proposed to be substantially expanded to more appropriately cover most of the causes of leaks. It is also being proposed in Part V of both forms to request additional information about leaks on plastic pipe and related components. Statistics resulting from the analysis performed by UO on data collected by this Department for the calendar years 1970-1973 have indicated that plastic pipe has a higher leak rate than pipe made of other materials. The additional information will permit a better understanding of the parts of the system constructed of plastic which leak or fail as well as the type of plastic used.

The proposed changes to Part V would also result in additional information regarding outside force damage. The UO analysis indicated that a majority of all serious leaks resulted from outside force damage, especially to lines of distribution operators. In order to develop a more comprehensive understanding of the cause of outside force damage, it is proposed that this category be divided to include "construction equipment and blasting" and "natural causes" with the respective definitions included as part of the specific instructions for the completion of the subject forms.

(f) Part VI of both forms proposes to require the operators to identify in RSPA-3 the number of leaks in mains and in services, and in RSPA-4 the number of leaks in transmission lines and in gathering lines during the year by cause and by decade of installation. This information is needed to identify the major causes of leaks and to relate these causes to age of the facility. This information can be used to determine if the cause of leaks is related to age of the pipe and to design preventive maintenance programs. Parts VI of both forms would also require the operators to identify, from the System Total, the number of leaks which occurred in Federal lands by Cause of Leak. This information is needed to comply with the Mineral Leasing Act of 1920, as amended November 16, 1973 (Pub. L. 93153, 30 U.S.C. 185).

(g) Parts VII and VIII in RSPA-3 would require the operators to identify the miles of mains and the number of services in their system at end of the year by material and by nominal size, and Part VII in RSPA-4 would require the operators to identify the miles of transmission and gathering

lines in their system at end of year by nominal size and by material. This information is needed to give the Department a comparison of the make of different systems in order to provide a relationship of the problems between different systems as well as a statistical base for analyzing the relative frequency on a per unit basis of leaks on each specific material. Such data can be used to identify problems associated with each specific material on a local or national basis and can be used as a guide for determining need for regulatory action. It can also be used by operators to design preventive maintenance programs.

(h) Information previously requested from distribution and transmission operators related to frequency of inspection for cathodically protected mains, services, transmission, and gathering lines has been deleted because the past management of the data showed that such information was not needed. Similarly, information previously requested about leak surveys has been deleted from the proposed forms. This also should reduce the workload of the pipeline operators in completing the forms.

(i) Parts Q and N of the existing forms are proposed to be revised in Part XI of Form RSPA-3 and Part IX of Form RSPA-4 in order to clarify the information related to personal injuries resulting from the escape of gas. This information, which would be revised to more readily identify the party killed or injured, would permit a better analysis of data.

(3) The specific instructions for completing the Annual Report Forms are proposed to be renumbered Forms RSPA-3A and RSPA-4A, respectively. These instructions would also be revised to improve their readability by using a concise and direct style of writing which will clarify some terms needed for the appropriate completion of the forms. As the instructions undergo change in future reporting periods, modified layouts and revised instructions will be prepared by the Department and mailed to the operators, together with appropriate documentation, if necessary, that describes the authorization and the details of all such changes, additions, or deletions. The instructions for the proposed revised Individual Leak Report forms have been entered directly into the forms. These forms have been designed to minimize the need for additional specific instructions.

ANTICIPATED BENEFITS

The anticipated benefits that would be derived from the use of the proposed revised leak reporting forms are as follows:

1. Collect additional or revised useful statistical information necessary to assemble facts that will enable

the Department to better define safety problems and devise regulatory solutions.

2. Provide additional information necessary to comply with additional statutory responsibilities assigned to MTB.

3. Delete information which has been determined unnecessary after 8 years of data collection experience.

4. Facilitate the extraction of data from the forms in order to provide this information for reports and replies to correspondence from Congress, the industry, and the general public.

5. Provide easier and more accurate transfer of data from the forms into data processing storage devices.

6. Make it easier for operators to submit requested information since the reporting burden is substantially reduced by reporting with the proposed forms.

7. Provide improved and easier to understand instructions and clarification of terms needed for the appropriate completion of the forms.

MTB has determined that this document does not contain a major proposal requiring preparation of a Regulatory Analysis under Department procedures for "Improving Government Regulations" implementing Executive Order 12044.

Effective Date: The revised Individual Leak Report forms (Forms RSPA-1 and RSPA-2) are proposed to become effective January 1, 1979, with Annual Report forms (Forms RSPA-3 and RSPA-4) for calendar year 1979 to be submitted to MTB on or before February 15, 1980.

In consideration of the foregoing, MTB proposes that Part 191 of Title 49 of the Code of Federal Regulations be amended as follows:

1. By revising § 191.1 to read as follows:

§ 191.1 Scope.

(a) This Part prescribes requirements for the reporting of gas leaks requiring immediate or scheduled repair and of test failures on pipeline facilities used in the transportation of gas, including pipeline facilities used in the transportation of gas within the limits of the Outer Continental Shelf as that term is defined in the Outer Continental Shelf Lands Act (43 U.S.C. 1331), by persons engaged in the transportation of gas.

(b) This Part does not apply to—

- (1) Gas leaks intended by persons engaged in the transportation of gas; or

- (2) Offshore gathering of gas upstream from the outlet flange of each facility on the Outer Continental Shelf where hydrocarbons are produced or where produced hydrocarbons are first separated, dehydrated, or otherwise processed, whichever facility is farther downstream.

§§ 191.9, 191.11, 191.15, and 191.17
[Amended]

2. By changing the Department of Transportation report form identification numbers in §§ 191.9(a), 191.11(a), 191.15(a), and 191.17(a) from "DOT-F-7100.1," "DOT-F-7100.1-1," "DOT-F-7100.2," and "DOT-F-7100.2-1" to "RSPA-1," "RSPA-3," "RSPA-2," and "RSPA-4," respectively.

3. By revoking paragraph (b) of § 191.11.

4. By establishing new leak reporting forms and pertinent instructions as set forth below.

(Sec. 3, Pub. L. 90-481, 82 Stat. 721 (49 USC 1672); for offshore gathering lines, Sec. 105, Pub. L. 93-633, 88 Stat. 2157 (49 USC 1804); 49 CFR App. A of Part 1 and App. A of Part 102.)

Issued in Washington, D.C., on May 31, 1978.

CESAR DE LEON,
*Acting Director, Office of
Pipeline Safety Operations.*