

**OCT. 5, 2012**

**VIA CERTIFIED MAIL AND FAX TO: 1-713-296-2661**

Mr. Clarence P. Cazalot, Jr.  
President and CEO  
Marathon Oil Corporation  
5555 San Felipe Street  
Houston, TX 77056-2723

**Re: CPF No. 5-2012-0022H**

Dear Mr. Cazalot:

Enclosed is a Corrective Action Order issued in the above-referenced case. It requires Marathon Oil Corporation to take certain corrective actions to protect the public, property, and the environment with respect to its 20-inch intrastate natural gas pipeline along Kalifornsky Beach Road near Kenai, Alaska. Service is being made by certified mail and facsimile. Your receipt of this Corrective Action Order constitutes service of that document under 49 C.F.R. § 190.5. The terms and conditions of this Order are effective upon receipt.

We look forward to the successful resolution of the concerns arising out of this recent flooding event in a manner that will ensure the safe operation of the pipeline. Please direct any questions on this matter to Chris Hoidal, Director, Western Region, OPS, at (720) 963-3171.

Sincerely,

Jeffrey D. Wiese  
Associate Administrator  
for Pipeline Safety

Enclosure: Corrective Action Order and Copy of 49 C.F.R. §190.233

cc: Mr. Alan Mayberry, Deputy Associate Administrator for Field Operations, OPS  
Mr. Chris Hoidal, Director, Western Region, OPS  
Ms. Gretchen Watkins, Vice President, North America Production Operations, Marathon Oil Corporation  
Ms. Jill Niswonger, Midstream DOT Coordinator, Marathon Oil Corporation

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

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<b>In the Matter of</b>	)	
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<b>Marathon Oil Corporation,</b>	)	<b>CPF No. 5-2012-0022H</b>
	)	
<b>Respondent.</b>	)	
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**CORRECTIVE ACTION ORDER**

**Purpose and Background**

This Corrective Action Order (Order) is being issued, under authority of 49 U.S.C. § 60112, to Marathon Oil Corporation (MOC or Respondent), the operator of a 20-inch diameter pipeline that transports natural gas from the Kenai Gas Field Pad 14-6 to the 400 Meter Building and the Jumpover 6 Building south of Kenai, Alaska. The pipeline is buried parallel to, and within the right-of-way of, Kalifornsky Beach Road, a major roadway near Anchorage, and crosses an unnamed stream south of Kenai near Milepost 11.

On or about September 20, 2012, the road and supporting embankment washed out at the stream crossing due to heavy rain and flooding. This exposed a 75-foot portion of the pipeline suspended approximately 25 feet above the streambed. The portion of the pipeline between the isolation valves to each side of the washout (the Affected Pipeline), a distance of approximately one mile, was subsequently shut down but has now been placed back in service.

This Order finds that continued operation of the Affected Pipeline without corrective action would be hazardous to life, property, or the environment and requires Respondent to take immediate corrective action to ensure the safe operation of the pipeline. Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), initiated an investigation. The preliminary findings of the investigation are as follows:

**Preliminary Findings**

- Heavy rainfall during September 2012 caused streams, rivers and lakes throughout South Central Alaska to swell. On September 21, 2012, Alaska Governor Sean Parnell made a declaration of a state disaster for the Kenai Peninsula Borough, including the area where the Affected Pipeline is located.

- A portion of the Affected Pipeline is buried within the right-of-way (ROW) of Kalifornsky Beach Road, parallel to the roadbed, within 50 feet of the centerline of the pavement. Kalifornsky Beach Road is a major thoroughfare near Kenai, Alaska.
- On September 20, 2012, the Alaska Department of Transportation and Public Facilities (Alaska DOT) advised the public that Kalifornsky Beach Road embankment repairs were in progress to correct erosion and notified the public of the road closure on September 24, 2012. Alaska DOT opened a detour around the washout on Monday, October 1, 2012.
- Respondent indicates that the Affected Pipeline transports approximately 20% of the supply of natural gas to Anchorage.
- Respondent shut down the Affected Pipeline on Sunday, September 23, 2012, and blocked the pipeline in at a pressure of 8 psig.
- From September 23 to October 1, 2012, the natural gas that would have normally been transported by the Affected Pipeline was rerouted through a 12-inch diameter pipeline between Pad 14-6 and Pad 34-31 and associated facilities that constitute an Alternate Flow Path (AFP). The AFP consists of pipelines subject to PHMSA jurisdiction.
- The MAOP of the AFP pipeline is 495 psig and is in a Class 3 location. From September 23 to October 1, 2012, MOC operated the AFP at 700 psig.
- A PHMSA inspector visited the site of the washout on September 26, 2012, but was unable to access the Affected Pipeline near the washout due to safety concerns.
- MOC filed a Safety Related Condition Report (PHMSA SRCR # 20120081) on Friday, September 28, 2012, to report the washout. The report stated that the condition was discovered on Thursday, September 20, 2012. MOC determined the condition to be safety-related on Friday, September 21, 2012. Thus far, the pipeline has not released any product as a result of the washout.
- The Affected Pipeline washed out in this same location on at least two previous occasions, once in 1967 and again in 1991.
- At the washout site, there is currently an overhead cable suspension system attached to the Affected Pipeline in midair and is believed to have been installed in 1967 following the first washout. (The cables were partially buried until the September 20, 2010 washout.) The system consists of two pile “bents” or towers, horizontal steel cables, backstay cables, dead men, vertical steel cables, and approximately 40 feet of 24-inch casing that surrounds the 20-inch carrier pipe. Some of the vertical cables attach directly to the pipe and some attach to the casing. Engineering drawings and analysis have not been provided to PHMSA. Respondent has indicated that the suspension system performed satisfactorily during the 1991 washout.

- Coffman Engineers submitted a report to MOC, dated September 28, 2012, indicating that:
  - The cable suspension bridge cannot be fully assessed due to the lack of original design and construction documents. The performance of the bridge during dynamic loading, such as seismic events and heavy equipment operations in the area, also cannot be predicted.
  - It is unknown how much load the suspension bridge is currently supporting. The type and depth of the piles at each end of the suspension system are also unknown.
  - Calculation of the pipeline's longitudinal stress, if the suspension system should fail, indicates that the stress would be very near the maximum allowed by industry standards.
- Marathon stopped using the AFP and returned the Affected Pipeline to service on October 1, 2012.
- Respondent believes that the Affected Pipeline was built in 1965 using X52 pipe with 0.375 inch wall thickness. The longitudinal seam type and method of girth welding is unknown.
- Respondent indicates that the Affected Pipeline has a maximum allowable operating pressure (MAOP) of 975 psig and normally operates around 700 psig. The natural gas transported is not odorized.
- Alaska DOT plans to begin road repairs as soon as possible, with the goal of completing the work by mid-November. Heavy machinery and additional personnel will be in the vicinity of the Affected Pipeline during this repair work.
- Respondent has requested an emergency Special Permit from PHMSA to utilize the AFP, but that application is still under review.

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

Under 49 U.S.C. § 60112 and 49 C.F.R. § 190.233, the Associate Administrator for Pipeline Safety (Associate Administrator) may issue a corrective action order after providing reasonable notice and the opportunity for a hearing if he finds that a particular pipeline facility is or would be hazardous to life, property, or the environment. The terms of such an order may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or any other action as appropriate. The Associate Administrator may also issue a corrective action order without providing any notice or the opportunity for a hearing if he finds that a failure to do so expeditiously will result in likely serious harm to life, property or the environment. The opportunity for a hearing will be provided as soon as practicable after the issuance of the CAO in such cases.

After evaluating the foregoing preliminary findings of fact, I find that the continued operation of the pipeline without corrective measures would be hazardous to life, property and the environment. Additionally, having considered the location of the Affected Pipeline, the history of washouts, the current inaccessibility of the pipe, the unknown integrity of the pipeline, the unknown characteristics of the cable suspension system, and the hazardous nature of the product the pipeline transported, I find that a failure to issue this Order expeditiously to require immediate corrective action would likely result in serious harm to life, property, and the environment. Accordingly, this Corrective Action Order 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, 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 fax at (202) 366-4566. The hearing will be held in Anchorage, AK, Denver, CO, or Washington, DC, 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.

### **Required Corrective Action**

Pursuant to 49 U.S.C. § 60112, Marathon Oil Corporation is ordered to immediately take the following corrective actions to ensure the safe operation of the Affected Pipeline:

1. Within three days of receipt of this Order, verify that the Affected Pipeline can be isolated by remotely or automatically actuated emergency shut-in valves or manual valves within five minutes. Prepare and implement procedures to isolate the Affected Pipeline if it experiences more than a 50 psig pressure drop below the normal operating pressure.
2. Within three days of receipt of this Order, prepare and submit for the Director's approval a site safety and evacuation plan. It will include written criteria to determine whether the pipeline is safe, and when and whom to evacuate in the vicinity of the washout. Copies of the site safety and evacuation plan will be provided to affected local, state, and federal agencies and emergency responders.
3. Marathon will provide around-the-clock monitoring of the current conditions at the washout site to ensure that all activities are consistent with pipeline safety and that the geotechnical conditions have not further deteriorated. Daily logs must be maintained. If, at any time, pipeline safety is further compromised or geotechnical conditions deteriorate, MOC will report the event immediately to PHMSA, Alaska DOT, and Kenai Peninsula Borough – Office of Emergency Management.

4. Within three days of receipt of this Order, provide additional support measures for the Affected Pipeline to ensure that combined longitudinal and hoop stresses do not exceed 72% of SMYS at any location.
5. During road repair work at the washout site, including culvert installation, reestablishment of the road embankment, reconstruction of the Kalifornsky Beach Road pavement, or any other activity that may impose additional loads to the pipeline or support systems, MOC must:
  - a. Depressurize the pipeline to less than 10 psig;
  - b. Have MOC employees on site to monitor the road repair work near the pipeline to ensure the pipeline is protected from damage;
  - c. When the embankment has been raised sufficiently to allow working access to the pipeline, remove the pipeline casing and inspect the entire length of exposed pipe using a method to be approved by the Director;
  - d. Not return the Affected Pipeline to service without prior approval from the Director.
6. By January 31, 2013, submit for the Director's approval a plan to ensure the continued safe operation and integrity of the Affected Pipeline and to avoid future external force damage at the water crossing, either by horizontal directional drill (HDD) or other method. Complete the plan by December 31, 2013.
7. MOC must not put the AFP back into service or use any other alternative line as a bypass for the Affected Pipeline without first submitting a plan for review and approval by the Director. No alternative flow path will be approved unless it is demonstrated to be in compliance with the Part 192 regulations applicable to gas transmission pipelines, or a Special Permit is requested and granted.
8. Submit monthly reports to the Director and Regional Deputy Director, Western Region, that: (1) include all available data and results of testing and evaluations completed regarding the Affected Pipeline, and (2) describe the progress of the repairs or other remedial actions being undertaken. The first monthly report for the period through October 31, 2012, is due by November 7, 2012.
9. It is requested that Respondent maintain documentation of the costs associated with implementation of this Corrective Action Order. In each monthly report, include the to-date total costs associated with: (1) preparation and revision of procedures, studies and analyses; (2) physical changes to pipeline infrastructure, including repairs, replacements and other modifications; and (3) environmental remediation, if applicable.

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.

With respect to each submission that under this Order requires the approval of the 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 must take all actions required by the submission as approved or modified by the Director. If the Director disapproves all or any portion of the submission, Respondent must correct all deficiencies within the time specified by the Director, and resubmit it for approval. If a resubmitted item is disapproved in whole or in part, the Director may again require Respondent to correct the deficiencies in accordance with the foregoing procedure, and the Director may otherwise proceed to enforce the terms of this Order.

Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), you must provide, along with the complete original document, a second copy of the document with those portions you believe qualify for confidential treatment redacted, along with an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

In your correspondence on this matter, please refer to “CPF No. 5-2012-0022H” and for each document you submit, please provide a copy in electronic format whenever possible. 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. Part 192, 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 will 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.

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Jeffrey D. Wiese  
Associate Administrator  
for Pipeline Safety

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Date Issued