



US Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh St S W
Washington D C 20590

AUG 24 2001

Mr. Andrew K. Turner
Vice President
Mobil Pipe Line Company
Post Office Box 2220
Houston, Texas 77252-2220

RE: CPF No. 1-2001-5006

Dear Mr. Turner:

Enclosed is the Final Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case. It withdraws four allegations of violation, makes findings of violation, assesses a civil penalty of \$92,000, and requires certain corrective action. The penalty payment terms are set forth in the Final Order. When the civil penalty is paid and the terms of the compliance order are completed, as determined by the Director, Eastern Region, this enforcement action will be closed. Your receipt of the Final Order constitutes service of that document under 49 C.F.R. § 190.5.

Sincerely,

James Reynolds
Pipeline Compliance Registry
Office of Pipeline Safety

Enclosure

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

DEPARTMENT OF TRANSPORTATION
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, DC 20590

In the Matter of)
Mobil Pipe Line Company,)
Respondent.)
_____)

CPF No 1-2001-5006

FINAL ORDER

Between October 10-12, October 17-19, and November 7-9, 2000, a representative of the Office of Pipeline Safety (OPS) conducted an on-site pipeline safety inspection of Respondent's facilities and records in Rhode Island, Massachusetts and Maine. As a result of the investigation, the Director, Eastern Region, OPS, issued to ExxonMobil Pipeline Company by letter dated December 18, 2001, a Notice of Probable Violation, Proposed Civil Penalty and Proposed Compliance Order (Notice). In accordance with 49 C.F.R. § 190.207, the Notice proposed finding that ExxonMobil Pipeline Company had violated 49 C.F.R. §§ 195.112, 195.401, 195.402, 195.403, 195.404, 195.408, 195.416, 195.420, 195.428, 199.23 [redesignated § 199.117 according to 66 Fed. Reg. 47114, September 11, 2001] and 195.416 [removed, reserved and replaced with Subpart H, Corrosion Control according to 66 Fed. Reg. 66994, December 27, 2001] and proposed assessing a civil penalty of \$134,000 for the alleged violations.

By letter dated January 9, 2002, Mobil Pipe Line Company requested and was granted an extension of time to respond to the Notice until March 26, 2002. Mobil Pipe Line Company responded to the Notice by letter dated March 25, 2002 (Response). Mobil Pipe Line Company contested many of the allegations and requested a hearing. The hearing was held on December 5 and 6, 2002, in Washington, DC.

After this hearing, Respondent provided additional information on waterway crossing engineering analysis, process for communication failures, etc, in a letter dated January 9, 2003 (Supplement) In its letter, Mobil Pipe Line Company stated:

As discussed at the hearing, ExxonMobil Pipeline Company. . .has been incorrectly named as the Respondent in this matter. The Facilities in question are owned and operated by [Mobil Pipe Line Company] .[ExxonMobil Pipeline Company] serves as a non-exclusive contractor to [Mobil Pipe Line Company] to perform various

activities on [Mobil Pipe Line Company]'s behalf. . [Mobil Pipe Line Company]'s use of another company to assist in the operation of its system does not change [Mobil Pipe Line Company]'s position as owner and operator of the facilities. . . We respectfully request that [Mobil Pipe Line Company] be appropriately identified as the party in this matter. . .

Mobil Pipe Line Company has therefore identified itself as the true Respondent in this case

FINDINGS OF VIOLATION

Uncontested Violation Item 1 of the Notice alleged that Respondent violated § 195.112 in not marking or identifying mainline spare pipe located in the Malvern, Pennsylvania Pump Station. In its Response and at the hearing, Respondent acknowledged that the pipe was not marked. Accordingly, I find that Respondent violated § 195.112, as more fully described in the Notice.

Respondent objected to an item in the Proposed Compliance Order, however, that would require Respondent to prepare appropriate procedures to specify how all spare mainline pipe will be identified and stored in the field such that there is no doubt as to the spare pipe's mechanical, chemical, and physical properties as shown on the respective manufacturer's Material Test Reports. Respondent stated that at the time of inspection, it already had a formal procedure for marking pipe in its DOT Liquids Manual Appendix B.

New pipe destined for mainline installation must have Mill Test Reports to substantiate its chemical and mechanical properties in accordance with § 195.112(b). Because Respondent's manual procedure did not take into account the mechanical chemical, and physical properties as shown on the respective manufacturer's Material Test Reports, it does not adequately address § 195.112. Item 1 of the Compliance Order, relating to violation of § 195.112, is therefore appropriate.

Contested Violations. Respondent's Vice President of Operations attended the hearing. Among his many comments was the charge that OPS' "findings are overly prescriptive and do not allow for latitude and discretion by the pipeline operator; the findings may be technically accurate but are isolated in nature or have negligible impact on safe pipeline operations."

OPS findings address critical safety concerns in Respondent's operations. The discussion of each alleged violation below attempts to show the impact of Respondent's actions or inaction on safe operation of the pipeline.

Item 2 of the Notice alleged that Respondent violated § 195 401(b) in failing to correct, within a reasonable time, certain conditions that could adversely affect the safe operation of its pipeline system. The Notice quoted Respondent's "Waterway Crossing Inspection Reports" which showed that on the Paulsboro Pipeline System, 248 linear feet of mainline pipe was exposed, and 76 linear

feet of mainline pipe was suspended, under the Swatara Creek. The reports showed that there were 88 linear feet of exposed mainline pipe in the Blackstone River. The reports also showed that there was no known pipeline elevation in 1984 for the Chicopee River Crossing in Massachusetts. The reports did not address the integrity of the unsupported pipe to assess whether it presented an adverse safety condition.

Item 2 also alleged that Respondent did not ensure that pipeline repairs were made in a safe manner, citing an instance in which disconnected, open-ended wires were left exposed, and junction box covers were open, in the East Douglas Pump Station pump unit area that was designated as a Class 1, Group D explosive atmospheric area. While observing this condition, the OPS inspector observed mainline units being started.

In its Response and at the hearing, Respondent stated that there was no evidence of a condition that could adversely affect the safe operation of the pipeline system. Respondent stated it was “unaware of any regulatory requirement or industry standard which defines ‘exposed’ or ‘suspended’ pipe as categorically unsafe.” Respondent stated it “has in place guidelines for monitoring the results from waterway crossing inspections. These processes incorporate risk analysis, prioritization and risk based decision making.”

Respondent stated that the 2001 Waterway Crossing Inspection Report indicated that there was zero feet of suspended pipe at the Swatara Creek crossing at the time of that inspection. Respondent stated that it has evaluated the other two river crossings and found that no field modifications were warranted.

In its Supplement, Respondent stated that historical engineering analysis on the three waterways could not be located. Respondent provided engineering calculations for the Blackstone River and Swatara Creek crossings in a document entitled “Maximum Allowable Unsupported Pipe Span,” accompanied by an interoffice memo dated January 8, 2003. The memo concluded that in both cases, the actual unsupported span of pipe was found to be less than that length allowed by the ASME code. “Therefore the recommendation is to continue to evaluate and monitor the crossings.”

Respondent’s calculations are deficient, however, in that they only consider the suspended pipeline vertically deflecting as a simply supported beam. They do not mention normal river current velocities, 100 year flood velocities, or lateral deflections due to trash accumulation on the exposed pipeline. Suspended pipelines in a flowing river or stream should also be evaluated with a rational engineering calculation involving the magnitude of “Von Karmen’s vortices.” If the unique parameters of current flow velocity, pipeline diameter and pipeline length are such that the resonant frequency is reached, the pipeline may oscillate vertically until it breaks. In the October 3, 2001 Waterway Inspection Report of the Swatara Creek crossing that was attached to the Response, Respondent mentions the continual shifting of the stream’s bottom. In the event of floods, debris can collect on the suspended pipeline, effectively increasing its effective area perpendicular to the stream flow and increasing the lateral deflection and the possibility of failure. Moreover, these pipeline systems were installed between 1931 and 1948, prior to the adoption of the Federal pipeline

safety laws and regulations. The old pipeline girth welds contained in these systems may not be made to the same quality standards as those made after the Federal pipeline safety laws and regulations was adopted.

As to the Chicopee River crossing, Respondent argued that OPS was attempting to apply § 195.248, "Cover over buried pipeline," which is found in Subpart D, Construction, "to operations covered by Subpart F, Maintenance and Normal Operations."

According to the Response, "All relevant factors must be considered when making an engineering determination on exposed or suspended pipe segments, such as internal pressure, external loads, pipe size, wall thickness and strength." As shown above, however, Respondent did not take into account crucial factors in making its engineering calculations. Accordingly, I find that the exposed and suspended pipe on the three waterways could adversely affect the safe operation of Respondent's pipeline system.

As to the exposed electrical wiring in the pump unit area, Respondent attempts to minimize the condition as inadequate "housekeeping." Respondent states that the wiring was not in service at the time of the OPS inspection and "was disconnected from an energy source." At the hearing, however, the OPS inspector recalled that more than 100 wires were lying on the floor, and some of the wires were "hot." Accordingly, I find that the exposed wiring in the East Douglas Pump Station constituted a condition that could adversely affect the safe operation of Respondent's pipeline system.

I therefore find that Respondent violated § 195.401(b), as more fully described in the Notice.

Item 3 in the Notice alleged that Respondent violated § 195.402(a) in failing to prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. The Notice alleged 6 instances in support of this violation. For the reasons discussed below, I find that each of the six instances cited in the Notice support a finding of violation of § 195.402(a).

- 1) The Notice alleged that Respondent's Malvern Pennsylvania location was using an outdated copy of Respondent's Welding Manual. In the Response, Respondent acknowledged this fact, stated it had discarded all prior versions of the Welding Manual, and stated that the current version is now at the Malvern Office.
- 2) The Notice alleged that Respondent did not review the accuracy of the written scraper procedures at the Springfield terminal because the written procedures were not compatible with the existing piping configuration at this location. Respondent disputed the allegation. Respondent included with its procedures a reference diagram, "for illustrative purposes only" and "not intended to reflect identical configuration of all field equipment." In using written procedures that do not accurately reflect the location of the facilities, however, Respondent increases the risk of human error during routine operations. The diagram did not identify the

locations of the “trap closure or “pig sig,” both of which are discussed in Respondent’s DOT Liquids Manual. The Response’s photograph of the Receiving Trap at the Springfield Terminal did not identify corresponding operational items discussed in the DOT Liquids manual.

- 3) The Notice alleged that Respondent had no written procedures at originating pump stations in Malvern, Pennsylvania, and South Portland, Maine, for its “flying switches” operations (changing suction or discharge tanks directly connected to a pumping pipeline without shutting the pipeline down during the tank change). In its Response, Respondent identified documents at both locations that purported to contain “procedures on batch switches.” OPS found that such procedures as Respondent did have were vague and didn’t answer the following critical questions: Which tank is opened first? Which tank is closed first? Is a tank closed before making sure that another tank has first been opened? Moreover, Respondent’s personnel had told OPS that its “flying switches” procedure was routinely performed during normal operations.
- 4) The Notice alleged that written procedures for pumping mainline station oil sumps were lacking at the Malvern, Pennsylvania 8” system and also the Massachusetts System. The Response referenced its “Operation Technician Instructions for the Paulsboro Region,” which it stated were “intended to be somewhat generic as they apply to multiple facilities.” OPS found that the procedures did not account for pump unit seal drainage and possible leaking manifold valve drainage. Inappropriate actions by field personnel monitoring and pumping mainline pump station sumps can lead to liquid spills and the over-pressuring of sump pump piping. Environmental damage and the increased risk to public safety can be significant. Sump pumps and the associated piping tend to be site-specific in design and operation. Respondent’s procedures do not answer the following questions regarding the Malvern pump station: What schematic drawings are referenced? What specific valves should be opened and closed prior to pumping the sump and to secure the sump after pumping is completed. Is the sump pump automated? What is the volume of the sump? To what location does the sump pump discharge?
- 5) The Notice alleged that on the Paulsboro System at the Malvern, Pennsylvania pump station, the abnormal condition associated with pump unit seal failure shutdowns was not described in the pump station’s operating procedures, and specifically, its Malfunction Upset Condition Chart. Respondent acknowledged that pump seal failure was not included in the 20 abnormal conditions and corresponding corrective actions listed on the chart
- 6) The Notice alleged that Respondent did not make pipeline repairs in accordance with its procedures and industry codes and standards. The Notice cited as an example pipeline repairs made on September 11, 2000. On that date fillet welded partial patches were used to repair dents on the mainline in the 8 and 12 o’clock positions on the pipeline approximately two miles downstream of the originating pump station in the East Providence line. The Response stated that applicable standards did not require repair as the dents were

found to be less than 6% of pipe diameter after visual inspection and verification. Respondent submitted its procedure for weld metal deposition on a loaded line. Respondent stated it ensures its welding procedures are performed correctly by requiring initial certification and annual recertification of all company welders. Once Respondent initiated repairs, however, it did not follow either its own procedures or industry standards to ensure that its repairs were properly executed and safely accomplished. Respondent did not follow ANSI B31.4, the standard industry code for hazardous liquid pipelines. For example, Respondent did not use a hardenable filler material such as epoxy to fill the void between the sleeve and the pipe, or tap the carrier pipe to restore the original contour of the pipe. Moreover, although ANSI B31.4 does not permit partial patches on dents, or on pipelines intended to operate at a hoop stress of more than 20% specified minimum yield strength of the pipe, Respondent did both. Respondent's Diagram of Change Report did not mention the geometric size of the dents. Respondent's Leak, Maintenance and Exposed Pipe Report did not identify the chemical and mechanical properties of the patch material welded over the dents. The Response identified its Weld Inspection and Welding Procedures Manual Addendum B, "Welded Patch Acceptable for Grades A, B & X-42 Pipe, Liquid Pipelines Only," as the applicable procedure. That procedure, however, is for "minor leaks and small corroded areas," and not for dent repairs. The procedures that field personnel submitted to OPS differed from those submitted with the Response. Finally, Respondent did not produce any record indicating that all the repair welds were satisfactorily inspected using non-destructive techniques to verify weld integrity.

Based on the above analyses, I find that each of the six instances supports a finding of violation of § 195.402(a).

Item 4 in the Notice alleged that Respondent violated § 195.402(c)(12) in failing to include in the manual procedures for establishing and maintaining liaison with fire, police and other appropriate public officials. The Notice listed two instances supporting the violation. The first was an incorrect phone number on the Massachusetts System. The Emergency Call List listed a number for the Chicopee Fire Department that was three years out of date. The second instance was Respondent's posted telephone number at the Malvern Pump Station on the Paulsboro system. That telephone number has been out of service at least since 1995 when the area code in New Jersey changed.

As for the Chicopee Fire Department telephone number, Respondent alleged that 911 is the number that is likely to be used in an emergency. Respondent stated that failure to update this one number does not support the allegation. Respondent provided the attendance roster for its Springfield Public Education Meeting in September 2000, showing attendance by the Chicopee Fire Department Captain. As for Respondent's incorrectly posted telephone number, the Response stated that emergency response personnel received Respondent's contact information through its "strong public awareness program."

If Respondent's program were truly strong, it would have identified and corrected the incorrect telephone numbers, through, for example, periodic exercises utilizing all emergency contact

information. Listing and posting correct emergency contact numbers is basic to any liaison program with emergency responders. In a real emergency, a member of the public should be able to call the number posted on Respondent's signs and not get a recording saying the number is disconnected.

Based on the foregoing discussion, I find that Respondent violated § 195.402(c)(12).

Item 6 in the Notice alleged that Respondent violated § 195.403(a)(3) in failing to establish and conduct a continuing training program to recognize abnormal conditions, predict their consequences and take appropriate corrective action. In support of this allegation, the Notice alleged that there were no records to show that appropriate personnel were trained on abnormal conditions on the Maine System.

Respondent submitted portions of its manuals entitled "Abnormal Operation." Respondent also submitted "certifications that such training occurred as is required by the regulation." The "certifications" do not indicate that any training actually occurred, however. Respondent's submissions included "Interoffice Correspondence" memoranda signed by the Maine Pipeline Supervisor stating that "Hazardous Liquids, Maintenance and Emergency Manual for the South Portland to Bangor six-inch Products Pipe line System has been reviewed for accuracy and revised as necessary."

Respondent also submitted "Annual Compliance Statements" signed by Maine operating personnel stating that each "affirm[s] that [s/he has] a thorough knowledge of that portion of the procedures . . . for which [s/he is] responsible." Finally Respondent submitted a U.S Supply and Logistics Safety Meeting Record indicating that the five attendees reviewed the operations, maintenance and emergency manual and discussed abnormal operating conditions. None of Respondent's documents, however, constitutes evidence of a continuing training program on the subject of abnormal conditions.

I therefore find that Respondent violated § 195.403(a)(3).

Item 7 in the Notice alleged that Respondent violated § 195.404(a) in failing to maintain current maps and records of its pipeline systems that include at least the following information: location and identification of pump stations, pipeline valves and safety devices to which § 195 428 applies. The Notice also alleged that Respondent violated § 195 404(c) in failing to maintain a record of each required inspection and test for at least 2 years or until the next inspection or test is performed.

The Notice cited 11 instances of Respondent's failure to provide or keep current facility drawings and specifications. The Notice alleged that . . .

- 1) . . . for the East Providence, Rhode Island originating pump station on the Massachusetts system, station electrical and mechanical drawings were not available.

The employee who escorted the OPS inspector during the inspection apparently did not know the location of the documents. Respondent later produced them. This instance, therefore, does not support a finding of violation

- 2) . . .at the East Providence originating pump station, station electrical and mechanical drawing number S242-42 was not checked and approved by the company's responsible person in charge. The Response acknowledged the necessity of accurate drawings but disputed that the regulations required that the company's responsible person in charge check and approve the drawings.

Good practice requires the review and approval of drawings by responsible personnel evidenced by a signature. Good practice notwithstanding, the regulations do not require a signature by the company's responsible person in charge. This instance, therefore, does not support a finding of violation.

- 3) . . .the Massachusetts system electrical and mechanical drawings are out of date and do not accurately reflect the location of existing piping at the East Douglas intermediate pump station. Piping shown as being underground was actually above ground.

The Response stated that Respondent has a "Management of Change (MOC) Process for ensuring that necessary documentation is updated upon modification to a facility." Respondent stated that the piping in question was relocated from below ground to above ground in conjunction with a facility upgrade. Respondent acknowledged that the East Douglas Station General Piping Plan did not reflect this upgrade. Respondent stated, however, that the upgrade involved 25 feet of pipe which did not reflect a significant change in flow, and project activities were ongoing at the time of the OPS inspection.

The issue, nevertheless, is maintaining current maps and records. This allegation supports a violation of § 195.404(a).

- 4) . . .a pump station facility plot plan at the East Douglas intermediate pump station of the MA system showing the physical location of security fencing, ingress and egress, emergency shutdown devices roadways, mainline pumps, sump tanks, electrical, water and sewer lines were not available.

The Response disagreed that the regulations require a facility "plot plan." Respondent stated that the East Douglas Station has a "Suction and Filling Line Chart" that contains most of the above information. Respondent stated that it also uses General Piping Plans, alignment sheets and strip charts, which depict the location of all of the facilities.

Although the regulations do not require a "plot plan," such maps and records as Respondent has must accurately reflect the location of its facilities. OPS found numerous discrepancies in the actual location of drain piping, relief valves, sump piping, emergency stop switches, etc., in the East Douglas Station drawings submitted by Respondent.

This allegation supports a violation of § 195.404(a).

- 5) . . . a pump station drawing that explicitly described the characteristics and physical location of the three existing emergency station shut down devices was not available at the East Douglas intermediate pump station on the Massachusetts system.

The Response disputed that the regulations require a “pump station drawing” such as described above. Respondent pointed out that its Station Suction and Filling Line Chart drawing described the location of Emergency Stops A, B, and C.

Although good practice dictates that an operator possess and post a pump station drawing explicitly describing the characteristics and physical location of all emergency station shut down devices, the regulations do not require it. This allegation does not support a violation of § 195.404(a).

- 6) . . . engineering drawings and operational specifications were not available to determine Respondent’s design operational pressure set points on the variable frequency drive for the East Douglas intermediate pump station mainline unit #2 and the complementary operation of the pump station control valve located on the Massachusetts System. The station mechanic established set points without formal engineering recommendations.

The Response disputed that the regulations require engineering drawings and operational specifications supporting Respondent’s pressure set points. Respondent also stated that its engineering staff, and not the station mechanic, established the set points.

OPS asked for the drawings and operational specifications on the newly installed variable frequency drive after reviewing Respondent’s semi-annual report of test of pressure gauges and protective devices for the East Douglas Pump Station. The OPS inspector asked the station mechanic what was the official engineering set point. He told the inspector that he had found it by trial and error after the variable frequency drive motor control had been installed. He could not produce any formal engineering correspondence indicating what should be the discharge set point.

Inasmuch as set points are related to pressure control, and 195.404(a) specifically requires current records with respect to 195.428 safety devices, Respondent’s mechanic should have been able to produce, at the very least, the set point established by the engineers along with any supporting documentation. This allegation supports a violation of § 195.404(a).

- 7) . . . a significant electrical and instrumentation project was underway in the control room at the East Douglas intermediate pump station on the Massachusetts system. The work area was unsecured and more than 100 wires were lying on the floor. Some wires were “hot” and drawings and specifications describing the scope of the work were not available. The project had been going on for over a year.

Respondent disputed that the regulations required “documentation on a modification project under execution.” Respondent said that this was a project to upgrade the Programmable Logic Controller control systems at East Douglas. Respondent stated that the temporary wires observed during the inspection and referred to as “hot” were low voltage wires, fully insulated, and presented no more risk than a household extension cord. Respondent further stated that that communication wires are transitioned one at a time to prevent pipeline operation disruption. Respondent stated that the upgrade was taking place in a secure building in which only trained company employees were allowed.

The issue in this allegation is project specifications and associated drawings. Respondent could not produce any. Notwithstanding the precautions Respondent stated it was taking, attempting relatively complicated electrical work without the aid of design drawings and specifications significantly increases the possibility of human error during the work. Incorrect connections may result in critical component failures increasing the risk of environmental damage and public safety. This allegation supports a violation of § 195.404(a).

- 8) . . . at the East Douglas intermediate pump station on the Massachusetts System, the “high sump” level alarm set point was shown as 39” in 2000, 39” in 1999, and 49” in 1998. At the East Douglas station, drawings and specifications were not available to correctly determine the volumetric capacity of the sump tanks or the correct high level alarm set point.

The Response stated:

The allegation exceeds the requirement of the cited regulation. . .

However, as clarification, East Douglas Station has two sumps in series. Flow enters one sump first, then overflows into the second sump if the source of the product is not reduced/eliminated. When the level reaches 39” in the first of the two sumps, the sump alarm will sound and the Douglas Station pumps will shut down.

The alarm and set point was lowered from 49” to 39”. . . This was an intentional reduction to establish a larger safety margin and longer response time to a high sump level, and thus to further protect from a potential overflow.

Alarm set points are typically based on the vertical measurement of the tank or vessel being monitored and not volumetric capacity. Volumetric capacity, therefore, is not a relevant data point as it relates to alarm set points.

OPS reviewed Respondent’s semi-annual report of test of pressure gauges and protective devices for the East Douglas Pump Station and noted inconsistency of the existing sump piping as shown

on company drawings. Respondent's personnel could not provide the OPS inspector with engineering data, including drawings or specifications, clearly establishing the capacity and appropriate alarm set points for the safe filling height of the sumps. The known volumetric capacity of a pump station sump is essential to properly establishing and setting sump level alarms. Sump level alarms that are incorrectly set can result in sump overflows with associated environmental damage and an increased risk of fire.

As previously stated, the regulation requires that Respondent maintain current facility maps and records. Properly maintained drawings and specifications contain adequate descriptions of existing facilities which provide rational answers to most operational questions. This allegation supports a violation of § 195.404(a).

The Notice alleged more instances of failure to maintain current facility drawings and records. In the Respondent and at the hearing Respondent stated it was not contesting the following allegations and that subsequent to the OPS inspection it addressed and corrected each:

9) The RSPA-approved Facility Response Plan associated with the Maine System is not consistent with the pipeline system static profile, schematic drawings and specifications. The mainline valve locations were inaccurately recorded.

On the Paulsboro System, the valve identification tags were not installed on all valves located in the Malvern, PA pump station. The tagged valves did not agree with the available pipeline schematic drawings.

10) The safety relief valves located at the Rhode Island originating pump station and at the East Douglas, Massachusetts intermediate pump station on the Massachusetts System, are not specifically identified on the annual maintenance checklists and the related schematic drawing, and have not been signed off as checked and operable.

11) The final allegation in Item 7 alleged that the last two 5-year inspection records (one for 1995 and one for 2000) for the Chicopee River #1 crossing located on the Massachusetts System were missing from the office files. After the OPS inspection, Respondent located the reports and submitted them to OPS. This allegation, therefore, does not support a violation of § 195.404(a).

Item 10 in the Notice alleged that Respondent violated § 195.420(c) in failing to provide protection for each valve from unauthorized operation and from vandalism. Specifically, the Notice stated that at the East Douglas Pump Station (on the Providence, Rhode Island to Springfield, Massachusetts 6" mainline), manually operated isolation valves are located upstream of the safety relief valves. The Notice alleged that the isolation valves were not secured to prevent inadvertent closure, which could result in the functional defeat of the safety relief valves during an over-pressure contingency.

The Response stated that the East Douglas Pump Station “is secured by a cyclone fence which is six feet high with 3 strands of barbed wire. The facility is gate access only and controlled by company personnel. Accordingly the facility is protected from unauthorized operation and from vandalism.”

The Response misses the point, however. The manually operated valves are usually used to isolate the relief valves so that the relief valves can be serviced and their respective set points confirmed. The unsecured, manually operated, isolation valves located upstream of any relief device have the potential to be closed inadvertently by Respondent’s operating personnel, as well as by contract personnel such as mechanics, painters, etc. Securing isolation valves is relatively easy and can be accomplished by simply removing the operating handle. If the handles of these manual valves are not removed or locked, they can be mistakenly closed by contractors or personnel unfamiliar with valve relief functions.

I therefore find that Respondent violated § 195.420(c).

Item 11 in the Notice alleged that Respondent § 195.428(a) in failing to inspect and test pressure control equipment at the required intervals to determine that it is functioning properly, etc. The Notice alleged that Respondent failed to inspect the appropriate breakout tank level alarms at the Springfield Station on the Massachusetts System after 1998.

In the Response and at the hearing, Respondent alleged that the tanks in question were not breakout tanks. Respondent later provided a letter from ExxonMobil Refining & Supply Company, dated January 8, 2003, stating that ExxonMobil Refining & Supply Company owns and operates the Light Products Terminal in Springfield, Massachusetts, and all the tanks at that facility. The letter stated, “This facility is the terminus for the pipeline and there are no pipeline breakout tanks.” OPS concurs that these tanks are not, in fact, breakout tanks. This instance, therefore, does not support a finding of violation.

The Notice also alleged that the Springfield “Station Control” pressure set points were inconsistent and varied with each semiannual check and there were no written remarks indicating what system changes had been made to justify the different set points. According to the Response, Respondent was “unclear regarding what inconsistency [was] being referenced.”

The pressure controller discrepancies are shown in OPS’ Violation Report Exhibits #19a-d, which are Respondent’s semi-annual Reports of Test Pressure Gauges and Protective Devices. In 1998 the Station Control Grove type pressure controller was set at 100 psi. In 1999 and 2000, the pressure controller was set at 200 psi. The reports contained no written remarks indicating what system changes had been made to justify the change in set points. Changes made to pressure control set points without supporting engineering documentation increase the potential for pipeline contingencies to occur. This instance, therefore, supports a finding of violation.

I therefore find that Respondent violated § 195 428(a).

These findings of violation will be considered prior offenses in any subsequent enforcement action taken against Respondent.

WITHDRAWAL OF ALLEGATIONS

Item 5 in the Notice alleged that Respondent violated § 195.402(c)(14) in failing to follow its manual to take precautions in excavated trenches protect personnel from hazards of unsafe accumulations of vapor or gas and making available when needed emergency rescue equipment, including a breathing apparatus. The Notice alleged that at the East Douglas intermediate pump station on the Massachusetts System, three pieces of personnel protective equipment, an oxygen meter, a combustible gas meter and an Ecolizer, were not calibrated and ready for use and all batteries were dead. The regulation specifically addresses excavated trenches, however. It is clear from both the Response and from the testimony at the hearing that there were no trenches at the East Douglas intermediate pump station. I am therefore withdrawing this allegation of violation.

Item 8 in the Notice alleged that Respondent violated § 195.408 in failing to have a communication system that includes a means for monitoring operational data and receiving notices of abnormal or emergency conditions and sending them to appropriate personnel or government agencies for corrective action. The Notice further alleged that Respondent did not respond to numerous supervisory control and data acquisition (SCADA) communication failure reports.

The Response stated that the communication outages reported by the SCADA system were brief (one to two seconds) and occurred for a limited period of time. Respondent stated that each time the communications link with its Operations Control Center was reestablished nearly instantaneously, and personnel in the field confirmed with the Operations Control Center that the link was reestablished. Respondent stated that the outages were ultimately attributed to a disruption on the phone lines between Texas and Maine. At the hearing Respondent produced a copy of its Operations Control Center "daily trouble log report." The report described the location and nature of each event and the date the event was taken care of. Respondent stated its manual addresses loss of communications. Based on the evidence presented, I am withdrawing this allegation of violation.

Item 9 in the Notice alleged that Respondent violated § 195.416 (this regulation was removed and reserved December 27, 2001; see 66 Fed. Reg. 66994, 67004; it has been replaced by § 195.583). The Notice alleged that Respondent failed to examine pipe for evidence of external corrosion. The Notice specifically alleged that Respondent did not follow up on a Leak Maintenance and Exposed Pipe Report of disbonded coating on its Massachusetts System in 2001. Respondent's personnel issued the report after repairing dents in two locations.

The Response pointed out that, notwithstanding the report of disbonded coating, there was no evidence of corrosion. Respondent disputed that the regulation requires addressing the disbonded coating; the regulation requires examining the pipe for external corrosion, and if there is pitting, active corrosion, or a corrosion-caused leak, then the operator must investigate further to determine the cause of corrosion.

Because there was no evidence of corrosion, and the regulation does not require that Respondent address the disbonded coating, I am withdrawing this allegation of violation.

Item 12 in the Notice alleged that Respondent violated 49 C.F.R. § 199.23(a)(5) in failing to keep records showing that Respondent's supervisors and employees had been trained in their Drug and Alcohol Plan for at least three years. (§ 199.23 was redesignated § 199.117 on September 11, 2001; the subsection in question remains unchanged and is now § 199.117(a)(5)).

The Response stated that Respondent's supervisors and employees were trained more than three years ago. Respondent nevertheless supplied OPS with documentation showing its supervisors and employees had received drug awareness training.

Because it does not appear that Respondent did not keep the training records for three years after training its supervisors and employees, I am withdrawing this allegation of violation.

ASSESSMENT OF PENALTY

Under 49 U.S.C. § 60122, Respondent is subject to a civil penalty not to exceed \$100,000 per violation for each day of the violation up to a maximum of \$1,000,000 for any related series of violations.

49 U.S.C. § 60122 and 49 C.F.R. § 190.225 require that, in determining the amount of the civil penalty, I consider the following criteria: nature, circumstances, and gravity of the violation, degree of Respondent's culpability, history of Respondent's prior offenses, Respondent's ability to pay the penalty, good faith by Respondent in attempting to achieve compliance, the effect on Respondent's ability to continue in business, and such other matters as justice may require.

The Notice proposed a civil penalty of \$25,000 for violation of § 195.402(a). Each of the six instances alleged in the Notice highlighted Respondent's failure to prepare and follow a manual of written procedures. In each such instance, employees tend to make ad hoc, "seat of the pants" determinations, which can pose a risk to operations. Respondent has not shown any circumstance that would justify reducing the \$25,000 civil penalty.

The Notice proposed a civil penalty of \$35,000 for violation of § 195.402(c)(12). The manual of written procedures must include procedures for maintaining a liaison with fire, police and other appropriate officials. The purpose is safety. Basic to the liaison relationship is the mutual exchange of accurate information. Respondent's posting and distributing inaccurate emergency telephone numbers puts the public at a disadvantage in an emergency. Respondent has not shown any circumstance that would justify reducing the \$35,000 civil penalty.

The Notice proposed a civil penalty of \$5,000 for violation of § 195.402(c)(14). Because I have withdrawn this allegation, the associated civil penalty is also withdrawn.

The Notice proposed a civil penalty of \$10,000 for violation of § 195.403(a)(3). The importance of a training program to instruct operating and maintenance personnel to recognize emergency conditions, predict the consequences of facility malfunctions and product spills, and to take corrective action, hardly needs emphasis. Precisely because it is so important, it does not suffice to have supervisors sign a declaration that they comply with the requirements of § 195.403(c). Respondent has not shown any circumstance that would justify reducing the \$10,000 civil penalty.

The Notice proposed a civil penalty of \$30,000 for violation of § 195.404(a)(1). In the discussion of Item 7, above, I found that the evidence did not support 4 of the 11 instances of violation. I therefore reduce the civil penalty proportionately and assess a civil penalty of \$19,000 for the 7 proved instances of violation.

The Notice proposed a civil penalty of \$24,000 for violation of § 195.428(a). The allegation regarding the tanks was the more serious aspect of this violation. The tanks were found not to constitute breakout tanks. I assess a civil penalty of \$3,000 for the Springfield Station Control pressure controller set point aspect of the violation, because it is similar in nature to instance number 6 of Item 7.

Finally, the Notice proposed a civil penalty of \$5,000 for violation of § 199.23(a)(5). Because I have withdrawn this allegation, the associated civil penalty is also withdrawn.

Accordingly, having reviewed the record and considered the assessment criteria, I assess respondent a total civil penalty of \$92,000. A determination has been made that Respondent has the ability to pay this penalty without adversely affecting its ability to continue in business.

Payment of the civil penalty must be made within 20 days of service. Federal regulations (49 C.F.R. § 89.21(b)(3)) require this payment be made by wire transfer, through the Federal Reserve Communications System (Fedwire), to the account of the U.S. Treasury. Detailed instructions are contained in the enclosure. Questions concerning wire transfers should be directed to: Financial Operations Division (AMZ-120), Federal Aviation Administration, Mike Monroney Aeronautical Center, P.O. Box 25082, Oklahoma City, OK 73125; (405) 954-8893.

Failure to pay the \$92,000 civil penalty will result in accrual of interest at the current annual rate in accordance with 31 U.S.C. § 3717, 31 C.F.R. § 901.9 and 49 C.F.R. § 89.23. Pursuant to those same authorities, a late penalty charge of six percent (6%) per annum will be charged if payment is not made within 110 days of service. Furthermore, failure to pay the civil penalty may result in referral of the matter to the Attorney General for appropriate action in a United States District Court.

COMPLIANCE ORDER

The Notice proposed a compliance order with respect to items 1, 2, 3, 4, 7, 8, 9, and 10.

Under 49 U.S.C. § 60118(a), each person who engages in the transportation of hazardous liquids or who owns or operates a pipeline facility is required to comply with the applicable safety standards established under chapter 601. Pursuant to the authority of 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, Respondent is ordered to take the following actions to ensure compliance with the pipeline safety regulations applicable to its operations.

In reference to Item 1 in the Notice:

- 1) Prepare procedures specifying how spare mainline pipe will be uniquely and unequivocally identified and stored in the field. Identification must correlate the respective manufacturer's material test reports of mechanical, chemical and physical properties to the spare mainline pipe.
 - a) Conduct an internal field audit to confirm that all mainline pipe stored in the field and designated as spare or replacement pipe has been marked and positively identified in accordance with the new procedure.
 - b) Submit a report of the results of the field audit and a copy of the procedure described in Item 1 of the Compliance Order to the Director, Eastern Region within 90 days of receipt of this Final Order.

In reference to Item 2 in the Notice:

- 2) Review all river and stream "Waterway Crossing Inspection Reports" to confirm that no other areas of "exposed" or "freely suspended" pipe exist.
 - a) Evaluate all areas of "exposed" or "freely suspended" pipe and immediately reestablish their pipeline safety integrity using recognized pipeline industry standards such as sleeving, lowering, boring, and other well-established and proven engineering techniques.
 - b) Submit a report of the review and evaluation described in Items 2 and 2a of the Compliance Order, including a list of the field locations, prioritized by the potential threat to public health, safety and welfare and to the environment which require remedial action to the Director, Eastern Region, OPS within 90 days of receipt of the Final Order.
 - c) The report described in Item 2b of the Compliance Order must include the proposed remedial action to reestablish pipeline safety and integrity and projected completion date of all field repair work.

In reference to Item 3 in the Notice:

- 3) Include, in your operations and maintenance manuals, explicit written instructions for the work sequence to be followed by operating personnel for the following procedures:
 - a) changing from suction tanks, or changing to discharge tanks that are directly connected to an operating pipeline, without shutting down the pipeline during the respective tank change (that is, the procedure known by some of your personnel as “flying switches”);
 - b) pumping down mainline station oil sumps;
- 4) Identify all areas where welded patches were used for repairs and ensure that the integrity of the pipeline repair is according to industry standards.

In reference to Item 4 in the Notice:

- 5) Conduct a check of phone numbers and other contact information on all warning signs along the rights-of-way, road, railroad, and river crossings, and on the fences and gated entrances of all pump and ancillary stations involved in the transportation of hazardous liquids
 - a) Submit a report of the number of signs that were replaced or added and their locations to the Director, Eastern Region, OPS within 90 days of receipt of the Final Order.

In reference to Item 7 in the Notice:

- 6) Review all existing:
 - a) mainline pump station electrical and mechanical drawings, including all process, instrumentation, and control drawings, to ensure that they accurately reflect the existing facility configurations.
 - b) Schematic drawings of mainline pump station piping and tank farm manifold piping and confirm that all uniquely numbered valves shown on the schematic drawings have been completely marked, tagged, and visually identified at all field locations.
 - c) Mainline pump station electrical and mechanical drawings, including all process, instrumentation, and control drawings, to ensure that they accurately reflect the location of all safety relief devices. Review all annual maintenance checklists and ensure they comprehensively list each safety relief device shown on the drawings, and list accurate operational set points for each safety relief device. Ensure that annual maintenance checklists conform to the facility drawings.
- 7) Prepare a report when the review required in Items 6a, b, and c have been completed, stating that the review required in Items 6a, b, and c and all corresponding corrections and approvals have been completed. Submit the report to the Director, Eastern Region, OPS within 270 days of receipt of the Final Order.

Because I withdrew Items 8 and 9 in the Notice, there are no corresponding items in this Compliance Order.

In reference to Item 10 in the Notice:

- 8) Conduct a comprehensive field review of all your pipeline facilities to ensure that all manually operated valves that have the potential to isolate a safety relief device (so that the safety relief device does not perform its intended function) have been adequately secured against inadvertent closure.
- a) Include in the review required by Item 8 of this Compliance Order a verification that all safety relief set points in the field have been determined by engineering calculations and confirmed by the responsible person in charge and that the set points perform as required without exceeding the Maximum Operating Pressures of their respective systems.
 - b) Submit a report when the review required in Items 8 and 8a has been completed, stating that the review required by Items 8 and 8a has been completed and all safety relief devices located on the pipeline filed facilities are adequate and set to perform their intended function. Submit the report to the Director, Eastern Region, OPS within 90 days of receipt of the Final Order.

The Regional Director may extend the period for complying with any of the required items if the Respondent requests an extension and adequately justifies the reasons for the extension.

Failure to comply with this Final Order may result in the assessment of civil penalties of up to \$100,000 per violation per day, or in the referral of the case for judicial enforcement.

Under 49 C.F.R. § 190.215, Respondent has a right to submit a Petition for Reconsideration of this Final Order. The petition must be received within 20 days of Respondent's receipt of this Final Order and must contain a brief statement of the issue(s). The filing of the petition automatically stays the payment of any civil penalty assessed. All other terms of the order, including any required corrective action, remain in full effect unless the Associate Administrator, upon request, grants a stay. The terms and conditions of this Final Order are effective on receipt.



Stacey Gerard
Associate Administrator
for Pipeline Safety

AUG 24 2004

Date Issued