U S Department
of Transportation
**Pipeline and
Hazardous Materials Safety
Administration**

233 Peachtree Street Ste 600
Atlanta, GA 30303

NOTICE OF PROBABLE VIOLATION
And
PROPOSED COMPLIANCE ORDER

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

May 22, 2007

Mr Samuel L Dozier
Vice President and Commercial Field Operations
Carolina Gas Transmission (CGT)
105 New Way Road
Columbia, South Carolina 29224-2407

CPF 2-2007-1010

Dear Mr Dozier

On October 2-5 and October 23-26, 2006, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code inspected your Gas Integrity Management Program at your office in Columbia, South Carolina

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

1. **High Consequence Area (HCA) Identification**

   §192.905 How does an operator identify a high consequence area (HCA)?

   (a) General. To determine which segments of an operator's transmission pipeline system are covered by this subpart, an operator must identify the high consequence areas. An operator must use method (1) or (2) from the definition in § 192.903 to identify a high consequence area.

§192.903 What definitions apply to this subpart?

High consequence area means an area established by one of the methods described in paragraphs (1) or (2) as follows.

(1) An area defined as—

(i) A Class 3 location under §192.5; or
(ii) A Class 4 location under §192.5, or
(iii) Any area in a Class 1 or Class 2 location where the potential impact radius is greater than 660 feet (200 meters), and the area within a potential impact circle contains 20 or more buildings intended for human occupancy; or
(iv) Any area in a Class 1 or Class 2 location where the potential impact circle contains an identified site.

(2) The area within a potential impact circle (PIC) containing—

(i) 20 or more buildings intended for human occupancy, unless the exception in paragraph (4) applies; or
(ii) An identified site

(3) Where a potential impact circle is calculated under either method (1) or (2) to establish a high consequence area, the length of the high consequence area extends axially along the length of the pipeline from the outermost edge of the first potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy to the outermost edge of the last contiguous potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy. (See Figure E.I.A. in appendix E.)

(4) If in identifying a high consequence area under paragraph (1)(iii) of this definition or paragraph (2)(i) of this definition, the radius of the potential impact circle is greater than 660 feet (200 meters), the operator may identify a high consequence area based on a prorated number of buildings intended for human occupancy within a distance 660 feet (200 meters) from the centerline of the pipeline until December 17, 2006. If an operator chooses this approach, the operator must prorate the number of buildings intended for human occupancy based on the ratio of an area with a radius of 660 feet (200 meters) to the area of the potential impact circle (i.e., the prorated number of buildings intended for human occupancy is equal to [20 x (660 feet [or 200 meters]/ potential impact radius in feet [or meters])**2])

Identified site means each of the following areas.

(a) An outside area or open structure that is occupied by twenty (20) or more persons on at least 50 days in any twelve (12)-month period (The days need not be

consecutive.) Examples include but are not limited to, beaches, playgrounds, recreational facilities, camping grounds, outdoor theaters, stadiums, recreational areas near a body of water, or areas outside a rural building such as a religious facility; or

(b) A building that is occupied by twenty (20) or more persons on at least five (5) days a week for ten (10) weeks in any twelve (12)- month period. (The days and weeks need not be consecutive.) Examples include, but are not limited to, religious facilities, office buildings, community centers, general stores, 4-H facilities, or roller skating rinks; or

(c) A facility occupied by persons who are confined, are of impaired mobility, or would be difficult to evacuate. Examples include but are not limited to hospitals, prisons, schools, day-care facilities, retirement facilities or assisted-living facilities.

- **Item 1A: § 192.905(a)**

  During a records review of HCAs, it was determined that the HCA identification process had not appropriately identified a school playground/athletic field as an HCA pipeline segment on Rhame Road in Columbia, South Carolina

2. **Direct Assessment (DA) Plan**

   § 192.925 What are the requirements for using External Corrosion Direct Assessment (ECDA)?

   (b) *General requirements.* An operator that uses direct assessment to assess the threat of external corrosion must follow the requirements in this section, in ASME/ANSI B31 8S (ibr, see § 192.7), section 6.4, and in NACE RP 0502–2002 (ibr, see § 192.7). An operator must develop and implement a direct assessment plan that has procedures addressing pre-assessment, indirect examination, direct examination, and post-assessment. If the ECDA detects pipeline coating damage, the operator must also integrate the data from the ECDA with other information from the data integration (§ 192.917(b)) to evaluate the covered segment for the threat of third party damage, and to address the threat as required by § 192.917(e)(1).

- **Item 2A. § 192.925(b)**

  CGT's ECDA procedures do not provide for integrating ECDA indirect inspection pipeline coating indication data with encroachment and foreign line crossing data to evaluate the covered segment for the threat of third party damage, and to address this threat as required by §192 917(e)(1) Further, a process is not in place to require an indirect survey of CGT's lines crossed when operator personnel are not present during third party construction activities As an additional note, it was learned that third party

damage occurred on the CGT pipeline as a result of power pole placement by CGT's sister company, indicating lack of appropriate controls

3 **Preventive and Mitigative Measures**

§ 192.935 What additional preventive and mitigative measures must an operator take?

(a) *General requirements* An operator must take additional measures beyond those already required by Part 192 to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in a high consequence area. An operator must base the additional measures on the threats the operator has identified to each pipeline segment. *(See* § 192.917) An operator must conduct, in accordance with one of the risk assessment approaches in ASME/ANSI B31.8S (ibr, *see* § 192.7), section 5, a risk analysis of its pipeline to identify additional measures to protect the high consequence area and enhance public safety. Such additional measures include, but are not limited to, installing Automatic Shut-off Valves or Remote Control Valves, installing computerized monitoring and leak detection systems, replacing pipe segments with pipe of heavier wall thickness, providing additional training to personnel on response procedures, conducting drills with local emergency responders and implementing additional inspection and maintenance programs.

(b) *Third party damage and outside force damage*—(1) *Third party damage.* An operator must enhance its damage prevention program, as required under § 192.614 of this part, with respect to a covered segment to prevent and minimize the consequences of a release due to third party damage. Enhanced measures to an existing damage prevention program include, at a minimum—

(ii) Collecting in a central database information that is location specific on excavation damage that occurs in covered and non covered segments in the transmission system and the root cause analysis to support identification of targeted additional preventative and mitigative measures in the high consequence areas. This information must include recognized damage that is not required to be reported as an incident under part 191.

- **Item 3A: § 192.935(b)(2)**

  There are no procedures for collecting, in a central database, location-specific information on excavation damage that occurs in covered and non-covered segments and the root cause analysis to support identification of targeted additional preventative and mitigative measures in HCAs

- **Item 3B: § 192.935(a)**

The CGT IMP does not include an evaluation of threats, a spectrum of preventive and mitigative (P&M) alternatives, and the potential impact on the identified risks for HCA segments Specifically, the determination of appropriate P&M measures does not include appropriate factors of likelihood and consequence

4. **Communications Plan**

§ 192.911 What are the elements of an integrity management program?

An operator's initial integrity management program begins with a framework *(see* § 192.907) and evolves into a more detailed and comprehensive integrity management program, as information is gained and incorporated into the program. An operator must make continual improvements to its program The initial program framework and subsequent program must, at minimum, contain the following elements. (When indicated, refer to ASME/ANSI B31.8S (ibr, *see* § 192 7) for more detailed information on the listed element.)

(m) A communication plan that includes the elements of ASME/ANSI B31.8S, section 10, and that includes procedures for addressing safety concerns raised by— (1) OPS; and (2) A State or local pipeline safety authority when a covered segment is located in a State where OPS has an interstate agent agreement

- **Item 4A: § 192.911(m)**

The CGT IMP includes no procedures on how safety concerns raised by PHMSA or State authorities are to be documented, tracked, and addressed

Proposed Compliance Order

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Carolina Gas Transmission Please refer to the *Proposed Compliance Order* that is enclosed and made a part of this Notice

Warning Items

With respect to item number 1A, 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 this item Be advised that failure to do so may result in Carolina Gas Transmission being subject to additional enforcement action

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 2-2007-1010** and for each document you submit, please provide a copy in electronic format whenever possible

Sincerely,

Linda Daugherty

Linda Daugherty
Director, Southern 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 Carolina Gas Transmission (CGT) a Compliance Order incorporating the following remedial requirements to ensure the compliance of Carolina Gas Transmission with the pipeline safety regulations

1 In regard to Item Number 2A of the Notice pertaining to CGT's ECDA procedures not providing for integrating ECDA indirect inspection pipeline coating indication data with encroachment and foreign line crossing data to evaluate the covered segment for the threat of third party damage A process and procedures must be developed for integrating ECDA indirect inspection indications with encroachment and foreign line crossing data to evaluate the covered segments for the threat of third party damage Additionally, CGT must require action to ensure the integrity of CGT pipelines when operator personnel are not present during third party construction activities that cross CGT pipelines An indirect survey of the CGT pipeline crossed could be performed to ensure safety and that the construction activity did not damage the CGT pipeline CGT has taken steps to ensure that the sister companies are aware of these requirements to prevent inadvertent damage to the pipelines when power poles are installed in the future CGT must document these actions and incorporate into the CGT integrity management program

2 In regard to Item Number 3A of the Notice pertaining to CGT IMP having no procedures for collecting, in a central database, location-specific information on excavation damage that occurs in covered and non-covered segments and the root cause analysis to support identification of targeted additional preventative and mitigative (P&M) measures in HCAs CGT must develop procedures for collecting location - specific information on excavation damage that occurs in covered and non-covered segments Root cause analysis requirements should be developed and integrated into CGT procedures

3 In regard to Item Number 3B of the Notice pertaining to CGT IMP not including an evaluation of threats, a spectrum of preventive and mitigative (P&M) alternatives, and the potential impact on the identified risks for HCA segments CGT must fully develop a threat evaluation and P&M alternatives with all appropriate factors included into the evaluation, especially likelihood and consequence factors The risk process should also be appropriately linked to the P&M process

4 In regard to Item Number 4A of the Notice pertaining to CGT IMP having no procedures on how safety concerns raised by PHMSA or State authorities are to be documented, tracked, and addressed CGT must develop procedures on how all safety concerns are to be documented, tracked and addressed

5 Carolina Gas Transmission has 90 days after the receipt of the Final Order to complete the above items

6 Carolina Gas Transmission shall maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Linda Daugherty, Director, Southern Region, Pipeline and Hazardous Materials Safety Administration Costs shall 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