

NOTICE OF AMENDMENT

REGISTERED MAIL - RETURN RECEIPT REQUESTED

May 5, 1998

Mr. M. L. Ottem  
Manager of Operations  
Trans Mountain Oil Pipeline Corporation  
1333 West Broadway, Suite 900  
Vancouver, B.C. V6H4C2

CPF NO. 58508M

Dear Mr. Ottem:

On April 20 - 23, 1998, a representative of the Western Region, Office of Pipeline Safety, pursuant to Chapter 601 of 49 United States Code, conducted an onsite pipeline safety inspection of the Trans Mountain Oil Pipe Line Corporation (TM) facilities, manuals, and records near Bellingham, Washington. As a result of the inspection, it appears that you have committed probable violations, as noted below, of pipeline safety regulations, Title 49, code of Federal Regulations, Part 195. The probable violations are:

1. **§195.416(a) requires each operator to conduct tests on each buried or submerged pipeline under cathodic protection to determine whether the protection is adequate. These tests must be conducted at least once each calendar year, but at intervals not exceeding 15 months.**

Trans Mountains cathodic protection (CP) monitoring procedures presented in the PLM Procedures Manual, Monitoring - Annual Surveys, CC-2 are inadequate. The procedures and annual corrosion survey results reveal that your CP monitoring tests do not consider voltage (IR) drop in your assessment of cathodic protection. Current industry corrosion standards established by the National Association of Corrosion Engineers (Standard Recommended Practice, Control of External Corrosion Underground or Submerged Metallic Piping Systems, NACE RP0 169-92) asserts that IR drop needs to be considered when measuring the adequacy of CP. Trans Mountain must add survey test procedures that consider IR-drops, other than those across the

structure-electrolyte boundary, to determine the true polarized potential of the pipeline.

2. **§195.416(i) requires each operator to clean, coat with material suitable for the prevention of atmospheric corrosion, and maintain this protection for, each component in its pipeline system that is exposed to the atmosphere.**

Trans Mountain procedures to maintain protection against atmospheric corrosion are inadequate. Protection against atmospheric corrosion is addressed in Trans Mountain's PLM Procedures Manual, Coating Repairs, CC-7. The existing procedures state that pipeline coating repairs will be made when any damage to the existing coating has been identified. In order to effectively maintain protection against atmospheric corrosion, the operator must first identify and evaluate any areas of atmospheric corrosion. Trans Mountain must include procedures to periodically and systematically evaluate all of their above ground pipeline components with respect to atmospheric corrosion.

3. **§195.420 (b) requires each operator, at intervals not exceeding 7 ½ months, but at least twice each calendar year, to inspect each mainline valve to determine that it is functioning properly.**

The Trans Mountain main line valve maintenance procedures presented in the PLM Procedures Manual, Main Line Valves, ML General- 3, dated December, 1996, are inadequate. The semi-annual valve inspection procedures must be expanded to verify that each mainline valve functions properly. The inspection, at a minimum, must include partial stroking of the valves to indicate they are functioning properly. Full stroking of the valve is preferable, however, to help ensure that the valve correctly seats and can fully open or close. Valves should be maintained in accordance with the manufacturer's recommended practices. The procedures must also identify which valves are designated mainline valves.

4. **§195.428 requires each operator, at intervals not exceeding 15 months, but at least once each calendar year, to inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that**

**it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.**

The over-pressure protection safety device inspection procedures located in the Laurel Station and Anacortes Station Operating Manuals are inadequate. No procedures for the inspection and testing of these devices are present in the PLM Procedures Manual. The procedures must be expanded to include inspection of all overpressure protection devices that protect the pipeline facilities at least once each calendar year, but at intervals not exceeding 15 months. The inspection and testing must ensure that each protective device functions properly, is in good mechanical condition, and has adequate capacity. As part of this annual inspection, Trans Mountain must ensure each relief device is set to and functions at the correct set point.

In regard to the deficiencies in your written procedures for operations, maintenance, and emergencies, the Office of Pipeline Safety is issuing you a Notice of Amendment requiring that your procedures be amended to comply with the requirements of the regulations referenced.

As provided in 49 CFR §190.237, this notice serves as your notification that this office considers your procedures/plans inadequate. Under 49 CFR §190.237, you have a right to submit written comments or request an informal hearing. You must submit written comments or a request for a hearing within 30 days after receipt of this notice. After reviewing the record, the Associate Administrator for Pipeline Safety will determine whether your plans or procedures are adequate. The criteria used in making this determination are outlined in 49 CFR §190.237. If you do not wish to contest this notice, please provide your revised procedures within 30 days of receipt of this notice.

When appropriate procedures have been prepared, submit to Director, Western Region, Office of Pipeline Safety, Research and Special Programs Administration, 12600 W. Colfax Avenue, Suite A-250, Lakewood, Colorado 80215.

Please refer to **CPF NO. 58508M** in any correspondence or communication on this matter.

Sincerely,

Edward J. Ondak  
Director

Enclosure

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