



U.S. Department  
of Transportation

**Pipeline and  
Hazardous Materials Safety  
Administration**

233 Peachtree Street Ste. 600  
Atlanta, GA 30303

**NOTICE OF PROBABLE VIOLATION  
PROPOSED CIVIL PENALTY  
and  
PROPOSED COMPLIANCE ORDER**

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

October 4, 2011

Mr. Pete M. Kirsch  
Division Sr. VP Pipeline Ops & Engr.  
Southeast Supply Header, L.L.C.  
1111 Louisiana  
Houston, TX 77002

**CPF 2-2011-1008**

Dear Mr. Kirsch:

On May 3-7, 2010, and on August 2-5, 2010, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code inspected the Southeast Supply Header, LLC (SESH) records and procedures in Shreveport, LA, and SESH's pipeline facilities from Delhi, LA, to Coden, AL.

As a result of the inspection, it appears that SESH has committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the probable violations are:

**1. § 191.5 Immediate notice of certain incidents.**

**(a) At the earliest practicable moment following discovery, each operator shall give notice in accordance with paragraph (b) of this section of each incident as defined in §191.3.**

SESH did not give notice of the pipeline incident that occurred on Line 100 on January 21, 2010, near Hazlehurst, MS, in accordance with §191.5(b) at the earliest practicable moment following discovery. The *National Response Center (NRC) Incident Report #929301* indicates the incident was discovered on January 21, 2010, at 12:29 local time (CST) but not reported to the NRC by SESH until January 21, 2010, at 21:09 (EST); more than 7½ hours after the discovery.

The supplemental/final written Incident Report-Gas Transmission and Gathering Pipeline Systems (#20100010 - 15178) SESH submitted to PHMSA on February 9, 2011, conveyed the following timeline on January 21, 2010.<sup>1</sup>

- A power company employee reported to the SESH Control Center at 12:30 hours (24-hour clock) bubbles in water that had pooled along SESH's right-of-way
- SESH employee arrived on site at 13:30 hours and suspected the pipeline may have a pinhole leak
- Location was excavated at 19:25 hours and the leak was confirmed as a girth weld leak

**2. § 191.15 Transmission and gathering systems: Incident report.**

**... (b) Where additional related information is obtained after a report is submitted under paragraph (a) of this section, the operator shall make a supplemental report as soon as practicable with a clear reference by date and subject to the original report.**

SESH did not make a supplemental report as soon as practicable upon obtaining additional information related to the pipeline incident discovered on January 21, 2010, near Hazlehurst, MS. The original written incident report submitted to PHMSA on February 19, 2010 (#20100010 - 15010) showed the incident cause as unknown, and "*still under investigation, cause of Incident to be determined*" (\*Supplemental Report required).

On May 23, 2010, SESH received a metallurgical failure investigation final report from Kiefner & Associates, Inc. (KAI) (Final Report No. 10-031). The KAI report concluded the cause of the leaking girth weld was Hydrogen Assisted Cracking. SESH did not submit a supplemental report with this additional information to PHMSA until January 21, 2011, (report # 20100010 - 15162); 8 months after SESH obtained the information.

**3. §192.167 Compressor stations: Emergency shutdown.**

**(a) Except for unattended field compressor stations of 1,000 horsepower (746 kilowatts) or less, each compressor station must have an emergency shutdown system that meets the following:**

**... (2) It must discharge gas from the blowdown piping at a location where the gas will not create a hazard.**

The blowdown piping vents for SESH's Emergency Shutdown (ESD) systems at the five SESH compressor stations were not configured so as to discharge gas at locations where the gas would not create a hazard.

During the PHMSA inspection, the inspector observed and took pictures of ESD trip station vents near the compressor buildings and at other locations that were directed horizontally at an elevation of approximately 6 to 8 feet, where vented natural gas could create a hazard to individuals near the trip station in the event of an ESD activation.

---

<sup>1</sup> Report #20100010 - 15178 was the second Supplemental/Final report submitted by SESH, which included other information requested by PHMSA that was not in the first Supplemental/Final report (Report #20100010 - 15162).

4. § 192.243 Nondestructive testing.

... (b) Nondestructive testing of welds must be performed:

(1) In accordance with written procedures; ...

SESH did not properly nondestructively test girth welds in accordance with its written procedures. SESH's *Specification Number: CS-GC 8.2. General Construction- Welding and Tie-Ins (Spec. Number: CS-GC 8.2) Item 4D* stated, all "welds (excluding ECA welds) including repairs are evaluated to workmanship standards of acceptability of API 1104, Section 9."

SESH's construction radiographs of the two girth welds listed below show a crack present in each weld. However, SESH's nondestructive testing (NDT) technician (a contractor) did not identify and reject either of these girth welds during construction radiographic reviews as required by SESH's written procedures. Both girth welds were installed in Line 100 despite not meeting API 1104 workmanship standards of acceptability.

- Girth weld no. XRA-078 at station #4616+78 was discovered to be leaking on January 21, 2010. The source of the leak was a longitudinal crack. Upon discovery of the leak, SESH and PHMSA used independent NDT consultants to re-review the construction radiographs. Both NDT consultants identified the crack and concluded the crack should have been identified and rejected by the NDT technician at the time of the original construction radiographic NDT evaluation.
- Girth weld no. XRA-047 at station #4366+51 was identified as having a transverse crack upon re-examination of the construction radiograph by SESH's NDT consultant and by PHMSA's NDT consultant. The crack was confirmed by examination of the girth weld by SESH's contract metallurgical consultant after the girth weld was removed from the pipeline. Additionally, PHMSA's in-house NDT/welding expert reviewed a photograph of the referenced construction radiograph and concluded that the crack should have been identified by the NDT technician at the time of the original construction radiographic NDT evaluation.

SESH did not comply with its written NDT examination procedures because it did not adequately and correctly record NDT inspections and tests as required by the procedures. SESH's NDT technician incorrectly completed *Form TS-406 NDE Report of Field Welds* (TS-406) as follows:

- *TS-406* dated February 14, 2008, had incorrect dimensions for four inspected girth welds. The report showed the welds were 42" x 0.750" x 0.600" transition welds when the correct dimensions were 42" x 1.000" x 0.600." Also, the report indicated Radiographic Procedure *42 x 600 x 750 GI* was used when no such qualification record was provided to PHMSA by SESH as it relates to this weld.
- *TS-406* dated January 21, 2008, had incorrect dimensions of girth weld no. XRA-047. The report showed the weld was a 42" x 0.720" x 0.750" transition weld when the correct dimensions were 42" x .600" x 0.750." Also, the report had an incorrect radiographic procedure number. SESH conveyed to PHMSA that it could not definitively determine which, if any, qualified radiographic procedure was actually used to radiograph girth weld no. XRA-047.

**5. 192.303 Compliance with specifications or standards.**

**Each transmission line or main must be constructed in accordance with comprehensive written specifications or standards that are consistent with this part.**

SESH did not construct Line 100, a transmission line, in accordance with its written specifications or standards. SESH had two qualified procedures regarding the use of radiographic film for NDT of girth welds:

- 1) *Construction Specification, Spec. Number: CS-GC31.2 Radiography (CS-GC31.2)*, which required the use of Class I or GI film with gamma radiation sources for penetration thicknesses (excluding weld build-up) less than 0.750 inches (18mm).
- 2) SESH approved its radiographic contractor's (JANX) *Radiographic Inspection Procedure* on November 16, 2007. This procedure required Class I film to be used on wall thicknesses up to and including 0.750 inches.

While the above were the two SESH approved procedures for radiographic film, SESH's records showed that JANX used different radiographic procedures during the construction of Line 100. The procedures JANX used allowed for the use of Class II (D7 Agfa) radiographic film (not Class I or GI film) when shooting with penetration thicknesses and/or wall thicknesses of less than or equal to 0.750 inches. That is, JANX routinely used Class II (D7 Agfa) film in the gamma-sourced radiographic inspection of manually produced girth welds on the SESH pipeline where penetration and/or wall thicknesses were less than 0.750 inches. Class II film is inferior to Class I film in the ability to detect some defects and imperfections.

SESH also did not construct Line 100 in accordance with *Specification Number: CS-GC 8.2 Item 3G*. For girth weld transitions, *Item 3G* required the internal transition slope on transition welds to be a minimum of 1:4 (14 degree angle) and maximum of 1:2.6 (21 degree angle). SESH's contracted investigation report<sup>2</sup> indicated the two induction bend-end welds on the bend located at construction survey station no. 4583+53 (failed weld bend) had maximum transition angles that exceeded 21 degrees. The report indicated maximum transition angles of 37 degrees and 34 degrees for these bend welds.

**6. § 192.305 Inspections: General.**

**Each transmission line or main must be inspected to ensure that it is constructed in accordance with this part.**

SESH did not adequately inspect Line 100, a transmission line, to ensure that it was constructed in accordance with Part 192.

SESH did not follow its construction inspection specifications for girth weld XRA-078. *Specification Number: CS-GC 8.2 Item 3D* and SESH form *TS-713 Transition Report* required wall thickness readings to be "taken on the quarter points of the transitioned pipe and this information is recorded on Form TS-713 and submitted for Company approval. Method of measurement shall be approved by Company." Form *TS-713* also required

---

<sup>2</sup> *Spectra Energy Final Report No. 10-031*, dated May 18, 2010

minimum and maximum transition slopes to be recorded and had a signature/date block for the Chief Inspector to sign.

SESH's *TS-713* report form for girth weld XRA-078, dated February 18, 2008,

- Showed measured transition slope angles of 16 degrees (min) and of 20 degrees (max). These min/max angles were inconsistent with the angles measured and reported in SESH's contracted failure investigation report.<sup>3</sup>
- Showed the wall thickness measurements taken at the quarter points were all nominal size numbers, indicating that actual wall thicknesses were not measured.
- Was not signed by the chief inspector.

SESH also did not adequately inspect girth weld XRA-075 to ensure it complied with weld specifications. *CS-GC8.2 Item 3F* conveyed that the weld transition shall be acceptable if "*Internal pipe misalignment is evenly distributed around the circumference of the pipe.*" Also, the *Pipeline Construction Inspection Manual- Inspector Responsibilities* stated that Welding/Tie-in Inspector duties include (item 5113) "*Visually inspects each weld for . . . high-low... and general weld appearance.*"

Girth weld XRA-075 (42" x 1.000" x 0.600" bend/pup transition weld) was observed and photographed by a PHMSA inspector on August 3, 2010, at SESH's contracted metallurgical consultant's shop; Kiefner & Associates, Inc. (KAI). The photographs indicate a (scaled) outside diameter (OD) misalignment of approximately 0.40 inches at one position and essentially zero misalignment directly opposite (180 degrees circumferentially from) the misalignment. This is consistent with the OD misalignment measurements taken by SESH on the weld. Moreover, these measurements indicate the internal pipe misalignment was not evenly distributed around the circumference of the pipe; and thus, the weld was either inadequately inspected, or was not inspected, for internal pipe misalignment.

7. **§ 192.317 Protection from hazards.**

**(a) The operator must take all practicable steps to protect each transmission line or main from washouts, floods, unstable soil, landslides, or other hazards that may cause the pipeline to move or to sustain abnormal loads. . . .**

SESH did not take all practicable steps to protect its Line 100, a transmission line, during construction. A buckle was discovered in the pipe at survey station no. 4389+68 during an unrelated excavation approximately 19 months after the pipeline was placed in service. SESH's contracted investigation report<sup>4</sup> stated that the buckle "*was caused by excessive bending loads applied to the pipeline during some phase of the construction of the pipeline.*" The report also stated that the "*. . . mode of buckling is associated with little or no pressure in the pipeline at the time the buckle formed. This implies that the buckle was probably present when the pipeline was hydrostatically tested.*" Although the report conveys that "*insufficient information is available to provide certainty with respect to the cause,*" it is evident from the investigation report, and from the geometry tool ILI vendor's final report which indicated that an actionable anomaly (5.3% dent) existed at

<sup>3</sup> *Spectra Energy Final Report No. 10-031*, dated May 18, 2010

<sup>4</sup> *Spectra Energy Final Report No. 10-069R*, dated November 5, 2010

the buckle location approximately one month after the construction hydrostatic test, that SESH did not take steps during the construction of the pipeline to prevent the buckle from occurring.

**8. §192.709 Transmission lines: Record keeping.**

**Each operator shall maintain the following records for transmission lines for the periods specified:**

**... (c) A record of each patrol, survey, inspection, and test required by subparts L and M of this part must be retained for at least 5 years or until the next patrol, survey, inspection, or test is completed, whichever is longer.**

SESH did not adequately document the inspection and test of a compressor station relief device as required by §192.731. That is, SESH did not document the “*as-left*” pressure of the Delhi compressor station Unit No. 1 High *Discharge Pressure Shutdown Setpoint* test, performed on November 3, 2009, on the inspection and test record.

**9. §192.745 Valve maintenance: Transmission lines.**

**(a) Each transmission line valve that might be required during any emergency must be inspected and partially operated at intervals not exceeding 15-months, but at least once each calendar year.**

SESH did not adequately inspect and partially operate the three remotely controlled transmission mainline valves during its 2009 annual valve inspections. SESH did not test the functionality of the SCADA remote control system to assure the valves operated when remotely initiated and did not test the gas-powered operator component to assure that gas power would operate the valve. These valves, located at MP 55.79 (BV65685), MP 155.9 (BV65774), and MP 166.7 (BV 65789) might be required during an emergency and are required to be remotely controlled per Special Permit Condition No. 23.

Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed \$100,000 for each violation for each day the violation persists up to a maximum of \$1,000,000 for any related series of violations. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violations and has recommended that you be preliminarily assessed a civil penalty of \$174,500 as follows:

<u>Item number</u>	<u>PENALTY</u>
2	\$ 5,000
3	\$ 35,000
4	\$ 85,600
5	\$ 16,500
6	\$ 16,200
7	\$ 16,200

### Warning Items

With respect to items 1, 8, and 9 we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to promptly correct these items. Be advised that failure to do so may result in Southeast Supply Header, L.L.C. being subject to additional enforcement action.

### Proposed Compliance Order

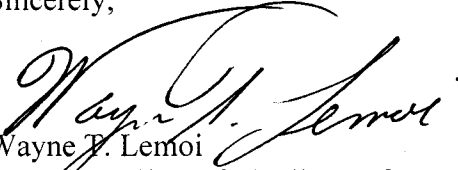
With respect to item 3 pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Southeast Supply Header, L.L.C. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

### 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 2-2011-1008** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



Wayne T. Lemo  
Director, Office of Pipeline Safety  
PHMSA Southern Region

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 Southeast Supply Header, L.L.C.(SESH) a Compliance Order incorporating the following remedial requirements to ensure the compliance of Southeast Supply Header, L.L.C. with the pipeline safety regulations:

1. In regard to Item Number 3 of the Notice pertaining to the inadequately configured Emergency Shutdown (ESD) system blowdown piping vents at Line 100 compressor stations, SESH must modify the blowdown vents at each of the five compressor stations such that any discharged gas will not create a hazard. No later than 60 days after the date of this Compliance Order, SESH must provide documentation (including photographs) to the Director, Office of Pipeline Safety, PHMSA Southern Region demonstrating that each of the ESD vents at the five Line 100 compressor stations will not create a hazard.
2. It is requested (not mandated) that SESH maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to the Director, Office of Pipeline Safety, PHMSA Southern Region. 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.