the notice of proposed rulemaking nor the report and order in this Docket discussed this inadvertent amendment to the rules.

4. For the above reasons, we are issuing this order to correct the error by restoring the deleted subsection to the Commission's rules. Because this is an editorial revision to correct a previous error, the prior notice and public procedure provisions of the Administrative Procedure Act, 5 U.S.C. 553, are unnecessary. Authority for this action is contained in sections 4(i), 5(d), and 303 of the Communications Act of 1934, as amended, and in § 0.231(d) of the Commission's rules.

5. *Accordingly, we order,* That § 95.71 of the Commission's rules is amended as set forth below, effective April 5, 1978.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082; (47 U.S.C. 154, 155, 303).)

FEDERAL COMMUNICATIONS COMMISSION,
R. D. LICHTWARDT,
Executive Director.

Part 95 of chapter 1 of title 47 of the Code of Federal Regulations is amended, as follows:

1. In § 95.71, a new paragraph (e) is added, to read as follows:

§ 95.71 Station identification.

* * * * *

(e) In lieu of complying with the requirements of paragraph (a) of this section, base stations, fixed stations, and mobile units when communicating with base stations may identify as follows:

(1) Base stations and fixed station shall transmit their call signs at the end of each transmission or exchange of transmissions, or once each 15-minute period of a continuous exchange of communications.

(2) A mobile unit communicating with a base station on the same frequency shall transmit once during each exchange of transmissions any unit identifier which is on file in the station records of that base station.

(3) A mobile unit communicating with a base station on a different frequency shall transmit its call sign at the end of each transmission or exchange of transmissions, or once each 15-minute period of a continuous exchange of communications.

[FR Doc. 78-8652 Filed 3-31-78; 8:45 am]

[4910-60]

Title 49—Transportation

CHAPTER I—MATERIALS TRANSPORTATION BUREAU

SUBCHAPTER D—PIPELINE SAFETY

[Amdt. 192-31; Docket No. OPSO-42]

PART 192—TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE

Design of Plastic Pipelines

AGENCY: Materials Transportation Bureau (MTB).

ACTION: Final rule.

SUMMARY: This amendment: (1) increases the maximum allowable operating temperature of thermoplastic pipe from 100° F to 140° F, (2) prohibits the operation of thermoplastic pipe at a temperature higher than its long-term hydrostatic test temperature, (3) establishes alternative temperature bases for determining the long-term hydrostatic strength of thermoplastic pipe, (4) establishes a single design factor for all plastic pipe, and (5) requires that thermoplastic pipe be marked to indicate its long-term hydrostatic strength and related temperature basis. A major benefit of the amendment is that it provides for use throughout the United States and Puerto Rico of properly designated thermoplastic service risers enclosed in metallic casings.

EFFECTIVE DATE: The effective date is May 18, 1978.

FOR FURTHER INFORMATION CONTACT:

Paul J. Cory, 202-426-2082.

SUPPLEMENTARY INFORMATION: This amendment results from a notice of proposed rulemaking, Notice No. 77-1 (42 FR 8386, Feb. 10, 1977) issued by the Office of Pipeline Safety Operations. The Notice proposed amendments to §§ 192.121 and 192.123(b)(2) of the Federal gas pipeline safety standards to: (1) remove the disparity between the long-term hydrostatic test temperature and maximum allowable operating temperature for thermoplastic pipe by prohibiting operation of the pipe at a temperature higher than its test temperature, (2) establish alternative temperature bases to facilitate the long-term hydrostatic testing of thermoplastic pipe, (3) increase the maximum allowable operating temperature of thermoplastic pipe, and (4) establish a single design factor for all plastic pipe. In addition, it was proposed that § 192.63 be amended to require that thermoplastic pipe be marked to show its strength and related temperature basis.

Interested persons were invited to participate in this rulemaking action by submitting written data, views, or arguments not later than March 28, 1977. In addition, the Technical Pipeline Safety Standards Committee (TPSSC) met in Washington, D.C., on June 7 and 8, 1977, to consider the proposal. The TPSSC's report is set forth below.

There were 36 persons who submitted written comments in response to Notice 77-1: 3 trade associations; 18 gas distribution companies; 2 State public utility commissions; 7 manufacturers of plastic pipe, plastic materials, or components of plastic pipe; 1 technical society; 3 gas transmission companies, 1 consultant on plastic, and 1 Federal agency. A discussion of significant comments and the recommendations of the TPSSC and their disposition in developing the final rules are set forth below by section.

SECTION 192.63

In conjunction with proposing to establish alternative temperature bases for the long-term hydrostatic testing of thermoplastic pipe, Notice 77-1 proposed that § 192.63 be amended to require that thermoplastic pipe be marked to show its long-term hydrostatic strength and related temperature basis. Only 3 commenters supported this rule change as proposed, while 11 others offered alternative marking suggestions. One commenter objected to the proposal, stating that marking strength and temperature could cause confusion and misapplication by field personnel and that the strength of pipe is only important to the engineer who tests, recommends, or approves the pipe. This comment was not adopted because the ability to identify the rated strength of pipe in the field is necessary to prevent inadvertent mixing of pipe of different strengths during installation. MTB believes that an additional marking to indicate the temperature basis of strength would not be so complex as to confuse field personnel. Also, with the amendment to § 192.123(b)(2) which ties allowable operating temperatures to test temperature, a temperature marking would serve to identify for field personnel the operating temperature limit on the pipe.

The majority of commenters and the TPSSC recommended that the proposed strength and temperature marking be accomplished by using the coded marking system for test temperatures above 73° F provided by section 9.2 of the 1975b edition of ASTM D2513, "Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing, and Fittings." Under this system, thermoplastic pipe is marked with code letters which represent certain strength and temperature values set forth in a table in ASTM D2513.

According to the commenters, two advantages of the new coded marking system are that the letters are easily read and they do not take up much additional space on the pipe. In addition to these reasons, MTB favors the new coded system because it is a new feature of the uniform marking system currently followed by the pipeline industry and required for thermoplastic pipe by § 192.63(a)(1). Although the new coded marking system would become mandatory under § 192.63(a)(1) if the 1975b edition of ASTM D2513 were incorporated by reference in part 192 as a pipe manufacturing specification (the 1974a edition is the latest edition now incorporated), such action cannot be taken within the scope of this proceeding. It is, however, being considered as part of a future notice of proposed rulemaking to update referenced specifications in part 192. Therefore, in the interim, a limited reference to the 1975b edition is being adopted under § 192.63(a). It requires that thermoplastic pipe installed after the amendment becomes effective must be marked in accordance with section 9.2 of the 1975b edition of ASTM D2513, unless the pipe falls under the "grandfather" provision of § 192.123(b)(2) for operating temperatures which is discussed below.

SECTION 192.121 (DESIGN FACTOR)

It was proposed that a single design factor within the range of 0.32 to 0.50 be used in the design formula for plastic pipe instead of the present factors of 0.32 for Class 1 locations, 0.25 for Class 2 and 3 locations, and 0.20 for Class 4 locations. Twelve commenters supported adoption of 0.32 as the single design factor. The 0.32 value was favored by these commenters because it would provide adequate design flexibility, and because a larger factor might contribute to harmful effects due to fluids in the gas other than water, secondary or combined stresses, or defects in the pipe. These commenters also stated that when combined with the proposal to determine hydrostatic strength on the basis of maximum allowable operating temperature, a design factor of 0.32 would provide a level of safety at least equal to that which is now required. They pointed out that a conservative factor is desirable, considering the possible chemical environment of plastic pipe and other unforeseeable effects.

At the same time, referring to pipe 2 inches or less in diameter, eight commenters said the 0.32 design factor would result in thinner pipe walls, and that the thin walls may cause problems in saddle fusion of side taps and service tees and in making butt fusion joints. As to this point, MTB believes that reduced pipe wall thickness should not present a major concern in the fusion joining of plastic pipe as long as the various installation procedures currently being used in accordance with § 192.281 are properly followed.

Six commenters and the TPSSC suggested that a design factor of 0.40 be adopted, based on its many years of satisfactory use prior to adoption of the more conservative factors in § 192.121. The 0.40 value was favored also because most pipe with a diameter to wall thickness ratio of 11 (SDR-11) could be used in encased risers throughout the United States and Puerto Rico at the typical 60 psig design pressure, thereby providing a more efficient use of materials.

Two commenters suggested that the design factor for Class 3 and Class 4 locations be increased to 0.40 and for Class 1 and Class 2 locations, to 0.50. In this way, they argued, experience could be gained at higher stress levels with minimum risk to the public. This comment was not adopted because sufficient operating experience at higher stress levels in water lines and gas gathering lines is already available. Besides, an objective of the proposal was to establish a single factor for all locations. With a single factor, operators would be able to use the same pipe for identical design pressures throughout their systems, thus saving the cost of keeping a variety of pipe and matching components in inventory for different class locations.

Three commenters were in favor of a single design factor equal to 0.50. This view was stated for several reasons, but it was based primarily on the fact that plastic pipe does not have a history of pressure failures.

After considering the several arguments favoring either 0.40 or 0.50, MTB has adopted a 0.32 design factor in the final rule because as indicated by the majority of commenters, a more conservative increment is desirable for the allowable design stress of plastic pipe. The potential loss in strength with increasing temperature is reason enough to choose a conservative factor in designing plastic pipe to carry a hazardous gas. When the uncertain effects of added stresses, undetected pipe defects, and the environment are also considered, a conservative figure becomes even more desirable. The reason presented most often by the commenters for selecting a factor less conservative than 0.32 was that a factor of 0.40 would allow wider usage of SDR-11 pipe. However, after further study, MTB finds that a value of 0.32 will permit the use of some plastic materials for SDR-11 pipe in encased risers at 60 psig for most operating temperatures throughout the United States and Puerto Rico. While other lower strength materials will be excluded from such use, MTB believes that the potential benefits from a wider choice of materials for SDR-11 applications are not large enough when weighed against the added risk of a higher design factor.

SECTION 192.121 (HYDROSTATIC STRENGTH) AND SECTION 192.123(b)(2)

It was proposed that the current maximum allowable operating temperature prescribed by § 192.123(b)(2) for thermoplastic pipe, 100° F, be increased to 120° F. This proposal was partially based on a petition by the ASME Gas Piping Standards Committee who had suggested that the temperature limit be raised to 140° F. In making the proposal, MTB also considered research data showing that the characteristics of thermoplastic pipe have been improved at temperatures above 120° F. Another factor bearing on the safety of raising the temperature limit for thermoplastic pipe was a concurrent proposal to require that the maximum allowable operating temperature not be higher than the temperature at which the pipe's long-term hydrostatic strength is determined under § 129.121.

The majority of commenters focused on whether the new temperature limit for thermoplastic pipe should be 120° F, as proposed by MTB, or instead, 140° F, as originally suggested by the ASME Gas Piping Standards Committee.

Commenters did not oppose the proposal that the long-term hydrostatic strength of thermoplastic pipe be precisely correlated with the intended maximum allowable operating temperature of the pipe. Therefore, this aspect of the proposed rulemaking has been adopted as final without change.

Three persons commented that rather than establish fixed temperature bases under § 129.121 for use in determining long-term hydrostatic strength, it would be more practical if the long-term strength were read from curves showing temperature versus strength. The commenters argued that by showing strength as a continuous function of temperature, curves would allow maximum use of the engineering properties of thermoplastic materials.

MTB asked the TPSSC to consider this alternative. The TPSSC said that using curves in determining long-term hydrostatic strength would make compliance with the proposed marking requirement difficult because the coded system of marking contained in ASTM D2513 is tied to specific temperatures. The TPSSC also said that curves might be susceptible to misinterpretation. MTB agrees with this opinion, and in view of the advantages of a uniform method of pipe marking, fixed temperature based are adopted in the amendment to § 192.121.

Only two commenters opposed increasing the maximum allowable operating temperature of thermoplastic

pipe above the currect 100° F. One said that raising the temperature limit could foster the use of poorly designed or poorly installed field-fabricated risers, which could be hazardous for reasons apart from the operating temperature of thermoplastic pipe. The other commenter was concerned about the deteriorating effect of fire on thermoplastic risers encased in metal. This commenter stated that under fire conditions, thermosetting plastic provides longer pipe life and, thus, greater safety. While MTB views both of these comments as serious considerations, they are not strictly germane to the question posed by Notice 77-1 of whether thermoplastic pipe can safely withstand normal operating temperatures above 100° F. Safety problems in the design and installation of risers are covered by existing standards in Part 192 other than §§ 192.121 or 192.123. Also, the reported incidence of fires damaging outside service risers does not appear to warrant taking remedial rulemaking action. Even if some action were necessary, it seems futile to suggest that the problem could be resolved by keeping the existing temperature limit on the operation of thermoplastic pipe.

Nine of the commenters stated that the maximum allowable operating temperature of thermoplastic pipe should be no higher than 120° F. These commenters basically were concerned that the long-term hydrostatic strength of some thermoplastic materials at temperatures above 120° F cannot be accurately predicted. This fear was countered, however, by commenters who argued that the hydrostatic testing required by § 192.121 would preclude the use of weak materials. Other reasons advanced for adopting 120° F as the temperature limit (e.g., it would provide a greater opportunity to use thermoplastic fittings) appear to apply equally to a limit of 140°F.

The same number of commenters favored unrestricted adoption of 140° F as the temperature limit for thermoplastic pipe. According to these commenters, thermoplastic materials are available whose long-term hydrostatic strength can be accurately determined at 140° F. These commenters stated that the Plastic Pipe Institute has tested and rated at least five of the major thermoplastic materials for operation in gas service at 140° F, and any materials which cannot operate safely at this high temperature would not pass the strength test required by § 192.121. In addition, they emphasized that a 120° F limit would not be high enough to permit the use of metal encased thermoplastic risers in many areas of the southwest.

A few commenters and the TPSSC favored adoption of 140° F as the temperature limit, but with certain limitations. One commenter objected to permitting its use belowground at that temperature. This commenter argued that any continuous operation belowground at such a high temperature, as might occur when pipe is installed near other utility lines, would cause a greater loss in strength than the cyclic temperatures likely to be experienced aboveground. Similarly, the TPSSC objected to belowground usage at 140° F because the additional stresses caused by temperature would be even higher for thermoplastic fittings used in conjunction with pipe in an underground piping system. The TPSSC pointed out that service risers, or the aboveground portion of a system, normally would not contain these fittings. Also, two commenters suggested that operating temperatures between 120° F and 140° F be allowed for only a small percentage of operating time. Their suggestion was intended to result in a conservative increase in allowable operating temperature that would not preclude aboveground installations in the Southwest.

MTB considered all the comments on establishing a new temperature limit in light of the tests which have been run by the Battelle Columbus Laboratories, the Plastic Pipe Institute, and others. These tests confirm that continuous exposure of thermoplastic pipe to a high temperature (e.g., 140° F) would be more harmful than cyclic exposure to the same temperature. More important, however, they show that thermoplastic materials now available for use in gas pipe and fittings would not be expected to fail during the service life of a pipeline even if it were continuously exposed to 140° F temperature. Another factor relevant to the temperature issue is that the hydrostatic strength test required by § 192.121 must be performed at a constant temperature, or under a worse condition than would be expected in actual service. The reliability of this test is proved by the satisfactory safety record of thermoplastic materials in gas service at 100° F and in water service (where a similar test is used) at even higher temperatures. Also, the hydrostatic test requirement takes on added significance as a check on the safety of operating at 140° F because of the amendment discussed above which requires close correlation between strength and allowable operating temperature.

As a consequence, MTB now believes there is insufficient reason to set a limit lower than 140° F on the operation of thermoplastic pipe. Also, MTB believes a sufficient reason has not been presented to restrict the use of thermoplastic pipe at 140° F to aboveground locations or for short periods of time. Almost all belowground operating temperatures will be cyclic rather than constant, and in the relatively few cases where a continuous high temperature can be expected (as near a steam line), the experimental testing mentioned above shows that materials are available which can be used without failure. As to the problem of added stresses in fittings, while deserving attention, it is not relevant to the question of what is a safe operating temperature for thermoplastic pipe. Moreover, an operator is required to protect against this effect under § 192.143 which requires that fittings be designed in a manner comparable to pipe. Also, the research results mentioned above apply to thermoplastic materials used in fittings as well as pipe. Therefore, section 192.123(b)(2) is amended to permit the use of thermoplastic pipe at temperatures up to 140° F. Concurrently, the proposal to amend § 192.121 by establishing temperature bases for testing thermoplastic pipe is changed to include 140° F as one of the bases.

These changes do not mean, however, that now operators can practically disregard the effects of temperature on thermoplastic pipe. For instance, in the DuPont conducted field testing discussed in Notice 77-1, the plastic pipe inside a service riser was deliberately forced against the metal casing. Temperatures near the point of contact consistently exceeded 140° F, with only moderate air temperatures in direct sunlight. This result points up the need for careful attention in installing metal encased thermoplastic service risers to ensure that the pipe's maximum allowable operating temperature is not exceeded.

Several commenters and the TPSSC objected to the "grandfather" provision in § 192.123(b)(2) of the notice regarding the use of thermoplastic pipe manufactured before the proposed amendment becomes effective. The "grandfather" provision was intended to allow operators to continue to use this pipe at temperatures up to 100° F, as currently provided, even though it has been tested at only 73° F. The commenters pointed out, however, that as written in the notice, the provision would have the undesirable effect of precluding use of the pipe at any higher allowable temperature which could be established consistent with the proposed hydrostatic test temperature under § 192.121. Since this result was not intended, the proposed amendment to § 192.123(b)(2) is changed in the final rules to allow thermoplastic pipe which is manufactured before the effective date of the amendment as well as pipe manufactured thereafter to be used at the highest temperature for which it qualifies for use under § 192.121. At the same time, a revised "grandfather" provision is adopted so that operators will not have to needlessly requalify pipe for use at 100° F which is

not installed or which is on hand but not intended for use above that temperature.

In addition to the substantive changes to §§ 192.63, 192.121, and 192.123 discussed above, the units of measurement expressed in these sections are changed to conform to the International System of Units (SI). These changes are part of an orderly transition process whereby SI units will be used in Part 192 as new or amended regulations are adopted.

REPORT OF THE TECHNICAL PIPELINE SAFETY STANDARDS COMMITTEE

Section 4(b) of the Natural Gas Pipeline Safety Act of 1968 requires that all proposed standards and amendments to such standards pertaining to gas pipelines be submitted to the TPSSC and that the Committee be afforded a reasonable opportunity to prepare a report on the "technical feasibility, reasonableness, and practicability of each proposal." The proposed amendments were submitted to the Committee as Item 1 of 4 items at a meeting in Washington, D.C., on June 7 and 8, 1977. On July 11, 1977, the Committee filed the following favorable report:

This communication is the official report of the Technical Pipeline Safety Standards Committee concerning the Committee's action on two amendments to 49 CFR Part 192 proposed by the Office of Pipeline Safety Operations and other matters which the Committee decided should be brought to the attention of the Department of Transportation.

The following described actions were taken by the Committee at a meeting held in Washington, D.C., on June 7 and 8, 1977.

Item 1 of the agenda was a proposal by OPSO to amend the requirements of §§ 192.63, 192.121, and 192.123(b)(2) pertaining to design of plastic pipelines as published in Notice 77-1; Docket No. OPSO-42. By a unanimous affirmative vote, the Committee found the following language for §§ 192.63, 192.121, and 192.123(b)(2) technically feasible, reasonable, and practicable.

* * * * *

[The language suggested is adopted in the final rule except as discussed above.]

In consideration of the foregoing, Part 192 of Title 49 of the Code of Federal Regulations is amended as follows:

In section 192.63, paragraphs (b), (c), and (d) are redesignated paragraphs (c), (d), and (e) respectively: reference to paragrapgh (d) in the introductory text of paragraph (a) is changed to read "paragraph (e)." A new paragraph (b) is added to read as follows:

§ 192.63 Marking of materials.

* * * * *

(b) In addition to the requirements in paragraph (a), thermoplastic pipe manufactured in accordance with the 1974a or earlier listed edition of ASTM D2513 must be marked as required by section 9.2 of ASTM D2513 (1975b edition) unless the pipe was manufactured before May 18, 1978, and is installed where operating temperatures are not above 38° C (100° F).

* * * * *

By revising section 192.121 to read as follows:

§ 192.121 Design of plastic pipe.

The design pressure for plastic pipe is determined in accordance with the following formula, subject to the limitations of § 192.123:

$$P = 2S\,t/(D-t) \times 0.32$$

P = Design pressure, gage, kPa (psi).
S = For thermoplastic pipe the long-term hydrostatic strength determined in accordance with the listed specification at a temperature equal to 23° C (73° F), 38° C (100° F), 49° C (120° F), or 60° C (140° F); for reinforced thermosetting plastic pipe, 75,800 kPa (11,000 psi).
t = Specified wall thickness, mm (in.).
D = Specified outside diameter, mm (in.).

By revising section 192.123 (a) introductory text, (b) (1) and (2), (c), and (d) to read as follows:

§ 192.123 Design limitations for plastic pipe.

(a) The design pressure may not exceed a gage pressure of 689 kPa (100 psig) for plastic pipe used in—

* * * * *

(b) * * *

(1) Below minus 29° C (−20° F); or

(2) In the case of thermoplastic pipe, above the temperature at which the long-term hydrostatic strength used in the design formula under § 192.121 is determined, except that pipe manufactured before May 18, 1978, may be used at temperatures up to 38° C (100° F); or in the case of reinforced thermosetting plastic pipe, above 66° C (150° F).

(c) The wall thickness for thermoplastic pipe may not be less than 1.57 millimeters (0.062 in.).

(d) The wall thickness for reinforced thermosetting plastic pipe may not be less than that listed in the following table:

Nominal size in inches:	*Minimum wall thickness in millimeters (inches)*
2	1.52 (0.060)
3	1.52 (0.060)
4	1.78 (0.070)
6	2.54 (0.100)

NOTE.—MTB has determined that this document does not contain a major proposal requiring preparation of a regulatory analysis under DOT procedures.

(49 U.S.C. 1672; 49 U.S.C. 1804, App. A. of Part 1, 49 CFR.)

Issued in Washington, D.C., on March 28, 1978.

L. D. SANTMAN,
Acting Director,
Materials Transportation Bureau.

[FR Doc. 78-8757 Filed 3-31-78; 8:45 am]

[3510-22]

Title 50—Wildlife and Fisheries

CHAPTER II—NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE

PART 230—WHALING

Taking of Bowhead Whales by Indians, Aleuts, or Eskimos for Subsistence Purposes

AGENCY: National Marine Fisheries Service.

ACTION: Final rule.

SUMMARY: The aboriginal exemption to the Schedule of the International Whaling Convention (Convention) which allows the taking of either 12 bowhead whales landed or 18 struck is allocated among the nine Alaskan Eskimo whaling villages which have traditionally participated in the subsistence hunt. In implementing the obligation of the United States under the Convention, these final regulations require appropriate licensing of whaling captains, call for reporting of various data, proscribe certain acts, set out penalties, and provide for, to the extent possible, the maximum utilization of all whales taken.

DATES: These regulations are effective April 3, 1978.

ADDRESSES: Assistant Administrator for Fisheries, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, 3300 Whitehaven Street NW., Washington, D.C. 20235.

FOR FURTHER INFORMATION CONTACT:

William P. Jensen, Marine Mammal and Endangered Species Division, National Marine Fisheries Service, 3300 Whitehaven Street NW., Washington, D.C. 20235, phone: 202-634-7461.

SUPPLEMENTARY INFORMATION:

BACKGROUND

Whaling activities conducted by persons subject to the jurisdiction of the United States are governed by the Whaling Convention Act (WCA, 16 U.S.C. 916a-1) which implements the Convention domestically. The body of