MAY 27 2010

VIA FEDERAL EXPRESS, ELECTRONIC MAIL, AND FAX TO: 907-787-8586

Mr. Kevin Hostler President and CEO Alyeska Pipeline Service Company 900 East Benson Blvd. Anchorage, AK 99508

Re: Corrective Action Order CPF No. 5-2010-5017H

Dear Mr. Hostler:

Enclosed is a Corrective Action Order issued by the Pipeline and Hazardous Materials Safety Administration in the above-referenced case. It requires the Alyeska Pipeline Service Company to take certain corrective actions with respect its hazardous liquid pipeline system that experienced a failure and crude oil spill on May 25, 2010, at Pump Station 9, near Delta Junction, Alaska. Service is being made by Federal Express, facsimile and electronic mail. The terms and conditions of this Order are effective upon service of this document in accordance with 49 C.F.R. § 190.5.

Sincerely,

Jeffrey D. Wiese Associate Administrator for Pipeline Safety

Enclosure

cc: Mr. Chris Hoidal Director, Western Region, OPS

> Ms. Shelia Doody Bishop, Esq., Senior Counsel, Alyeska Pipeline Service Company (*by email*)

U.S. DEPARTMENT OF TRANSPORTATION PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION OFFICE OF PIPELINE SAFETY WASHINGTON, D.C. 20590

In the Matter of () Alyeska Pipeline Service Company, () Respondent.

CPF No. 5-2010-5017H

CORRECTIVE ACTION ORDER

Purpose and Background

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112, to require Alyeska Pipeline Service Company (Alyeska or Respondent), to take the necessary corrective action to protect the public, property, and the environment from potential hazards associated with a failure involving Respondent's hazardous liquid pipeline system which runs from the North Slope of Alaska to the Valdez Marine Terminal (Trans Alaska Pipeline System or TAPS).

On May 25, 2010, a failure occurred on TAPS resulting in a release of crude oil from a breakout tank that is part of the pipeline facility. The cause of the failure has not yet been determined. Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), initiated an investigation of the incident.

Preliminary Findings

- 1. Beginning at approximately 11:00 a.m. local time, on May 25, 2010, a failure occurred on Respondent's pipeline system, resulting in the release of an estimated 1400-2000 barrels of crude oil. The release occurred from Tank 190 a 55,000 barrel breakout tank at Pump Station 9 (PS9), located at Mile Post (MP) 548, near Delta Junction, Alaska, approximately 100 miles south of Fairbanks, Alaska.
- 2. On the morning of May 25, Alyeska was performing maintenance and testing activities on the fire control system at PS9. The pipeline system was temporarily shut down at the time. During the maintenance and testing activities, a problem developed with the uninterruptible power supply (UPS) system at PS9.
- 3. At approximately 11:00 a.m. local time, Alyeska personnel observed that crude oil was discharging from the vents on Tank 190 onto the ground. The release of crude oil appears to have been limited to the secondary containment area around Tank 190.

- 4. At approximately 11:35 a.m., Alyeska shut down all power to the station to minimize fire risks.
- 5. At approximately 11:50 a.m., Alyeska closed Battery Limit Valve 1 using a portable generator. The closure of this valve prevented oil from the pipeline upstream of PS9 from entering PS9. At approximately 12:16 p.m. Alyeska closed Battery Limit Valve 2 using a portable generator. The closure of this valve prevented oil from the pipeline downstream of PS9 from entering PS9.
- 6. Alyeska reported the accident to the National Response Center at 1:07 p.m. local time on May 25, 2010 (NRC Report No. 941598).
- 7. Alyeska did not report any injuries or fires associated with the release.
- 8. The cause of the failure is unknown and the investigation is ongoing. The preliminary investigation indicates that a failure occurred in the switching equipment that controls electrical power to PS9.
- 9. TAPS originates on the North Slope of Alaska, near Prudhoe Bay, transports crude approximately 800 miles to the south and terminates at the Valdez Marine Terminal. The line crosses rivers, mountains and populated areas. TAPS transports approximately 600,000 barrels of oil per day.
- 10. TAPS was commissioned in 1977 and was constructed from API 5L X-52, 48-inch diameter pipe.
- 11. PS9 is located in close proximity to a High Consequence Area (HCA) as defined in 49 C.F.R. § 195.450.
- 12. PHMSA has investigated safety issues at PS9 in the past, including a 2007 fire at Tank 190.
- 13. Photographs of Tank 190 indicate some structural damage in the upper course of the tank. Detailed examination of Tank 190 has not been performed due to the presence of spilled crude oil in the containment area surrounding the tank, and the potential presence of hazardous, flammable vapors in that area.
- 14. Alyeska reports that Tank 190 will remain out of service for an indeterminate period of time to allow for drain down, inspection and any needed repairs. Alyeska has indicated that it plans to operate TAPS without the overpressure relief capacity provided by Tank 190. Alyeska has indicated that relief capacity can be provided by breakout tanks at other locations along the pipeline.

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, and may require various corrective actions to be taken, including 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(e), and the regulations promulgated thereunder, provide for the issuance of a Corrective Action Order without prior notice and an opportunity for a 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.

After evaluating the foregoing preliminary findings of fact, I find that the operation of TAPS without corrective measures would be hazardous to life, property and the environment.

Additionally, after considering the age of the pipeline facility, the particular circumstances surrounding this failure and crude oil spill, the failure to actuate certain valves around the time of the spill, suspected problems with the PS9 electrical power system, the proximity of the pipeline and breakout tank to an HCA, the hazardous nature of the crude oil being transported, the pressure required for transporting the material when the line is operational, Alyeska's intention to restart the pipeline without the relief capacity provided by Tank 190, the uncertainties as to the cause of the failure, and the ongoing investigation to determine the cause of the failure, I find that a failure to issue this order expeditiously to require immediate corrective action would result in likely serious harm to life, property, and the environment. Accordingly, this Corrective Action Order mandating 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 service of this order, 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 facsimile at (202) 366-4566. The hearing will be held in Anchorage, Alaska or Washington, D.C., on a date that is mutually convenient to PHMSA and Respondent.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective 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.

<u>Required Corrective Action</u>

Pursuant to 49 U.S.C. § 60112, I hereby order the Alyeska Pipeline Service Company, to immediately take the following corrective actions with respect to TAPS:

- 1. Prior to resuming operation of TAPS, prepare and submit a written re-start plan for prior approval to the Director, Western Region, OPS (Director), Pipeline and Hazardous Materials Safety Administration, 12300 West Dakota Avenue, Lakewood, Colorado 80228. The restart plan shall include, at a minimum, the following elements:
 - a. A temporary operating procedure for restart and operation of TAPS without the use of PS9 relief tankage. The procedures shall include, at a minimum, a listing of all physical (hard) and computer software (soft) pipeline control setpoints that will be altered before restart.
 - b. Demonstrate that the contingency overpressure relief at Pump Station 5 (PS5) will operate in accordance with the temporary operating procedures required by paragraph 1(a), and is otherwise capable of controlling overpressure on TAPS.
 - c. Demonstrate that the System Integrity Pressure Protection System (SIPPS) will be provided with continuous, uninterruptible power and that Alyeska technicians are on location at PS9 24 hours per day, 7 days a week to ensure this.
 - d. The oil movement gradient for operating TAPS, including a listing of critical pinch points, with the PS9 relief system out of service. A critical pinch point is the location on the pipeline where the pressure gradient is close to the MOP of the pipeline.
 - e. Confirm that adjustment to the PS5 overpressure relief setpoint can and will be made within 75 seconds of any idling or shutdown of PS9.
 - f. A daylight restart and at least 12 hours advance notice to local emergency response officials and spill response personnel.
- 2. Obtain written approval to resume operation of TAPS from the Director prior to resuming operation.
- 3. Submit the restart plan and any proposed revisions to such plan to the Director for prior approval. The restart plan described above is incorporated by reference into this order and may be revised by the Director as necessary to incorporate the results of actions undertaken pursuant to this order and whenever necessary to incorporate new information obtained during the failure investigation and remedial activities. The Director may approve plan elements incrementally.
- 4. Implement the restart plan as it is approved by the Director, including any revisions to the plan.
- 5. After restarting the pipeline pursuant to written approval from the Regional Director, and until the Regional Director provides written relief upon request by Alyeska, perform the following activities:
 - a. Monitor Tank 190 containment area for hazardous and/or combustible vapors.

b. Locate personnel at PS9 24 hours per day, 7 days per week who are capable of reestablishing PS9 power if it is lost, operating station valves in the event of a power failure or loss of communications with the TAPS Operations Control Center (OCC), and shutting down and isolating PS9. Such personal shall be tested and operator qualified pursuant to 49 C.F.R. Part 195, Subpart G to perform such activities.

c. Locate a minimum of two dedicated, roving observers at PS9. The observers must be on site 24 hours a day, 7 days a week and must inspect PS9 every 30 minutes for leaks and any abnormal operations or activities. The observers must prepare and maintain a written hourly log of their inspections.

d. Submit daily updates to the Western Region Director of any abnormal operations, including, but not limited to any loss of communications or electrical power on TAPS.

- 6. Before putting Tank 190 back into service, conduct and document API 653 inspection of Tank 190. Such inspection shall be performed after draw down of the contents of the tank. Provide the Director, Western Region, with notice of the planned API 653 inspection at least 2 days prior to performing an inspection.
- 7. With respect to each submission that under this order requires the approval of the Regional Director, the Director may: (a) approve, in whole or part, the submission; (b) approve the submission on specified conditions; (c) modify the submission to cure any deficiencies; (d) disapprove in whole or in part, the submission, directing that Respondent modify the submission, or (e) any combination of the above. In the event of approval, approval upon conditions, or modification by the Director, Respondent shall proceed to take all action required by the submission as approved or modified by the Director. If the Director disapproves all or any portion of the submission, Respondent shall correct all deficiencies within the time specified by the Director, and resubmit it for approval.

The Director may grant an extension of time for compliance with any of the terms of this order upon a written request timely submitted demonstrating good cause for an extension.

The actions required by this Corrective Action Order are in addition to and do not waive any requirements that apply to Respondent's pipeline system under 49 C.F.R. Parts 190-199, under any other order issued to Respondent under authority of 49 U.S.C. § 60101 *et seq.*, or under any other provision of Federal or State law.

Respondent may appeal any decision of the Director to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator shall be final.

Failure to comply with this order may result in the assessment of civil penalties and in referral to the Attorney General for appropriate relief in United States District Court pursuant to 49 U.S.C. § 60120.

The terms and conditions of this Corrective Action Order are effective upon receipt.

Jeffrey D. Wiese Associate Administrator for Pipeline Safety Date Issued