

LETTER OF CONCERN

June 25, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Tim Felt
Vice President
Mobil Pipe Line Company
1201 Elm Street
Dallas, Texas 75221

CPF: 19503C

Dear Mr. Felt:

On November 4-6, 1998 a representative of the Eastern Region, Office of Pipeline Safety, pursuant to Chapter 601 of 49 United States Code, conducted an onsite pipeline safety inspection of your facilities and records at the South Portland, Maine to Bangor, Maine products pipeline including the originating pump station at South Portland, Maine; the 126 mile, 6" mainline; and the Bangor, Maine delivery terminal.

During the inspection, the following items came to our attention that have caused some concern. I hope you will give these items your attention.

1. ITEM OF CONCERN: Maps and Records

§195.404 Maps and Records.

(a) Each operator shall ***maintain current maps and records*** of its pipeline systems that include at least the following information;

(1) Location and identification of the following pipeline facilities;

(ii) *Pump stations;*

The terminal plot plan is outdated and inaccurate. The South Portland pump room emergency stop button was noted on the drawings to be located inside the pump room. The subsequent field inspection revealed that the pump room building itself actually had no emergency stop button.

The stop button shown on the existing drawings labeled as a “pump room emergency stop” button was actually identified in the pump room as a test button for the infrared flame detector.

(iii) Scraper and sphere facilities;

The written procedures for launching scrapers at South Portland, Maine did not agree with the station schematic drawings. It was generic and needs to be site specific. This particular launcher has a combination drain line and kicker line. Inadvertent or misaligned valves during the launching of an internal pig are a potential safety problem.

(iv) Pipeline valves;

South Portland Station valves have no identifying tags on them in the field that can be used to correlate them to written operating manuals or drawings.

At the Bangor, Maine delivery terminal, there are no valve identification tags located on the field valves that relate the physical location of the valves to the respective delivery terminal drawings and written procedures.

(viii) Safety devices to which §195.428 applies.

The South Portland, Maine originating pump station manifold discharge over-pressure relief valve name plate data did not agree with the set point indicated on the station drawings or the “semi-check” forms used by the technicians when performing the annual over-pressure safety device settings. The nameplate indicated a maximum set point of 1275 psi - the drawings and charts indicated 1375 psi. There was no record of the date of calibration or testing under simulated conditions of the over-pressure safety relief valve located on the pump discharge piping.

The surge relief system and procedures utilized at the Bangor, Maine delivery terminal should be reviewed. The required surge relief volume of the two dedicated surge relief tanks (11 and 20) is not accurately known. A motor operated valve (MOV) that is SCADA controlled from Dallas, Texas is located upstream of the nitrogen actuated back pressure control/relief valve with its potential to go inadvertently closed resulting in a defeat of the entire surge relief system. The MOV is normally open. The back pressure control/relief valve is normally closed and set to relieve at 850 psi. If the nitrogen pilot gas should fail and the back pressure control/relief valve starts to open at something less than 850psi, a small rupture disk located downstream of this valve is set to

pop at 250 psi. The resulting flow into either tank 11 or 20 would alert the Dallas controller that the nitrogen has failed or he has had a surge. He in turn would notify the appropriate delivery terminal personnel using established procedures. This is a weakness within this system. The terminal personnel have the local capability of **switching tanks 11 and 20** to and from the relief system depending on operational requirements. It is strongly suggested that one tank be designated as the surge relief / back pressure failure tank with sufficient volume reduced from the normal working storage height to allow for the containment of any contingency including surge relief or total failure of the back pressure control valve. This tank should remain open to the mainline at all times without the potential for inadvertent closure by operating personnel or a malfunction of the supervisory control system.

At the Bangor, Maine delivery terminal, a review of the list of all of the over-pressure thermal protective devices revealed that at the time of our review, their last annual inspection date had exceeded the 15 month regulatory period between subsequent inspections by several months.

(2) All crossings of public roads, railroads, rivers, buried utilities, and **foreign pipelines**.

A buried pipeline, from the old South Portland Exxon (now Sprague Energy) terminal, was physically in existence, empty of liquid and purged with nitrogen, but not shown on the South Portland Terminal Plot Plan. Recommend that all pipelines physically in existence be clearly marked on all applicable drawings and their operational status (abandoned or idled) indicated. It was not clear whether or not this particular line had been physically disconnected from the system. It is our understanding that this particular line is not currently in the cathodic protection plan.

2. ITEM OF CONCERN: Certification of Maximum Operating Pressure (MOP)

§195.303 Test Pressure.

Each test pressure conducted under this subpart must be maintained throughout the part of the system being tested for at least 4 continuous hours at a **pressure equal to 125 percent**, or more, **of the maximum operating pressure** and, in the case of a pipeline that is not visually inspected for leakage during test, for at least an additional 4 continuous hours at a pressure equal to 110 percent, or more, of the maximum operating pressure.

The mainline was last hydrostatically **tested in a 1968 to a pressure of 110 percent** (1440 psi) of the present MOP (1309).

In order to maintain your current MOP you were required to come up with a plan and schedule consistent with the requirements in 195.302 and 195.303 by December 7, 1998. Please make sure the requirements published in the federal Register on November 4, 1998 were considered in your plan.

3. ITEM OF CONCERN: Employee Training

§195.403 Training.

(a) Each operator shall establish and conduct a continuing training program to instruct operating and maintenance personnel to;

(5) Learn the proper use of firefighting procedures and equipment, fire suits, and breathing apparatus by utilizing, where feasible, a ***simulated Pipeline emergency condition; and,***

There were no records of any simulated emergency drills that may have been conducted regarding specific pipeline emergencies. The OPA drills that had been conducted regarding terminal spills in the river were assumed to comply with this item. Suggest that simulated emergency drills also be conducted that are more orientated and site specific to the integrity of the pipeline operation between South Portland and Bangor.

(b) At intervals not exceeding 15 months, but at least once each calendar year, each operator shall;

(1) Review with personnel their performance in meeting the objectives of the training program set forth in paragraph (a) of this section;

The Employee Training Records were reviewed and the signed statements required by the O&M manual were not in the files. The O&M procedures appear not to be followed with regards to all employees acknowledging that they had been trained in and were aware of the contents of the O&M manual.

4. ITEM OF CONCERN: Valve Maintenance

§195.420 Valve maintenance.

(c) Each operator shall provide protection for each valve from unauthorized operation and from vandalism.

The thermal relief valve, set at 1375 psi on the South Portland, Maine scraper launcher barrel had a quick opening valve upstream of it that was not sealed in the open position. The valve could be accidentally closed and defeat the thermal relief.

5. ITEM OF CONCERN: Corrosion Records

§195.416 External corrosion control.

(a) Each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, **conduct tests** on each buried, in contact with the ground, or submerged pipeline facility in its pipeline system that is under cathodic protection to **determine** whether the **protection is adequate**.

(b) Each operator shall **maintain the test leads** required for cathodic protection in such a condition that electrical measurements can be obtained to ensure adequate protection.

Not all cased road crossings have test leads to confirm that the casing has not shorted out to the mainline carrier pipe. In addition, written records do not indicate what road crossings are cased and what ones are not. According to the available records, at the present time there are approximately 168 cased road crossings without test leads and 19 cased road crossings with test leads. Recommend that the most recent internal inspection log data be used to correlate the pipeline stationing of any corrosion indicated on the mainline with respect to the pipeline stationing of the cased pipeline road crossings. If any correlation exists, cased road crossings, particularly those without test leads, should be given high priority for field examination.

6. ITEM OF CONCERN: Branch to Header Piping Fabrications

§195.122 Fabricated branch connections.

Each pipeline system must be designed so that the addition of any **fabricated branch connections** will not **reduce the strength** of the pipeline system.

The angled, blinded branch to run connection on the South Portland, Maine scraper barrel, designed by Pipetronix and installed in 1997 by Mobil for potential use by Pipetronix during smart pig runs, could not be confirmed to meet the ANSI B31.4 specifications for these types of connections. It did not have a full encirclement sleeve reinforcement.

Both the scraper trap receiver and launcher designed by Pipetronix and installed in 1997 by Mobil at the Hallowell, Maine pump station to accommodate the Pipetronix internal inspection tool appear to have the same angled, blinded, inadequately reinforced branch to run connection observed at South Portland.

7. ITEM OF CONCERN: Piping Modifications

§195.422 Pipeline Repairs.

(b) No operator may use any pipe, valve, or fitting, for replacement in repairing pipeline facilities, unless it is designed and constructed as required by this part.

Per ANSI B31.4, under 451.6.2 Disposition of Defects:

(1) If practical, the pipeline should be taken out of service and repaired by cutting out a cylindrical piece of pipe containing the defect and replacing the same with pipe meeting the requirements of para. 401.2.2 and having **a length of not less than one-half diameter.**

Welded pipe connections were observed at the Bangor Terminal on recently completed piping work that do not conform to the recommendations of ANSI B31.4, relative to minimum allowable lengths of pipe, i.e., "pup joints".

8. ITEM OF CONCERN: Drug Testing

§199.11 Drug tests required.

(a) PRE-EMPLOYMENT TESTING. No operator may hire or **contract** for the use of any person as an employee unless that person passes a drug test or is covered by an anti-drug program that conforms to the requirements of this part.

A drug testing program was in place but was not referenced in the O&M manual. The typical contract language did not include a procedure to drug test small independent contractors who may not have their own drug testing plan.

If we can answer any questions or be of any assistance, please contact my field engineer, Mr. Chuck Behounek, telephone 207-926-5929 or my office at (202) 366-4580. I would appreciate a response within 45 days from the receipt of this letter, including any activities which Mobil has initiated or will initiate, regarding the concerns addressed in this letter. Thank you for your staff's candor and cooperation during this scheduled inspection.

Sincerely,

William H. Gute
Director, Eastern Region
Office of Pipeline Safety