

May 4, 2000

Mr. William J. Sim
Vice President/Manager
Potomac Electric Power Company
1900 Pennsylvania Avenue, NW
Washington, DC 20068-0001

Re: CPF No. 1-2000-6001-H

Dear Mr. Sim:

Enclosed is an amendment to the April 12, 2000 Corrective Action Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case. The Amendment makes changes appropriate to the current status of the investigation into the failure of April 7, 2000. These include modifications to and addition of information, and some new requirements. 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 amendment are effective upon receipt.

Sincerely,

Gwendolyn M. Hill
Pipeline Compliance Registry
Office of Pipeline Safety

Enclosure (49 C.F.R. § 190.233)

cc: William L. Gardner (Fax 202-467-7176) and Fred Johnson (Fax 972-931-6526)
Morgan, Lewis & Bockius Support Terminal Services
1800 M Street, N.W. 17304 Preston Road, Suite 1000
Washington, DC 20036-5869 Dallas, Texas 75252-5623

VIA CERTIFIED MAIL (RETURN RECEIPT REQUESTED) AND FAX

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

In the Matter of)	
Potomac Electric Power Company, Owner and)	CPF No. 1-2000-6001-H
Support Terminal Services, Operator)	
Respondents.)	

AMENDMENT TO CORRECTIVE ACTION ORDER

On April 12, 2000, the Associate Administrator issued a Corrective Action Order (Order) making preliminary findings of fact, and finding that the continued operation by Potomac Electric Power Company as owner and Support Terminal Services as operator (Respondents) of PEPCO's pipeline system, which transports fuel between the Piney Point marine terminal to the Morgantown and the Chalk Point electric generating plants through the Ryceville transfer station, would be hazardous to life, property, and the environment without the implementation of corrective measures. The Order required that corrective measures be taken prior to the return to service of PEPCO's pipeline system. It also required a plan to address training, personnel qualification, procedure and instrumentation issues. This Amendment supplements, discusses and revises certain information provided in the Order based upon information gained in the course of the investigation. It also adds specific requirements to the Order.

Addition and correction of information

! The Order indicated that the release was discovered at 2:30 pm, EDT. Although the precise time of discovery is not critical to this Order, the time stated in the Order may be inaccurate. According to Support Terminal Services, at 2:30 pm the flow of oil suddenly stopped and the pump at Chalk Point lost suction pressure. Support Terminal Services personnel then throttled the pump valve and performed tank gauging at the Chalk Point generating station and Ryceville transfer station. Calculations from the tank gauging showed a difference of 3,088.70 barrels (bbls). Support Terminal Services then conducted a valve alignment check which was verified correct. Next, tank gauging and meter reading were performed at Morgantown and Piney Point. Finally, all tank figures and meter readings were compared with the latest monthly inventory, and no discrepancies were found. At 3:34 pm, Support

Terminal Services shut down the pipeline pumping operation. At 3:50 pm, Support Terminal Services notified PEPCO personnel of the 3,088.70 bbls discrepancy. At 5:00 pm, Support Terminal Services called the Piedmont Flight Center to arrange for an emergency overflight of the pipeline. At 6:02 pm, during the emergency overflight of the pipeline, oil was visually identified in Swanson Creek. At 6:50 pm, PEPCO reported a release of 2,000 gallons¹ to the National Response Center.

- ! The Order indicated that the release occurred on a 12-inch segment of high frequency Electric Resistance Welded (ERW) pipe. The type of pipe stated may be incorrect. Therefore, the later part of Preliminary Finding No. 4 should be changed to read “1973 Electric Resistance Welded (ERW) pipe”, thus removing the words “high frequency.”
- ! When the Order was issued, only preliminary investigations had taken place. After further investigations, the following information has been determined:
 - ! The Order indicted that the pipe appears to have failed while running an internal cleaning tool. In fact, the incident occurred while propelling an internal cleaning tool that was followed by an internal gauging tool, using #2 fuel oil that was being pumped from the Chalk Point electric generating station to the Ryceville transfer station.
 - ! During the April 7, 2000 use of the internal cleaning tool and internal gauging tool, the level of the #2 fuel oil flushing tank at Chalk Point was measured with a dip-stick five times between 7:15 am and 12:20 pm (based on Support Terminal Services records). Whereas, the level of the receiving tanks at Ryceville was measured using a dip-stick at the start and end of pumping operations. Based on Support Terminal Services interviews, the tank at Ryceville was read intermittently using the tank wall gauge; however, those readings were not recorded or communicated to the Piney Point control center or to the personnel at Chalk Point during the pumping operations.
 - ! According to Support Terminal Services and PEPCO’s 1999 Operations and Maintenance Manual, the Daniels Solarflow Plus computer system records only the pressure, flow, temperature and hydrocarbon emissions at the pumping and generating stations when #6 fuel oil is being transferred through the pipeline. However, Support Terminal Services indicates that the information is not automatically transferred to the Piney Point pumping station. It is stored for 30 days and downloaded via telephone line, when requested.
 - ! The Daniels Solarflow Plus could not be used to record pressure, flow, temperature and hydrocarbon emissions because, due to a different piping configuration, #2 fuel oil does not flow through the Daniels Solarflow Plus during flushing operations at Chalk Point.
 - ! While reviewing PEPCO’s 1997, 1998 and 1999 Operations and Maintenance (O&M)

¹42 gallons = 1 bbl. Therefore, 2000 gallons is equivalent to approximately 47.62 bbls.

manuals, the following was noted:

- ! the table of contents of these manuals, lists in Section 6.5 the topic “Pipeline Pigging”; however, none of these manuals contained pipeline pigging procedures;
 - ! in Chapter 2.0 System Description of each of these manuals, Table 1 (page 4) referred to Figure 1 for a numbered mainline block valves listing; however, Figure 1 was not available in any of these documents; and
 - ! figure 8 - Component Schematic at the Chalk Point Fuel Oil Off-Loading Facility, does not agree with drawing number 7E-GSE-4048, which was approved on April 01, 1996. According to drawing number 7E-GSE-4048, the Daniels Solarflow Plus cabinet and monitor are shown upstream of valve FS-100. Actually, the cabinet and monitoring instrumentation are located downstream of valve FS-100 (based on flow of oil from pipeline into the station).
- ! When the Order was issued, the failure site had not been excavated. On April 14, the pipe was excavated at the location of the potential leak. A 5 inch long by 0.50 inch wide (at the widest location) crack was exposed at the 3 o'clock position in a bulge at or about 126.1' north from the valve pit on the north side of Swanson Creek.
- ! On August 16, 1997, an internal inspection report submitted by Pipetronix, did not identify the bulge (wrinkle bend). However, the internal inspection report did identify a “T-piece” in the general vicinity of the crack.
- ! To Preliminary Finding No. 9 - in the fourth line, the word “gaging” should be “gauging”.

Determination of Necessity for Amendment of 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.

Section 60112, and the regulations promulgated thereunder, provide for the issuance of a corrective action order without prior opportunity for notice and hearing upon a finding that failure to issue the order expeditiously will result in likely serious harm to life, property or the environment. In such cases, an opportunity for a hearing will be provided as soon as practicable after the issuance of the order.

Taking into consideration the facts alleged in the Order as well as the above factual amendments, I continue to find that the operation of this pipeline without corrective measures would be hazardous to life, property and the environment. Additionally, after considering the circumstances surrounding this failure, including the numerous possible factors, the proximity of the pipeline to populated areas and environmentally sensitive areas, and the continued uncertainties as to cause of the failure, I find that the failure to expeditiously issue this Amendment would result in likely serious harm to life, property, and the environment.

Accordingly, this Amendment mandating needed immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Amendment are effective upon receipt.

Within 10 days of receipt of this Amendment, 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 Washington, D.C. on a date that is mutually convenient to OPS and the Respondent. A hearing requested on this Amendment may be consolidated with the hearing that Respondent has already requested on the Order.

After receiving and analyzing additional data in the course of this investigation, OPS may identify other longer term measures that need to be taken. Respondent will be notified of any additional measures required and further amendment of the 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.

Discussion of amendments

Hydrostatic Testing

Based on the size of the spill as compared to the actual size of the crack at the identified failure point, the amount of product that escaped within the time period indicated by Support Terminal Services, may be excessive. In order to rule out the possibility that another crack exists that has not yet been identified, Respondent is required to hydrostatically test the segment of pipeline between the Chalk Point electric generating plant and the mainline block valve south of Swanson Creek.

Internal Inspection

In the course of the investigation, OPS learned that the 1997 internal inspection report, submitted by Pipetronix, did not identify the bulge (a “wrinkle bend”) at the failure site; however, it did identify a “T-piece” in the general vicinity of the crack, where there was none. Due to this finding, Respondents are required to submit a plan for identifying defects throughout the PEPCO

pipeline system, similar to what was found at the April 7, 2000 release point. The plan should include, but not be limited to: (a) a review of the previous internal inspection report logs by a third party with demonstrated expertise in interpreting internal inspection report data; (b) excavation of sites identified by this review of the internal inspection report logs for visual examination; (c) repairs as necessary; and (d) the use of internal inspection tool surveys and remedial action to the extent needed to address factors in the failure and verify the integrity of the pipeline.

Procedures

In the course of the investigation, OPS learned that documentation for monitoring operational parameters such as the mainline pressure, the flow rate, was not available during internal tool operations. Therefore, Respondents must ensure that specific operational procedures are in place to monitor pressure, flow rate, and any other necessary operational parameters during the passage of a cleaning or an internal inspection report.

Component Schematic Drawings

In the course of the investigation, OPS identified that the Component Schematic at the Chalk Point Fuel Oil Off-Loading Facility does not agree with drawing number 7E-GSE-4048, which was approved on April 1, 1996. Based on this information, Respondent must review, update and revise component schematic drawings to assure that the field installations are consistent with component drawings.

Amendments

Pursuant to 49 U.S.C. § 60112, I hereby amend the Order and require Respondents to immediately take the following additional corrective actions with respect to the PEPCO pipeline system.

The following new sections are added to the Order:

7. Hydrostatically test the segment of pipeline from the Chalk Point electric generating plant to the mainline block valve south of Swanson Creek. Testing must be conducted according to the Federal Pipeline Safety Regulations, Part 195.
8. Submit a plan for approval which will identify defects throughout the PEPCO pipeline system, similar to that which was found at the April 7, 2000 release point. The plan should include, but not be limited to:
 - a. a review of previous internal inspection report logs by a third party with demonstrated expertise in interpreting Internal inspection report data;

- b. excavation of sites identified by this review of the Internal inspection report logs for visual examination;
- c. repairs as necessary; and
- d. the use of internal inspection tool surveys and remedial action to the extent needed to address factors in the failure and verify the integrity of the pipeline.

The written plan should be submitted for approval and all results shared with the Director, Eastern Region, William H. Gute, Office of Pipeline Safety, RSPA, 400 Seventh Street, S.W., DPS-24, Suite 7130, Washington, DC 20590.

- 9 Ensure specific operational procedures are in place to monitor pressure, flow rate, and any other necessary operational parameters during the passage of a cleaning or an internal inspection report.
- 10. Review, update and revise component schematic drawings to assure that the field installations are consistent with component drawings.

The terms of the April 12, 2000 Corrective Action Order, as modified by this Amendment, remain in effect.

Failure to comply with the Corrective Action Order, as amended, 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 Amendment are effective upon receipt.

Richard B. Felder
Associate Administrator For Pipeline Safety

Date Issued: _____

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