Mr. John W. Somerhalder, II President El Paso Energy Pipeline Group 1001 Louisiana Houston, Texas 77002

Re: El Paso Natural Gas Company CPF No. 420001004-H

Dear Mr. Somerhalder:

Enclosed is a Corrective Action Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case. Service is being made by certified mail and telecopy. Your receipt of the enclosed document constitutes service of that document under 49 C.F.R. § 190.5. The terms and conditions of this Corrective Action Order are effective upon receipt.

Sincerely,

Gwendolyn M. Hill Pipeline Compliance Registry Office of Pipeline Safety

Enclosure

cc: Mike Ferguson, Esq

El Paso Natural Gas Company

VIA CERTIFIED MAIL (RETURN RECEIPT REQUESTED) AND TELECOPY

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# DEPARTMENT OF TRANSPORTATION RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION WASHINGTON, DC 20590

	)	
In the Matter of	)	
El Paso Natural Gas Company,	)	CPF No. 420001004-H
Respondent.	)	
	)	

#### CORRECTIVE ACTION ORDER

### **Purpose and Background**

This Corrective Action Order (Order) is being issued, under authority of 49 U.S.C. § 60112 to require El Paso Natural Gas Company (El Paso), a wholly owned subsidiary of the El Paso Energy Corporation, to take the necessary corrective action to protect the public and environment from potential hazards associated with its pipeline. The El Paso Pipeline System is both owned and operated by El Paso. The El Paso Pipeline System operates in Texas, Oklahoma, New Mexico, Colorado, Arizona and California. The Office of Pipeline Safety (OPS) has found that corrective action is necessary to prevent the recurrence of a failure similar to that which occurred on August 19, 2000.

On August 19, 2000, at approximately 5:30 a.m. MDT, El Paso's 30-inch natural gas transmission line 1103 ruptured and ignited near a Pecos River crossing in Eddy County, a rural area approximately 30 miles southeast of Carlsbad, New Mexico. The release and subsequent ignition resulted in eleven deaths and one critical injury.

Pursuant to 49 U.S.C. § 60117, the Southwest Region, OPS initiated an investigation of this incident.

#### **Preliminary Findings**

1. On August 19, 2000, at approximately 5:30 a.m. MDT, El Paso's 30-inch natural gas transmission line 1103 (line 1103) ruptured and ignited near a Pecos River crossing in Eddy County, a rural area approximately 30 miles southeast of Carlsbad, New Mexico, and

approximately 3000 feet upstream of El Paso's Pecos River Compressor Station and 300 feet on the east side of the Pecos River. The release and subsequent ignition resulted in eleven deaths and one injury.

- 2. Line 1103 is both owned and operated by El Paso and transports natural gas from its Keystone Compressor Station in Winkler County, Texas to La Paz County, California. It passes through or near the cities of El Paso, Texas; and Tucson and Phoenix, Arizona.
- 3. The ruptured pipeline, Line 1103, runs parallel to two other pipelines, Line 1100 and Line 1110 at the Pecos River crossing Lines 1103 and 1110 are 30 inches in diameter and were built in 1950. Line 1100 is 26 inches in diameter and was built in 1947.
- 4. Line 1100 and its suspension cable bridge sustained an undetermined amount of damage at the Pecos River crossing, due to the fire. It is still undetermined whether Line 1110 sustained damage.
- 5. The release occurred on a 30-inch segment of Line 1103 pipeline at a low point in a section of the piping that does not allow an internal cleaning tool to traverse through it. This segment runs from the Keystone Compressor Station to the Pecos River Compressor Station. This segment is constructed with 30-inch, DSAW X52 pipe with varying wall thicknesses.
- 6. Line 1103 has a maximum allowable operating pressure (MAOP) of 837 psig and has not been hydrostatically tested in its entirety since its construction in 1950.
- 7. The Keystone Compressor Station's operating pressure in effect at the time of the rupture at approximately 5:30 a.m. MDT on August 19, 2000 was 781 psig.
- 8. Preliminary investigation of Line 1103 by OPS and National Transportation Safety Board (NTSB) investigators indicates that significant internal corrosion was visible on the failed section. Internal corrosion may have been a contributing factor in the line failure. The possibility of internal corrosion on other lines in the area is a safety concern.
- 9. The cause of the incident is currently unknown as the investigation is on-going and all facts have not yet been determined.
- 10. Metallurgists and investigators are presently at the failure site to perform an evaluation of the failed pipe.
- 11. The El Paso pipelines are critical suppliers of natural gas to Arizona and Southern California. El Paso has arranged for rerouting gas supply from other storage sites.

## **Determination of Necessity for Corrective Action Order and Right to Hearing**

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action as appropriate. The basis for making the determination that a pipeline facility is hazardous, requiring corrective action, is set forth both in the above referenced statute and 49 C.F.R. §190.233, a copy of which is enclosed.

Respondent has orally waived the need for a prior written notice and hearing. Respondent has received oral notice of the terms of this order.

After evaluating the foregoing preliminary findings of fact, I find that the resumed and continued operation of EL Paso's pipelines without corrective measures would be hazardous to life, property and the environment, and issue this Corrective Action Order mandating needed immediate corrective action. The terms and conditions of this Order are effective upon receipt.

Within 10 days of receipt of this Order, the Respondent may request a hearing, to be held as soon as practicable, by notifying the Associate Administrator for Pipeline Safety in writing, delivered personally, by mail or by telecopy at (202) 366-4566. Any hearing will be held in Houston, Texas or Washington, D.C. on a date that is mutually convenient to OPS and the Respondent.

After receiving and analyzing additional data in the course of this investigation, OPS may identify other measures that need to be taken. Respondent will be notified of any additional measures required and amendment of this Order will be considered. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

#### Required Corrective Action

Pursuant to 49 U.S.C. 60112, I hereby order El Paso Natural Gas Company to take the following corrective actions with respect to its pipelines in the vicinity of the Pecos River in New Mexico:

With respect to the line segment between valve no. 6 and the Pecos River Compressor Station on Line 1110,

- 1. Do not operate this segment until items 2 through 4 are completed and determined acceptable by the OPS Southwest Region Director:
- 2. Directly assess the integrity of the line pipe at all low points, pig traps, dead end stub lines, and crossover piping that may have a no flow condition, and any other

section of piping that liquids might settle in, and implement any needed corrective action. The direct assessment must include both x-ray and ultrasonic examinations to determine possible metal loss.

- 3. Hydrostatically test the line segment to 90 percent (90%) specified minimum yield strength (SMYS).
- 4. After completion of item 3, but before resuming operation, submit a return to service plan to the Region Director for his approval. The return to service plan should include a summary of all findings to date.
- 5. Once operation is resumed, restrict the maximum allowable operating pressure to 80 percent (80%) of the operating pressure of Line 1103 at the time of failure, which was calculated to be 538 psig.
- 6. Maintain the pressure restrictions until written authorization is given to exceed them by the Associate Administrator for Pipeline Safety. The Associate Administrator will review within ten (10) working days, and consider removing, this pressure restriction following receipt of additional information about the factors that may have played a role in the accident of August 19, 2000 and the applicability of those factors to the operation of Line 1110.

With respect to the line segment between valve no. 6 and the Pecos River Compressor Station on Line 1103,

7. Do not operate this segment until a review of additional information about the factors that may have played a role in the accident of August 19, 2000, and the applicability of those factors to the operation of Line 1103.

With respect to the line segment between station 2482+52 to the Pecos River Compressor Station on Line 1100,

- 8. Do not operate this segment it shall remain out of service until items 9 through 12 are completed and determined acceptable by the OPS Southwest Region Director:
- 9. Submit the design for the temporary crossing of the Pecos River to the Region Director for his approval.
- 10. Directly assess the integrity of the line pipe at all low points, pig traps, dead end stub lines, crossover piping that may have a no flow condition, and any other section of piping that liquids might settle in, and implement any needed corrective action. The direct assessment must include both x-ray and ultrasonic examinations.

- 11. After installation of the new crossing, but before operating the segment, hydrostatically test it to 90 percent (90%) SMYS.
- 12. After completion of item 11, but before resuming operation, submit a return to service plan to the Region Director for his approval. The return to service plan should include a summary of all findings to date.
- 13. Once operation is resumed, restrict the maximum allowable operating pressure to 80 percent (80%) of the operating pressure of Line 1103 at the time of failure, which was calculated to be 538 psig.
- 14. Maintain the pressure restrictions until written authorization is given to exceed them by the Associate Administrator for Pipeline Safety. The Associate Administrator will review within ten (10) working days, and consider removing, this pressure restriction following receipt of additional information about the factors that may have played a role in the accident of August 19, 2000 and the applicability of these factors to the operation of Line 1100.

With respect to the line segments between the Keystone Compressor Station and the Guadalupe Compressor Station on Lines 1110 and 1103, and between the Eunice Compressor Station and the Guadalupe Compressor Station on Line 1100,

- 15. Take immediate steps to restrict the maximum allowable operating pressure to 668 psig, which is 80 percent (80%) of the maximum operating pressure. The required pressure restriction must be achieved within five (5) days of the receipt of this Order.
- 16. Maintain the pressure restrictions until written authorization is given to exceed them by the Associate Administrator for Pipeline Safety. The Associate Administrator will review within ten (10) working days, and consider removing, this pressure restriction following receipt of additional information about the factors that may have played a role in the accident of August 19, 2000, the applicability of these factors to the operation of Line 1110 and Line 1100, and the satisfactory completion of items 17 through 19.
- 17. Identify all crossings that cannot be traversed with an internal cleaning tool, similar to the Pecos River crossing, areas of no flow, and areas that include, but are not limited to, dead end pipe stubs, pig traps, valved off cross-overs, low spots, and any other section of piping that liquids might settle in.

- 18. After completion of item 17, develop a risk based plan to inspect, assess, and correct, as necessary, all of the areas identified in item 17 for signs of internal corrosion or other metal loss. Perform those inspections and provide the OPS Southwest Region Director with the results of the inspections.
- 19. Within 90 days of issuance of this Order, provide the Region Director an analysis of the continued safe operation of Line 1100, Line 1103, and Line 1110 based on the testing and inspection required under this Order, what is discovered about the failure of August 19, 2000, and other information available to the operator about the integrity of these pipelines.

With respect to all segments and all other areas mentioned in this Order:

- 20. Prior to implementing any correction action, which includes, but should not be limited to, repairs or replacements, submit a corrective action plan to the OPS Southwest Region Director for review and approval. The plan must describe the criteria for evaluating the corrosive area and the criteria used for selecting the corrective action. The corrective action must also meet current industrial standards and regulatory requirements.
- 21. In order to fully evaluate the information requested in this order, submit to the National Pipeline Mapping System (NPMS) all El Paso geospatial pipeline data that was not included in the Tennessee Gas Pipeline Company submission to the NPMS. If unable to include metadata initially, include both the geospatial and attribute data as discussed in the NPMS Operator Standards. Submit the data by August 24, 2000.
- 22. Submit any design for permanent Pecos River crossings for the OPS Southwest Region Director's approval. All permanent designs must include, but not be limited to, the ability of these segments to be traversed by an internal inspection tool.
- 23. Provide OPS with 48 hours advance notice prior to beginning the direct assessments, hydrotesting, and any corrective action required by this order to allow OPS to observe the actions.
- 24. Based on the results of the above requested information, develop a plan to assess the integrity of the remainder of the El Paso Pipeline System. The plan should include, but not be limited to, the actions required in Items 17 through 19.
- 25. The OPS Southwest Region Director may extend the time for compliance with any of the terms of this order for good cause. Extension requests must be in writing.

The procedures for the issuance of this Order are described in Part 190, Title 49, Code of Federal Regulations. Section 190.233, a copy of which is enclosed, is made part of this Order and describes the Respondent's procedural rights relative to this Order.

Failure to comply with this Order may result in the assessment of civil penalties of not more than \$25,000 per day and in referral to the Attorney General for appropriate relief in United States District Court.

Sincerely,

Stacey Gerard Associate Administrator for Pipeline Safety