NOTICE OF PROBABLE VIOLATION
PROPOSED CIVIL PENALTY
and
PROPOSED COMPLIANCE ORDER

VIA FACSIMILE and UPS NEXT DAY AIR

May 13, 2013

Mr. Wes Christensen
Senior Vice President of Operations
ONEOK NGL Pipeline, L.P.
ONEOK NGL Pipeline, L.L.C.
ONEOK Underground Storage Company, L.L.C.
100 West Fifth Street
Tulsa, OK 74102

CPF 3-2013-5014

Dear Mr. Christensen:

Representatives from the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code, conducted an investigation of repeated overpressure events that occurred on May 17, 2008, at ONEOK's natural gas liquids (NGLs) facility in Bushton, Kansas (the Bushton facility). Initial site investigations were conducted on May 22, 2008, and May 23, 2008. Site investigation activities were also conducted the week of April 11, 2011. During the period from May 2008 and April 2011 PHMSA and ONEOK had additional communications and correspondence involving engineering modeling and evaluation of the circumstances and contributing factors involved in the accident. ONEOK NGL Pipeline, L.P., ONEOK NGL Pipeline, L.L.C., and ONEOK Underground Storage Company, L.L.C. are subsidiaries of ONEOK Partners, L.P.

The Bushton facility includes among other types of pipeline facilities, storage fields used to store liquid hydrocarbons, a dedicated control room, piping manifold systems and a fractionation plant that separates Y-grade NGLs into purity products such as liquid propane, butane, ethane-propane mix, and natural gasoline. The products received from the

incoming pipelines include both Y-grade NGL mix and purity products. The incoming purity products are either sent to storage wells or are sent on to other outgoing pipelines. The incoming Y-grade NGL mix is sent either to the fractionation plant for processing, to the storage wells for storage, or are sent on to outgoing pipelines through pipeline manifolds. NGLs can be moved directly through the Bushton facility in continued transportation by pipeline.

The accident involved repeated overpressure events during which a mixture of NGLs and water were forced through the facility's flare accumulator tank and through the flare stack.[1] The hydrocarbon liquids were forced upwards through the flare stack and were ignited by the flare tip burners. The burning hazardous material reached the ground and fires developed around the base of the flare stack. The releases resulted in multiple evacuations of ONEOK and contractor personnel from the facility as well as evacuations of nearby residences in the area.

As a result of the investigation, it appears that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The probable violations are:

1. **§ 195.52 Telephonic Notice of certain accidents.**

   (a) At the earliest practicable moment following discovery of a release of the hazardous liquid or carbon dioxide transported resulting in an event described in §195.50 the operator of the system shall give notice, in accordance with paragraph (b) of this section, of any failure that:

   (2) Resulted in either a fire or explosion not intentionally set by the operator.

   ONEOK did not make a telephonic report to the National Response Center at the earliest practicable moment following the initial unintentional release and fire at 7:41 a.m. CDT on May 17, 2008. ONEOK did not make the required telephonic report until 12:08 p.m. CDT which was over four hours after the initial ignition and evacuation occurred.

2. **§ 195.54 Accident reports.**

   (a) Each operator that experiences an accident that is required to be reported under § 195.50 must, as soon as practicable, but not later than 30 days after

[1] The facilities at Bushton were configured at the time of the May 17, 2008, accident such that the flare stack involved with the release served as part of the overpressure protection system connected to the piping. ONEOK has since made modifications to this flare stack portion of the system and rerouted the outlet of the accumulator tank to a common flare stack located in a different area of the facility.

discovery of the accident, file an accident report on DOT Form 7000-1.

ONEOK did not file an accident report on DOT Form 7000-1 within 30 days after the unintentional release and ignition of hydrocarbon liquids on the ground at the Bushton Pipeline Facility on May 17, 2008. As of the date of this Notice of Probable Violation, ONEOK has not filed a DOT Form 7000-1 report in connection with the accident. The May 17, 2008, release resulted in a fire per 195.50(a); therefore, a DOT Form 7000-1 is required.

3. § 195.401 General requirements.

(b) Whenever an operator discovers any condition that could adversely affect the safe operation of its pipeline system, it shall correct the condition within a reasonable time. However, if the condition is of such a nature that it presents an immediate hazard to persons or property, the operator may not operate the affected part of the system until it has corrected the unsafe condition.

On the day of the accident, ONEOK failed to correct an unsafe condition which presented an immediate hazard to persons and property prior to resuming operation of the affected part of the system. On four separate occasions at 7:41 a.m., 8:05 a.m., 8:49 a.m. and 9:53 a.m., a mixture of water and liquid hydrocarbons was forced through the accumulator tank (which was full) to the flare stack. On each occasion, the liquid mixture was forced through the system when pipeline pressure relief valves opened and the liquid mixture flowed through the accumulator tank and to the tip of the flare stack where the hydrocarbon mixture was ignited at the burner tips. These conditions presented an immediate hazard to persons and property, yet ONEOK allowed personnel to reenter the area and resumed operation of the system without identifying the primary cause of the releases (the full accumulator tank) and correcting the unsafe condition.

4. §195.402 Procedural manual for operations, maintenance, and emergencies.

(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

ONEOK did not follow its procedure for limiting the amount of product in the flare system accumulator tank. A June 2011 Data Submission shows ONEOK's procedure entitled "SF Flare / Drain" limits the volume of liquid in the accumulator tank (SFT-702) to 85% of the total volume as follows:

EQUIPMENT	UPPER LIMITS	LOWER LIMITS	HAZARDS OF DEVIATION	ACTION FOR DEVIATION
SF PSV's Ref. Master list	Device seated and Open to flare system	None	Upper: May cause an overpressure Lower: Cannot exceed	Upper: Open device to flare System Lower: No action necessary
SF PSV Block valves	Valves open	None	Upper: If closed may cause an overpressure Lower: N/A	Upper: open block valve Lower: No action necessary
SF drain valves	Valves closed	None	Upper: May allow excess flow to flare system Lower: N/A	Upper: Close drain valve Lower: no action necessary
SFT- 702 Tank	85%	0%	Upper: May carry LPG's to the flare stack Lower: Cannot exceed	Upper: Lower tank level Lower: No action necessary
SFM-1 Flare stack	Pilot Lit	Pilot not lit	Upper: Cannot exceed Lower: Release raw hydrocarbons to environment	Upper: No action necessary Lower: Light flare stack

ONEOK's Root Cause Analysis stated, "The flare system piping and accumulator were setting full of liquids from blowing down storage field piping in preparation for hydro testing. …. Failure to recognize that the flare system was full of liquids and not immediately identifying the sources relieving into the systems compounded the flare incident."[2] A total of 242 barrels (10,164 gallons) of hydrocarbon/water mixture was removed from the accumulator which has a capacity of 10,500 gallons.

5. **§195.402 Procedural manual for operations, maintenance, and emergencies.**

(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

ONEOK did not follow its procedure for isolating equipment when removing part of the flare/drain system from service. Specifically, the isolation valve for 108 pipeline thermal relief valve was closed while the pipeline remained in operation. ONEOK's emergency shutdown procedures state "4. Isolate affected equipment. (Do not by-pass safety equipment)" as shown in item 4 below. On the accident date the thermal relief isolation valve was closed on pipeline 108 which subjected the line to possible over pressurization.

[2] Violation Report Exhibit E; ONEOK NGL Follow up to April 2011 Meeting containing Root Cause Analysis.

EMERGENCY SHUTDOWN

Emergency shutdown of the storage field flare/drain system

When a emergency condition exists and it becomes necessary to remove part or all of the flare/drain system from service, follow the steps that are appropriate for the condition.

1. Initiate control procedures to ensure the safety of personnel, the environment and equipment.
2. Notify appropriate personnel of operational changes.
3. Reference the emergency response plan and take appropriate actions.
4. Isolate affected equipment. (Do not by-pass safety equipment)
5. Perform lockout/tagout procedures as needed.
6. Generate a MO (maintenance order) for repairs.

6. §195.408 Communications.

(a) Each operator must have a communication system to provide for the transmission of information needed for the safe operation of its pipeline system.

ONEOK did not have a functioning communication system for monitoring the fluid level in the accumulator tank involved in controlling receipt of hazardous liquid as necessary for the safe operation of the pipeline system. ONEOK's investigation report stated, "Accumulator tank level alarm was still connected into old control room, Operator had relocated to new control, alarm had not been moved to new control room." The control room had been recently moved in connection with a facility expansion project. The electronic level monitor which had been connected to the accumulator tank was disconnected from the control room alarm and ONEOK had failed to manually monitor the liquid level in the accumulator tank.

7. § 195.406 Maximum operating pressure.

(a) Except for surge pressures and other variations from normal operations, no operator may operate a pipeline at a pressure that exceeds any of the following:

(2) The design pressure of any other component of the pipeline.

ONEOK operated its pipeline facilities at a pressure that exceeded the design pressure of Dehydrator Vessel #1. Prior to the accident, Dehydrator Vessel #1 had a reduced design pressure of 328 psig due to decreased wall thickness. The design pressure of this vessel had been reduced to 328 psig in 1988. A review of Line 800 operation which flowed product to the dehydration isolation valve showed its range from 395 to 460 psig within 24 hours prior to the release with no surges. On May 17, 2008, ONEOK operated the vessel at a pressure as high as 350 psig when the isolation valve did not fully prevent product from entering the vessel. The set-point of its overpressure protection device was 350 psig.

8. § 195.420 Valve maintenance.

(a) Each operator shall maintain each valve that is necessary for the safe operation of its pipeline systems in good working order at all times.

ONEOK failed to maintain Valve 182 and Valve 152 in good working order at all times as is necessary for the safe operation of its pipeline system. These two valves were the main isolation valves to propane dehydrator systems #1 and #2. Both of these valves were in the closed position but at the time of the accident malfunctioned in a manner that allowed high pressure product to flow into their dehydration systems which overpressured the dehydration vessels. When the dehydration vessels were overpressured, the relief valves on these vessels opened and product was sent to the accumulator tank and on through the flare stack.

ONEOK also failed to maintain the Buckeye Y-grade system water dump level control valve in good working order necessary for the safe operation of its pipeline system. This valve was found "blocked" in the open position which allowed liquid to be fed to the flare system without necessary control.[3]

9. §195.428 Overpressure safety devices and overfill protection systems

(a) Except as provided in paragraph (b) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, or in the case of pipelines used to carry highly volatile liquids, at intervals not to exceed 7½ months, but at least twice each calendar year, inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.

ONEOK failed to test certain pressure relief valves to determine their adequacy from the standpoint of capacity and reliability in providing overpressure protection. Specifically, ONEOK failed to determine that three relief valves on propane dehydration units #1 and #2 were adequate from the standpoint of capacity to provide overpressure protection for their respective vessels. ONEOK's Propane Dehydration PSV Study conducted by ENGlobal reported on pages 1 and 5 that for dehydration unit #1, "The relief valves (PSV-DA-167/168) on dehydration towers (SFT-112A/113A) will not protect towers from blocked flow outlet or failure of inlet pressure control valve (PCV-163)." The study also stated for dehydration unit #2, "PSV-DA-142 has adequate orifice area to protect dehydration tower (SFT-113B) from blocked flow or failure of inlet control valve (PCV-104) for supply pressures up to 395 psig." ONEOK's supply pressure was 450 to 550 psig. The PSV-DA-142 did not have adequate orifice area to handle blocked flow or failure of

[3] Violation Report, Exhibit _D *ONEOK NGL Follow up April to 2011* –Root Cause Analysis Section

PCV-104 for supply pressure greater than 395 psig. Therefore, ONEOK has not met the requirement of §195.428(a).

Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed $200,000 for each violation for each day the violation persists up to a maximum of $2,000,000 for a related series of violations. For violations occurring prior to January 4, 2012, the maximum penalty may not exceed $100,000 per violation per day, with a maximum penalty not to exceed $1,000,000 for a related series of violations. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violation(s) and has recommended that you be preliminarily assessed a civil penalty of $559,100 as follows:

Item number	PENALTY
1	$13,700
2	$28,700
3	$92,500
4	$100,000
5	$43,700
6	$100,000
7	$46,200
8	$100,000
9	$34,300

Proposed Compliance Order

With respect to item 2, pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to ONEOK NGL Pipeline, L.P. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. 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), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b). If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

In your correspondence on this matter, please refer to **CPF 3-2013-5014** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

David Barrett
Director, Central Region
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Compliance Proceedings

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to ONEOK NGL Pipeline, L.P. (ONEOK) a Compliance Order incorporating the following remedial requirements to ensure the compliance of ONEOK with the pipeline safety regulations:

1. In regard to Item 2 of the Notice, submit DOT Form 7000-1 Accident Report within 30 days of issuance of the Final Order.

2. It is requested that ONEOK NGL Pipeline, LP maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to David Barrett, Director, Central, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.