

U.S. Department of Transportation

**Research and
Special Programs
Administration**

Mr. Don Brinkley
President/CEO
Colonial Pipeline Company
3390 Peachtree Road, NE
Lennox Towers
Atlanta, Georgia 3302--1108

July 3, 1997

Re: CPF No. 26503-H

Dear Mr. Brinkley:

Enclosed is a Consent Order that has been issued by the Associate Administrator for Pipeline Safety. The Consent Order incorporates the terms of the Agreement Colonial has entered into in this case and requires Colonial to comply with the Agreement. In addition, the Consent Order addresses the issues raised in the hearings on this case.

Your receipt of the enclosed document constitutes service of that document under 49 C.F.R. Section 190.5.

Sincerely,

Gwendolyn M. Hill
Pipeline Compliance Registry
Office of Pipeline Safety

Enclosure

CERTIFIED MAIL--RETURN RECEIPT REQUESTED

DEPARTMENT OF TRANSPORTATION
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
Washington, D.C.

In the Matter of)
)
Colonial Pipeline Company,)
)
Respondent.)
_____)

CPF No. 26503-H

CONSENT ORDER

On July 31, 1996, I issued a Hazardous Facility Order and Notice Proposing to Amend the Order following opportunity for hearing. Although both actions are included within a single document, the separate actions are hereinafter referred to as the "July 31, 1996 Order" and the "Notice". The July 31, 1996 Order required Colonial Pipeline Company ("Colonial" or "Respondent") to take immediate corrective action with respect to two locations on its pipeline in South Carolina and with respect to certain pressure controlling switches. The Notice proposed to require Colonial to undertake a long-term program of internal inspection.

By letter of August 8, 1996, Respondent requested a hearing on the July 31, 1996 Order and the Notice. The hearing was conducted in two stages. The first stage was conducted by telephone on August 23, 1996. The second was conducted in the offices of the Southern Region, Office of Pipeline Safety (OPS), in Atlanta, Georgia, on September 26, 1996.

Discussion of issues raised in the hearing. Respondent raised several issues in the hearing. The first of the issues, raised at both stages of the hearing, was the use in the July 31, 1996 Order of the term "maximum allowable operating pressure". Colonial noted that the term does not appear in 49 C.F.R. Part 195 and that, although Colonial understood what was meant, it could be confusing. The term used in Part 195 is maximum

operating pressure. As used in Part 195, maximum operating pressure governs normal operating pressure of a pipeline, but allows an additional 10% for surge pressures or other variances from normal operations. The term "maximum allowable operating pressure" is used in Part 192 to restrict absolutely the operating pressure of gas pipelines. I agree that gas pipeline terminology for pressure should not have been used to apply to a hazardous liquid pipeline. Accordingly, the term "maximum operating pressure" should have been used in the first paragraph of the July 31, 1996 Order. In Item #1 of the Required Corrective Action on page 5, the term was used to mean a restriction that did not allow an additional 10% for surges. Therefore the term "maximum allowable operating pressure" in that section should have read "operating pressure including surge pressure." In the hearing, Colonial confirmed that that was Colonial's understanding of what was meant in Item # 1.

Colonial also noted inaccuracies in describing locations of certain anomalies in the July 31, 1996 Order. I agree that the descriptions should be corrected, but note that there was no misunderstanding on the part of Colonial as to the location of the anomalies. In particular, in Items # 1 and ~ 2 of the Required Corrective Action on page 5, "Little Creek" occurring in both items should be properly designated Reedy Creek. Furthermore the anomaly denoted in Item # 2 as being "in" Broad River was actually located near, but not in, the Broad River. This error in describing the location of the Broad River anomaly had also occurred in Preliminary Findings, paragraph e. on page 2 of the July 31, 1996 Order. The last sentence in that section should have read "Both areas are located in or near water crossings..."

With respect to the same two anomalies, Colonial questioned the characterization of them as "general corrosion." The actual language questioned reads as follows:

The consultant Ehired by the Office of Pipeline Safety (OPS) to review and evaluate the raw data from the smart pig runs] has identified to OPS two additional significant anomalies which *may* indicate areas of general corrosion.

July 31, 1996 Order, p. 2 (emphasis added)⁶. The statement describes the consultant's opinion as to what the anomalies

could indicate. The opinion is based on the raw pig data and does not amount to a characterization of the conditions at the locations established after direct examination. I see no reason to change the language since it accurately describes the consultant's opinion. I note that the pipe containing these two anomalies has since been removed from the line and the record before me does not indicate whether in fact general corrosion was found at those locations.

Colonial also argued that the following language in the preliminary findings should be stricken:

Thus, any discrepancies between the actual and predicted performance of pressure control devices may well be systemwide.

July 31, 1996 Order, p. 3, preliminary finding h. I disagree. At the time the July 31 1996 Order was issued, OPS was concerned about an apparent discrepancy between certain pressure control switches and the transient flow model. The existence of both the unanticipated overpressure that occurred in the Simpsonville, South Carolina accident and the other overpressures that have occurred on Colonial's system coupled with a single location for control make a suspicion of system-wide impact reasonable. Colonial's concern is that the system-wide impact played a central role in the formal determination of hazardous facility. However, that concern is moot since the determination of hazardous facility made in the July 31, 1996 Order is being canceled as no longer necessary because of this Consent Order.

Incorporation of Agreement and issuance. By the attached Agreement, Colonial has agreed to the issuance of this Consent Order and performance of the corrective action described in the Agreement. Pursuant to 49 U.S.C. ~ 60112(c), notice and an opportunity to comment on the Agreement was provided to appropriate state officials from Maryland, New Jersey, North Carolina, South Carolina, Pennsylvania, Georgia, Mississippi, Delaware, Texas, Tennessee, Louisiana, and Virginia. Their comments have been considered. Accordingly, I hereby incorporate the terms of the Agreement and issue this Consent Order. The July 31, 1996 Order is rescinded.

Failure to comply with this Consent Order, including the terms of the incorporated Agreement, 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. The terms and conditions of this Consent Order are effective upon receipt.

This Consent Order does not fully address whether additional measures should be taken for the long-term safety of Colonial pipelines and of the original construction Pasadena-Linden line in particular. The task force established by OPS has examined those issues and additional measures may follow. If any additional measures are to be required through an order, the Respondent will be notified of that determination in writing through further action in this case or through the initiation of a separate case, as appropriate. To the extent consistent with safety, the Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional measures through an order.

Richard Felder
Associate Administrator for Pipeline Safety

Date Issued: July 3, 1997

AGREEMENT
CPF No. 26503-H

WHEREAS, pursuant to 49 U.S.C. § 60112, on July 31, 1996, the Office of Pipeline Safety (OPS), Research and Special Programs Administration (RSPA), issued to Colonial Pipeline Company (Colonial) a Hazardous Facility Order and Notice Proposing to Amend the Order Following Opportunity for a Hearing (Hazardous Facility Order and Notice Proposing to Amend the Order);

WHEREAS, the Hazardous Facility Order and the Notice Proposing to Amend the Order apply to Colonial's pipeline extending from Pasadena, Texas, to Linden, New Jersey constructed in the 1960's (original construction Pasadena-Linden line).

WHEREAS, the Hazardous Facility Order addressed two anomalies found following internal inspection in South Carolina as well as issues surrounding certain pressure controlling switches on the original construction Pasadena-Linden line;

WHEREAS, except for some follow-up work with respect to the pressure controlling switches on stub lines connected to the original construction mainline and on lines of newer construction, Colonial has completed actions required by the Hazardous Facility Order;

WHEREAS, the Notice Proposing to Amend the Order proposed corrective action on original construction Pasadena-Linden line to address pipe subject to rail transportation-induced fatigue except for those portions of the line, between Louisa, Virginia and Dorsey Junction, Maryland, that are already subject to such inspection under CPF No. 14501-H;

WHEREAS, the pipe subject to rail transportation-induced fatigue has been identified as double submerged arc welded pipe of .281 inch wall thickness manufactured by National Tube or Republic Steel;

WHEREAS, such pipe, not already previously inspected internally, remains only in some portions of the original construction Pasadena-Linden line identified by Colonial as the portions between the following points:

- I. M.P 407 in Jasper County, Mississippi and M.P. 942 in Cleveland County, North Carolina;
- ii. M.P. 288 in Carroll County, Maryland and M.P. 335 in Hartford County, Maryland; and
- iii. M.P. 389 in Delaware County, Pennsylvania and M.P. 484 in Middlesex County, New Jersey;

WHEREAS, Colonial objected to the scope of the of hazardous facility upon which the Hazardous is based and requested that a consent order be amending the Hazardous Facility Order; and initial finding Facility Order issued in lieu

WHEREAS, Colonial is willing to internally inspect the remainder of its original construction Pasadena-Linden line and, in addition, to conduct work with respect to the pressure controlling switches on stub lines connected to the original construction mainline and on lines of newer construction;

Therefore, Colonial and OPS agree as follows:

1. Colonial, as operator of the hazardous liquid pipeline facilities to which the Notice applies, is subject to the jurisdiction of 49 U.S.C. § 60101 etseq. and administrative orders issued pursuant thereto.
2. Colonial agrees to the issuance of an administrative order (Consent Order) incorporating the terms of this Agreement and waives any further procedural requirements, other than notice itself, with respect to its issuance and all rights to seek judicial review or otherwise contest its validity.
3. OPS agrees to withdraw the Hazardous Facility Order pursuant to 49 C.F.R. § 190.233(g) upon execution of an administrative order incorporating this Agreement. OPS also agrees not to make a determination of hazardous facility against Colonial based on the July 31, 1996 Notice Proposing to Amend the Order in this case.
4. Nothing in this Agreement bars RSPA from taking action based upon new evidence to address any hazardous situation which may arise with respect to Colonial's facilities. Colonial retains available defenses to such action including those available under 49 C.F.R. Part 190.
5. The terms of this Agreement are in addition to other duties imposed by 49 U.S.C. § 60101 etseq. and 49 C.F.R. Parts 195 and 199. Compliance with this Agreement does not excuse compliance with any of those duties. Nothing in this Agreement bars RSPA from taking action under 49 C.F.R. Part 190 to address any probable violation of the pipeline safety law or regulations.

6. The terms of this Agreement may be construed by reference to the Hazardous Facility Order or the Notice Proposing to Amend the Order. In case of conflict, the terms of this Agreement shall control.
7. Colonial agrees to complete the follow-up work with respect to the pressure controlling switches on stub lines connected to the original construction mainline and on lines of newer construction. This work includes reevaluating operational set points for these portions of the system on changes made to the transient flow model.
8. Colonial agrees to conduct an internal inspection of pipe of .281 inch wall thickness manufactured by National Tube or Republic Steel using the British Gas elastic wave pig, or its equivalent within five years of issuance of the Consent Order.
9. Colonial agrees to conduct internal inspection of portions of the original construction Pasadena-Linden line according to the schedule attached as Exhibit 1. Colonial will begin within 90 days of receipt of the Consent Order. The inspection will be conducted in accordance with an implementation plan approved by the Regional Director which will include the following:
 - a. Describe the minimum crack defects that will be identified by the pig, in terms of length and depth of defects. Cracks adjacent to the longitudinal weld that are at least as short as two and one-half inches in length, and at least as deep as 25% of the nominal wall thickness of the pipe must be identifiable.
 - b. Include non-destructive techniques to evaluate anomalies, destructive testing evaluation criteria, if any is needed, and other techniques to demonstrate the effectiveness of the pig run.
 - c. Include acceptance criteria that use engineering calculations to determine whether cracks or crack-like features remaining in the line will grow by fatigue due to the normal operating pressure fluctuations during service.

d. Taking the crack growth data described above [in a] into account, prepare an analysis to determine how long the pipeline could safely operate with those remaining cracks before another internal inspection, using a smart pig that could detect longitudinal seam defects, if needed. Submit this analysis to the Regional Director within 60 days after completion of the report of the elastic wave pig run.

e. The success of the pig run is subject to the concurrence by the Regional Director. In order to provide the Regional Director adequate assurance that the pig data accurately identifies the anomalies described in a., Colonial agrees to provide the Regional Director, within 10 days following completion of each dig cycle, pipe dig data compatible with existing database being used by the Eastern Region, OPS, in evaluating the results of other internal inspection required of Colonial by other orders. Colonial agrees that this data will include at least the pipe dig number, odometer reading, pig predicted data, field verified data collected using nondestructive evaluation methods, any remedial action taken, and the reason for the anomaly.

10. Beginning ~ (1/4 Colonial agrees to file quarterly reports with the Regional Director, on the progress made on the corrective measures required by this Agreement and the anticipated schedule for work in the upcoming quarter. These reports shall include, but not be limited to, the location and dates that internal inspections have occurred, anomalies identified as potentially requiring follow-up prior to receipt of the final report for the relevant pig run, and any follow-up actions, including correction, taken with respect to those anomalies.

11. OPS and state representatives may observe the conduct of any of the corrective action provided for in this Agreement. Colonial agrees to provide the Regional Director forty-eight hours advance notice of the initiation of an identifiable segment of the work.

12. Colonial agrees to provide OPS with reports obtained following successful smart pig runs within 10 days after completion of the respective reports.

13. The Regional Director may grant an extension of time, including modification of the schedule in Exhibit 1, upon receipt of a written request stating reasons an extension is needed, for completion of any of the actions required in this Agreement.

14. Any decision made by the Regional Director may be appealed to the Associate Administrator for Pipeline Safety.

Victor A. Yarborough
Vice President
Colonial Pipeline Company

Date: 7/1/97

Richard B. Felder
Associate Administrator
for Pipeline Safety

Date: 7/3/97

j¼..½.

Exhibit 1

The British Gas elastic wave tool will be used to inspect the following portions of the original construction Pasadena-Linden Pipeline according to the schedule indicated:

1. Collins Station, Covington County, Mississippi to Pelham Junction, Shelby County, Alabama:

March and April, 1997.

2. Atlanta Junction, Cobb County, Georgia, to Anderson Station, Anderson County, South

Carolina: June and July, 1997.

3. Anderson Station, Anderson County, South Carolina to Simpsonville Station, Greenville County, South Carolina: July and August, 1997.

3. Pelham Junction, Shelby County, Alabama to Atlanta Junction, Cobb County, Georgia: January

and February, 1998.

4. Dorsey Junction, Carroll County, Maryland to M.P. 335, Hartford County, Maryland: June and

July, 1998.

5. M.P. 389, Delaware County, Pennsylvania to Linden Junction, Middlesex County, New Jersey:

August and September, 1998.