



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

APR 28 2005

Mr. Mike P. Tudor
President
ExxonMobil Pipeline Company
800 Bell Street, EMB 741D
Houston, TX 77002

Re: CPF No. 4-2005-5017H

Dear Mr. Tudor:

Enclosed is a Corrective Action Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case. It requires you to take certain corrective actions with respect to your Grand Isle to Raceland crude oil pipeline system. 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 Corrective Action Order are effective upon receipt.

Sincerely,

James Reynolds
Pipeline Compliance Registry
Office of Pipeline Safety

Enclosure

cc: Karen R. Bailor
Manager, Safety, Health and Environment, ExxonMobil

R. M. Seeley
Director, Southwest Region, OPS

VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED – AND FACSIMILE

DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
OFFICE OF PIPELINE SAFETY
WASHINGTON, DC 20590

In the Matter of

ExxonMobil Pipeline Company,

Respondent

CPF No. 4-2005-5017H

CORRECTIVE ACTION ORDER

Purpose and Background

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112, to require ExxonMobil Pipeline (Respondent) to take the necessary corrective action to protect the public, property, and the environment from the potential hazards associated with multiple failures involving Respondent's Grand Isle to Raceland crude oil pipeline system.

The pipeline system has recently experienced two failures. On December 2, 2003, a failure occurred on the pipeline system, resulting in the release of approximately 356 barrels of crude oil into the water of Barataria Bay, Louisiana. The cause is considered to be external corrosion and a manufacturing defect.

On April 19, 2005, a second failure occurred on the pipeline system in Jefferson Parish, Louisiana, resulting in the release of approximately 600 barrels of crude oil into the water of the bay. The cause of the failure has not yet been determined. Pursuant to 49 U.S.C. § 60117, the Southwest Region, Office of Pipeline Safety (OPS) initiated an investigation of the accident.

Preliminary Findings

- On April 19, 2005, at approximately 2:29 PM CDT, a failure occurred on Respondent's Grand Isle to Raceland crude oil pipeline system. Respondent visually confirmed oil in the water at approximately 3:00 PM CDT and reported the incident to the National Response Center at 3:44 PM CDT.
- No fires, injuries, or fatalities were reported in connection with the incident. The accident resulted in the release of approximately 600 barrels of crude oil into Barataria Bay. Respondent mobilized an oil spill response team to contain the spill and begin cleanup. By 5:00 PM CDT on April 21, 2005, most of the floating oil had been sequestered by

containment boom and removed by skimmers and absorbent pads. A small quantity of oil escaped the booms and reached a small stretch of shoreline, which is being cleaned.

- The Grand Isle to Raceland pipeline system transports crude oil approximately 55.5 miles from Grand Isle Terminal, the receipt point for ExxonMobil Production and other shipper volumes, north to Raceland and on to the Baton Rouge area. From Grand Isle Terminal, there is a single 12-inch pipeline for the first 0.43 miles to FiFi Island, where the line splits into parallel 8- and 12-inch pipelines for the next 10.48 miles to Manila Junction. At Manila Junction, there are 12- and 16-inch lines leading north to Raceland.
- The release occurred approximately 6 miles north of the city of Grand Isle on the 12-inch pipeline segment that runs from the Grand Isle to Manila Junction (“the affected segment”). The affected segment is approximately 10.91 miles in length, and includes the 0.43-mile segment from Grand Isle to FiFi Island and the 10.48-mile segment from FiFi Island to Manila Junction.
- The affected segment has a maximum operating pressure (MOP) of 1203 pounds per square inch gauge (psig) as established by hydrostatic pressure testing. From December 18, 2003 to April 19, 2005, Respondent operated the pipeline at 880 psig.
- Preliminary investigation indicates that on April 19, 2005, Respondent increased pressure on the pipeline to determine flow rate at 1200 psig, preparing to return the pipeline to full operating pressure. At 11:00 AM CDT, Respondent began to increase pressure. Respondent maintained a pipeline pressure of 1155 psig and flow rate of 5,085 barrels per hour (bph) for approximately 3 hours. At 2:29 PM CDT, pressure on the line suddenly dropped by 444 psig causing a pressure rate-of-change alarm. Nine seconds later, a high flow rate alarm activated, signaling flow rate had increased from 5,085 to 7,457 bph. The increase in flow rate caused one pump to trip and shut down automatically. Alarms continued for 7-8 minutes until the local Controller at Grand Isle Terminal shut down the pipeline and closed the valves at 2:37 PM CDT.
- The Grand Isle Terminal is manned 24 hours per day and has operational control of the Grand Isle pipeline system. The Operations Control Center (OCC) in Houston, Texas has remote monitoring and emergency shutdown capabilities for the system. Shutdown and startup operations are normally initiated by Grand Isle in communication with OCC. Preliminary investigation indicates that the OCC did not respond during the alarms. The Grand Isle Controller also did not respond for 7-8 minutes until the Controller shut down the pipeline.
- The cause of the failure has not yet been determined. Divers estimated the rupture to be approximately 48-inches long and along the longitudinal seam weld. Respondent has installed an annulus clamp and aquawraps to prevent any further release of oil from the pipeline.
- The affected segment is constructed of 12.75-inch outside diameter, API-5LX, Grade X-52, 0.250-inch wall thickness, electric resistance welded (ERW) pipe with beveled edges

installed in 1964 and manufactured by Republic Steel in 1964 at its plant in Youngstown, Ohio. Respondent's has indicated that this particular pipe mill began manufacturing pipe using the high frequency ERW process in 1963.

- A previous failure occurred on the affected segment on December 2, 2003. At the direction of OPS, Respondent restricted operating pressure on the affected segment to 80% of MOP and performed a failure analysis. OPS reviewed the results of the failure analysis, which revealed the failure had occurred along the longitudinal seam weld of the pipe. The cause of the failure was identified to be external corrosion due to coating damage.
- Respondent also accelerated its internal inspections schedule at the direction of OPS. In October 2004, Respondent performed three internal inspections on the pipeline using a deformation tool (October 5), magnetic flux axial flaw detection tool (October 6), and magnetic flux corrosion detection tool (October 7). Respondent received the results of these internal inspections and shared them with OPS in April 2005.
- Respondent's Integrity Management Program (IMP) identifies the affected segment as a pipeline that could affect a high consequence area (HCA). The IMP has identified the city of Grand Isle and the entire width of the inland waterway to be HCAs. Respondent's IMP also identifies two Unusually Sensitive Areas (USAs) near the 8-inch pipeline, but the IMP does not identify either the 8- or 12-inch as a pipeline that could affect the USAs.

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, provides 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 likely result in 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 continued operation of the affected segment without corrective measures would be hazardous to life, property and the environment. Additionally, after considering the age of the pipe, the nature of the failures that have occurred on the pipeline, the proximity of the pipeline to high consequence areas, the hazardousness of the product the pipeline transports, the pressure required for transporting the material, and the ongoing investigation to determine the cause of the pipeline failure, I find that a failure to expeditiously issue this Order requiring immediate corrective action would likely result in serious harm to life, property, or 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 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 facsimile at (202) 366-4566. The hearing will be held in Houston, Texas or Washington, DC on a date that is mutually convenient to OPS and Respondent.

After receiving and analyzing additional data in the course of this investigation, OPS may identify other corrective measures that need to be taken. In that event, 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 ExxonMobil to immediately take the following corrective actions with respect to its Grand Isle to Raceland pipeline system:

1. Do not operate the affected segment until prior written approval is obtained from the Director, Southwest Region, OPS. The Regional Director may approve the operation of the Grand Isle to FiFi Island segment separately from the FiFi Island to Manilla Junction segment. Once a pipeline segment is restarted, the operating pressure on the segment is not to exceed 80 percent (80%) of the maximum operating pressure (MOP). This pressure restriction will remain in effect until written approval to increase the pressure is obtained from the Director, Southwest Region, OPS. If the results of any action undertaken pursuant to this Order dictate a reduction in the allowable operating pressure below that imposed by this Order, Respondent must further reduce the operating pressure accordingly.
2. Conduct mechanical and metallurgical testing of the failed pipe section as follows:
 - (A) Collect, catalog, and seal the pipe and all other evidence and document the chain-of-custody;
 - (B) Submit the mechanical and metallurgical testing protocol to the Regional Director for prior approval;
 - (C) Prior to commencing the mechanical and metallurgical testing, provide the Regional Director with the scheduled date, time, and location of the testing to allow an OPS representative to witness the testing; and
 - (D) Ensure that the laboratory distributes all resulting reports, whether draft or final, to OPS at the same time as they are made available to Respondent.

3. Within 30 days of receipt of this Order, submit to the Regional Director for prior approval a plan for completing a hydrostatic pressure test of the affected segment in accordance with the pressure testing requirements of 49 C.F.R. Part 195 subpart E within 120 days of receipt of this Order.
4. Obtain an independent reviewer to re-evaluate the data, including the A-Scan, from the inline inspection tool runs performed in 2004. The independent reviewer chosen by Respondent must be approved by the Regional Director. The re-evaluation must identify any anomalies that could have contributed to the failure and determine whether any other anomalies of a similar nature are present elsewhere on the affected segment. All resulting reports, whether draft or final, must be submitted directly to OPS by the reviewer at the same time they are made available to Respondent. Make all inline inspection data available to OPS or its representative. Submit the results of the re-evaluation to the Regional Director within 45 days of receipt of this Order.
5. Within 30 days of receipt of this Order, establish a plan for completing a cathodic protection close internal survey (CIS) of the affected segment and the 8-inch pipeline running parallel to the affected segment using an independent contractor approved by the Regional Director within 120 days of receipt of this Order. Submit the plan and CIS procedures to the Regional Director for prior approval
6. Within 30 days of receipt of this Order, establish a plan for completing a review of Supervisory Control and Data Acquisition System (SCADA) and Leak Detection system data at the Houston and Grand Isle Operations Control Centers (OCC) using an independent contractor approved by the Regional Director within 120 days of receipt of this Order. Submit the plan to the Regional Director for prior approval. The plan must incorporate changes to the SCADA system and Leak Detection system on the affected segment to:
 - (A) Identify operational data, such as temperature, amperage, pressure, flow, et cetera, required for the safe operation of the pipeline facilities;
 - (B) Perform a logical "field inspection - walk down" with applicable drawings, including station piping and instrument diagram (P&ID) and Controller Screens, to verify logical correctness and completeness for the safe operation during normal operating conditions and for an effective response during abnormal operating conditions. Identify changes required and implement them utilizing Respondent's MOC procedures.
 - (C) Review Houston and Grand Isle OCC procedures and SCADA systems to ensure proper coordination and responsibilities between both control rooms during normal and abnormal operation conditions; and
 - (D) Review the piping and instrumentation arrangements for adequacy in identifying and responding to leaks on the either the 8- or 12-inch pipelines. Address the ability to identify the line on which a failure has occurred.


7. Within 45 days of receipt of this Order, identify all maps and drawings that are critical to the operation of the affected segment and update them in accordance with Respondent's procedures. Submit the listing and procedures for updating the drawings to the Regional Director for approval.
8. Within 60 days of receipt of this Order, develop and submit a written plan with corrective measures for prior approval by the Regional Director. The plan must fully address all known or suspected factors that caused or contributed to the April 19, 2005 failure. The plan must address any necessary repairs to the affected segment, or alternatively, the replacement of the affected segment.
9. The plan required by Item 8 must be revised as necessary to incorporate new information obtained during the failure investigation and remedial activities undertaken pursuant to this Order. Submit any such plan revisions to the Director for prior approval. The Director may approve plan elements incrementally.
10. Implement the plan required by Item 8 as it is approved, including any revisions to the plan.
11. Submit quarterly reports to the Regional Director that: (1) include the available data and results of the testing and evaluations required by this Order; and (2) describe the progress of the repairs or other remedial actions being undertaken.
12. Submit information to the Director, Southwest Region, Office of Pipeline Safety, 8701 South Gessner, Suite 1110, Houston, TX 77074.

The Director, Southwest Region, OPS may grant an extension of time for compliance with any of the terms of this Order for good cause. A request for an extension must be in writing.

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

The corrective actions required by this Corrective Action Order are in addition to and do not waive any requirements that apply to the pipeline under 49 C.F.R. Part 195, including integrity management program regulations.

Failure to comply with this Order may result in the assessment of civil penalties of not more than \$100,000 per day and in referral to the Attorney General for appropriate relief in a United States District Court.

for 
 Stacey Gerard
 Associate Administrator
 for Pipeline Safety

APR 28 2005

Date Issued