June 18, 1999

Mr. Frank Hopf Vice President/Manager Equilon Pipeline Company LLC Olympic Pipeline Company 2319 Lind Avenue S.W. Renton, WA 98057

Re: CPF No. 59505-h

Dear Mr. Hopf:

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

VIA CERTIFIED MAIL (RETURN RECEIPT REQUESTED) AND TELECOPY

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

In the Matter of Equilon Pipeline Company, Respondent.

CPF No. 59505-h

CORRECTIVE ACTION ORDER

Purpose and Background

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112 to require Equilon Pipeline Company (Equilon) to take the necessary corrective action to protect the public and environment from potential hazards associated with its Olympic Pipeline. Olympic is owned and operated by Equilon. The Olympic Pipeline System originates at the ARCO and Tosco refineries in Ferndale, and the Equilon and Tosoro refineries in Anacortes, all in northern Washington, transporting petroleum products approximately 260 miles south into Portland, Oregon. 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 June 10, 1999.

On June 10, 1999, at approximately 4:43 PM PST, a release of approximately 3,600 to 6,600 barrels of gasoline occurred on the Olympic pipeline at milepost 16 in the city of Bellingham, Washington. The release originated onshore near the Bellingham Water Treatment Plant and entered Hannah Creek which carried the product into the Whatcom Creek where it was ignited by an unknown source. The release and subsequent ignition resulted in three deaths, eight injuries, and environmental damage to the Hannah and Whatcom Creeks. Additionally, property damage occurred to the Bellingham Water Treatment Plant, other industrial structures along the creeks, and at least one private residence.

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

Preliminary Findings

- 1. On June 10, 1999, at approximately 4:43 PM PST, a release of approximately 3,600 to 6,600 barrels of gasoline occurred from the Olympic 16-inch products pipeline at milepost 16 in the city of Bellingham, Washington resulting in three deaths, eight injuries, and environmental damage to approximately 1.5 miles of the Hannah and Whatcom Creeks.
- 2. The Olympic Pipeline is owned and operated by Equilon and transports petroleum products

from refineries located in Ferndale, Washington approximately 37 miles to the Allen Pump Station where products from refineries in Anacortes are also batched on the pipeline for continued transportation an additional 75 miles to markets south in the Seattle area.

- 3. The Olympic Pipeline began operation in 1965 and traverses through or near the cities of Bellingham, Avon, Arlington, Marysville, Mill Creek, Woodinville, Redmond, Bellevue, and Renton, Washington. Additionally the pipeline crosses environmental areas and water supplies such as Nooksack River, Samish Lake, Samish River, Skagit River, Pilchuck Creek, Stillaquamish River, Ebey Slough, and Snohomish River.
- 4. The release occurred on a 16-inch segment of the pipeline that runs from Ferndale to Allen, Washington. This segment is constructed with 0.312-inch wall thickness, 5LX52, Electric Resistance Welded (ERW) pipe of Lone Star and U.S. Steel manufacture.
- 5. The pipeline is constructed of electric resistance welded pipe manufactured prior to 1970. OPS has issued two Alert Notices ALN-88-01 and ALN-89-01 based on twelve seam failures of such pipe during 1988 and 1989. The Alert Notices advised pipeline operators with such pipe in their systems to take additional precautions to limit pressure, to hydrotest, and to assure adequate cathodic protection.
- 6. The Ferndale to Allen segment has a maximum operating pressure (MOP) of 1,370 psig and was hydrostatically tested, in February 1965, to a pressure of 1,713 psig for a duration of 24 hours. The normal operating pressure for the segment is 1,320 psig.
- 7. The operating pressure in effect at the time of the release at approximately 4:43 PM PST on June 10, 1999 is unknown.
- 8. Preliminary investigation indicates that the mainline block valve located at milepost 16.22 immediately upstream of the incident site either malfunctioned or was not closed in a timely fashion, resulting in as much as an additional 3,100 barrels of gasoline being released at the incident site.
- 9. Preliminary investigation indicates that the Supervisory Control and Data Acquisition System (SCADA) was not functioning properly prior to, and at the time of, the incident. System response time was reported as slow and the system's recording of some data was not consistent with normal operation.
- 10. The cause of the incident is currently unknown as the investigation is on-going and all facts have not yet been determined.
- 11. The failed pipe has not yet been viewed by investigators as the site has not been deemed safe for investigative efforts.

12. The Olympic pipeline is a critical supplier of refined products from four northern Washington state refineries to airports and other strategic markets in the Seattle, Washington and Portland, Oregon areas. Olympic has arranged for alternative forms of transportation for its products while the Ferndale to Allen pipeline segment is out of service.

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.

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 or a hearing will be provided as soon as practicable after the issuance of the Order.

After evaluating the foregoing preliminary findings of fact, I find that the continued operation of this pipeline without corrective measures would be hazardous to life, property and the environment. Additionally, after considering the circumstances surrounding this failure, the location of the pipeline to populated areas, and the uncertainties as to cause of the failure, I find that a failure to issue expeditiously this Order, requiring immediate corrective action, would result in likely serious harm to life, property, and the environment.

Accordingly, this Corrective Action Order mandating needed immediate corrective action is issued without prior notice and opportunity for a hearing. 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 Lakewood, Colorado 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 longer term 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 Equilon to immediately take the following corrective actions with respect to its Olympic Pipeline.

With respect to the Ferndale, Washington to Allen, Washington segment:

- 1. Do not operate this segment until completing Items 2 through 4, and obtaining the written approval of the Regional Director, Western Region of the plan provided for in Item 5.
- 2. Review the Supervisory Control and Data Acquisition System (SCADA) to determine the cause of the deficiencies that occurred on June 10, 1999, and correct these deficiencies.
- 3. Test mainline valves intended to isolate sections of the pipeline traversing populated and environmentally sensitive areas. Take any needed remedial action to assure they will perform their intended function.
- 4. Install a check valve adjacent to the Lakeway Drive block valve at milepost 16.22.
- 5. Develop a plan with corrective measures that address factors playing a role in the release. The plan must include the following items to the extent that they address factors in the release:
- a. A review of the existing mainline block valves and check valves taking into consideration elevation, population, and environmentally sensitive locations, and plan for additional mainline block valves and check valves to minimize the consequences of a release from the pipeline. The block valves will have remote operation capability as deemed appropriate by the review.
- b. A comprehensive review of the Supervisory Control and Data Acquisition System (SCADA) to detect any deficiencies, with a schedule for modifications.
- c. Cathodic protection surveys with scheduled remedial action.
- d. Pressure testing.
- e. Internal inspection tool surveys and remedial action to assure the integrity of the pipeline. The type of internal inspection tool used shall be the best available technology appropriate for accessing the system based on the type of failure that occurred on June 10, 1999.
- 6. Submit the written plan to the Director, Western Region, Office of Pipeline Safety, RSPA, 12600 West Colfax Ave., Suite A250, Lakewood, Colorado 80228.
- 7. Restrict the MOP of the Ferndale, Washington to Allen, Washinton to 1056 psig which is 80% of the normal operating pressure. Equilon may request approval from the Associate

Administrator, OPS to increase its pressure based on a showing that the hazard has been abated. OPS' approval must be in writing.

8. Implement the plan in Item 5 and coordinate all corrective actions with the Regional Director, Western Region, OPS to assure the integrity of the pipeline.

With respect to the 16" Allen, Washington to Renton, Washington segment:

- 9. Restrict the MOP of this segment to 80% of its normal operating pressure. Equilon may request approval from the Associate Administrator, OPS to increase its pressure based on a showing that the hazard has been abated. OPS' approval must be in writing.
- 10. Include consideration of this segment within the plan developed under Item 5.
- 11. The Regional Director may grant an extension of time upon receipt of a written request stating the reasons therefor, for completion of any of the items required under an approved plan.

The procedures for the issuance of this Order are described in Part 190, Title 49, Code of Federal Regulations, § 190.233, a copy of which is enclosed, is made part of this Order and describes the Respondents's procedural rights relative to this Order. Failure to comply with this Order may result in the assessment of civil penalties not more than \$25,000 per day and in referral to the Attorney General for appropriate relief in United States District Court.

Sincerely,

Richard B. Felder Associate Administrator for Pipeline Safety