

## STANDARD PRACTICE

STANDARD PACIFIC

EXECUTIVE OFFICE OR DIVISION

GAS LINE INCORPORATED

STANDARD PRACTICE NO. S-463-8

PAGE NO. 1 EFFECTIVE 4-1-82

ISSUING DEPARTMENT Manager of Operations

REPLACING 1 EFFECTIVE 6-1-81

## SUBJECT:

MAXIMUM OPERATING PRESSURES OF PIPELINES AND MAINS  
OPERATING AT OR ABOVE 20% OF S.M.Y.S.

PURPOSE AND POLICY

1. To establish a uniform procedure for identifying, reviewing, and revising Design Pressure (DP), Maximum Allowable Operating Pressures (MAOP), and Maximum Operating Pressure (MOP) (Stanpac) for all pipelines, mains, and holders operating at or above 20% of specified minimum yield strength (SMYS) of the pipe material (see Appendix A).

RECISIONS

2. All previous instructions, oral or written, that may be contrary to this Standard Practice.

RESPONSIBILITY

3. The Superintendent of Stanpac shall be responsible for the performance required by this Standard Practice. Performance will include reviews of design procedures for the lines and the records generated by the referenced Standard Practices any time a change in MOP, MAOP, or DP is contemplated.
4. The Manager of Operations will establish and confirm changes to MOP (Stanpac), MAOP, and DP.

REFERENCES

5. Current edition of 49 CFR, Part 192
  - S.P. 412-1, "External Corrosion Control of Buried Gas Facilities"
  - S.P. 460-1, "Location Class Changes: Pipelines and Mains"
  - S.P. 460.2-2, "Physical Inspection: Pipelines, Mains and Services"
  - S.P. 460-21-4, "Periodic Leakage Surveys of Gas Transmission and Distribution Facilities"
  - S.P. 463.7, "Pipeline History File, Establishing and Maintaining"

DEFINITIONS

6. Design Pressure (DP) is the maximum pressure permitted by the design sections of the current edition of 49 CFR, Part 192, applicable to the materials and locations involved. In some cases the DP has been established as the maximum pressure for the minimum wall thickness required under the current edition of 49 CFR, Part 192, for Type 3 construction for line size listed (see double asterisk entries in Appendix A).

Future Design Pressure is the Design Pressure (DP) to be used for future additions to existing facilities, effective July 1, 1975.

PACIFIC GAS AND ELECTRIC COMPANY  
**STANDARD PRACTICE**

EXECUTIVE OFFICE OR DIVISION STANDARD PACIFIC  
 GAS LINE INCORPORATED

STANDARD PRACTICE NO. S-463-8

PAGE NO. 2 EFFECTIVE 4-1-82

ISSUING DEPARTMENT \_\_\_\_\_

REPLACING PAGE NO. 2 EFFECTIVE 6-1-81

**SUBJECT:**

**MAXIMUM OPERATING PRESSURES OF PIPELINES AND MAINS  
 OPERATING AT OR ABOVE 20% OF S.M.Y.S.**

DEFINITIONS (continued)

Maximum Allowable Operating Pressure (MAOP) is the maximum pressure at which a pipeline or section of a pipeline may be operated in accordance with all the applicable provisions of the current edition of 49 CFR, Part 192.

Maximum Operating Pressure (MOP) (Stanpac) is the maximum pressure at which a gas system may be operated as specified by the Manager of Operations.

Specified Minimum Yield Strength (SMYS) is the minimum yield strength in psi prescribed by the specification under which pipe is purchased from the manufacturer or as specified in Section 192.107 of the current edition of 49 CFR, Part 192.

APPLICATION

7. Procedural details and supplemental data appear in addenda to this Standard Practice.

Supplement - Procedural Details

Appendix A - Lines in Transmission Capital Operating At or Over 20% SMYS

RECORD

8. Pressure Recording Charts and Operating Sheets (record of hourly data) which document the MAOP and/or MOP (Stanpac) of pipelines and mains operating at or above 20% of SMYS shall be kept current by the Superintendent of Stanpac.

SUPPLEMENT

9. The Supplement establishes the procedure for designating the MOP (Stanpac), MAOP, and DP for each facility.

APPROVED BY:



Manager of Operations

DISTRIBUTION

President  
 Superintendent  
 Gas Operations Managers

East Bay Division Gas Superintendent  
 Stockton Division Gas Superintendent  
 San Joaquin Division Gas Superintendent  
 Sacramento Division Gas Superintendent

Additional copies of this Standard Practice may be obtained from Standard Pacific Gas Line Incorporated, 375 North Wiget Lane, Walnut Creek (PG&E Ext. 783-216)

\* Paragraph Revised  
 \*\* Paragraph Added

(SEE OVER)

PROCEDURAL DETAILS

10. Piping systems listed are not to be operated in excess of the MOP (Stanpac). This limitation has been determined by the lowest of the following:
  - a) The test pressure or the rated working pressure of the pipe, valves, and fittings in the line.
  - b) The MAOP of the line as established in accordance with the provisions of the current edition of 49 CFR, Part 192.
  - c) The MAOP of another pipeline system connected to the first system where there is no pressure control complete with overpressure protection between the two systems.
  - d) Operating conditions that limit pressure.
11. The MOP (Stanpac) may equal, but shall never exceed the MAOP or the DP. In some cases where the MAOP is less than DP, it is anticipated that the MAOP may be increased at some future time, in accordance with Subpart K (Uprating) of the current edition of 49 CFR, Part 192. For this reason, all new additions to an existing system shall have a design pressure at least equal to the future design pressure listed in Appendix A. Some sections of an existing system may not qualify for the established design pressure and would require reconstruction, testing, or replacement prior to increasing the MAOP. See Paragraph 6.
12. New or replacement sections of line should be tested and qualified for the future MAOP of the system, even though the MOP (Stanpac) of the system is limited by the MAOP of other facilities connected to it.
13. Any changes contemplated in the MOP (Stanpac) or the MAOP of a line operating at or over 20% of SMYS shall be submitted by the Superintendent of Stanpac, in letter form, to the Manager of Operations for review and approval. A copy should be sent to the Manager of Gas System Planning and the Manager of Gas System Design.
14. The MOP (Stanpac), MAOP, and DP of all newly installed pipelines and mains operating at or above 20% of SMYS, along with those in Appendix A, shall be confirmed annually by letter on or before February 1 by the Superintendent to the Manager of Operations for each facility within the scope of this Standard Practice.
15. The Manager of Operations will publish and distribute updated lists of pipeline pressures (Appendix A), as required.

Attachment: Appendix A - "Lines in Transmission Capital Operating  
At or Over 20% of SMYS"

LINES IN TRANSMISSION CAPITAL OPERATING AT OR OVER 20% OF SMYS

Trans. Line No.	Location	Pipe Size (Inches)	Stanpac		Design Press.	Future Requirements	
			MOP PSIG	MAOP		Design Press.	Size (Inches)
SP-2	✓Panoche Jct. to Vernalis Tap	22-26	500	500	500	890	26
	✓Vernalis Tap to Tracy Station	26	500	500	890 (1)	890	26
	✓Tracy Sta. to Brentwood Term.	26	605	605	890 (2)	890	26
SP-3	Brentwood Term. to Delta Fair Junction	26	360	360	456	600	26
	Delta Fair Junction to Los Medanos PL Station	26	600	600	600	600	26
	Los Medanos PL Station to Crockett Junction	22-24-26	315	315	375	600	26
	Crockett Junction to San Pablo Station	20-22-24-26	250	250	250	600	24
	San Pablo Station to Chevron	16	150	150	150	250	16
SP-4	East Rio Vista Gas Field to Antioch Terminal	8-10-12-16	720 (3)	800	800	800	8-10-12-16
SP-5	Antioch Terminal to Antioch Town Meter Station	24	338	390	600	600	24
	Antioch Town Meter Station to Delta Fair Junction	30	600 (4)	600	600	600	30
Crockett Branch	Crockett Junction to Crockett Station	20-22	250	250	250	600	24
Ryer Is. Branch	Los Medanos PL Station to MP 0.63	8-22	315	315	315	315	22

- NOTES:
- (1) At MP 132.42, a 145' section crossing the California Aqueduct has a design pressure of 605 psig.
  - (2) At MP 149, a 950' pipeline section at the California Aqueduct crossing has a design pressure of 605 psig.
  - (3) The MOP is: 510 psig when operated in conjunction with L-114. (West Rio Vista Field to Antioch Terminal)  
720 psig when operated in conjunction with L-131. (East Rio Vista Field to Antioch Terminal)
  - (4) The MOP is: 360 psig when operated in conjunction with SP-3. (Brentwood Terminal to Delta Fair Junction)