## TENNESSEE REGULATORY AUTHORITY



460 James Robertson Parkway Nashville, Tennessee 37243-0505

## **MEMORANDUM**

To:

Eddie Roberson, Chairman

Tre Hargett, Director Sara Kyle, Director

From:

Larry K. Borum, Chief - Gas Pipeline Safety Division

Docket No.

07-00251

Date:

June 13, 2008

Subject:

Staff Report - Natural Gas Leak Complaint by Mr Paul Whetstone, Morristown,

TN.

During the May 19, 2008 Tennessee Regulatory Authority Conference, Directors heard the petition of Atmos Energy Corporation ("Atmos") for a waiver to permit the limited use of polyethylene piping (Docket No. 07-00251). During the public hearing for this item, Mr. Paul Whetstone of 427 E. 4<sup>th</sup> North Street in Morristown, Tennessee stated that on several occasions he had detected the odor of natural gas near the road in front of his residence and reported the natural gas leaks to the Atmos-Morristown distribution system operator. Mr. Whetstone stated that Atmos-Morristown personnel would respond to his numerous leak reports, however, he did not think the leaks were being repaired. According to Atmos-Morristown records, one leak repair had been completed each year since 2005 at or near the 427 E. 4<sup>th</sup> North Street. The most recent leak repair at this location was completed during the week of May 12-16, 2008. Based on Mr. Whetstone's comments, the Tennessee Regulatory Authority Directors requested that the Gas Pipeline Safety Division ("GPSD") investigate his concerns and report its findings.

Mr. Tony Hughes, Operational Superintendent of the Atmos-Morristown natural gas distribution system, stated that Mr. Whetstone had expressed concerns to Morristown city officials in the Fall of 2007 regarding his perception of poor maintenance of the natural gas distribution system. This

concern was reportedly based on gas odors at several locations in his neighborhood. A representative of the City of Morristown contacted Mr. Hughes to determine if there valid concerns with the gas distribution system. In response, Mr. Hughes described the bare steel pipe replacement program underway in many of the Atmos natural gas distribution operations throughout Tennessee. Mr. Hughes was under the impression that the city official was satisfied with his response, and that the "City" would respond to Mr. Whetstone.

Safety of a natural gas distribution system is greatly enhanced by a high level of public knowledge and awareness. The report of possible natural gas leaks by Mr. Whetstone is commendable and certainly warranted. The frustration and perception of operator non-responsiveness on the part of Mr. Whetstone is understandable. Based on records reviewed, the response by Atmos-Morristown personnel also appears to be appropriate. Even though both parties appear to have acted responsibly, additional communication and explanation between the two would have probably lowered frustration level. Additional communication would have been very valuable because of rather unique characteristics of the distribution system in this area and circumstances as follows:

- The area in the vicinity of 427 E. 4<sup>th</sup> North Street is provided with natural gas through some of the first gas pipelines to be constructed in the City of Morristown and the pipe material used was steel.
- The steel pipe was not coated nor was it provided with cathodic protection.
- The previous owner of the Morristown system, United Cities Gas, began a program to replace bare steel pipe in Morristown as well as in other cities in Tennessee. Atmos has continued this program and replaced in excess of 45,000 lineal feet in the past year.
- Due to many variables, the extent of corrosion damage to buried unprotected bare steel
  pipe can vary from no threat to the integrity of the pipe to the development of leaks
  extending the entire length of a segment of pipe.
- Realizing that replacing all bare steel pipelines present in distribution systems in
  Tennessee would require many years, Atmos Energy developed a risk management
  program to establish a priority list for pipe replacement projects. Because many factors
  considered in developing the priority list are impossible to exactly quantify, the priority

list is periodically re-evaluated as additional data becomes available and replacement projects are completed.

Classification of identified leaks is not an exact process.

Based on our investigation, the above characteristics/circumstances played a part in Mr. Whetstone's perception and subsequent frustration as follows:

- The old bare steel lines have apparently experienced corrosion to the extent that leaks
  were occurring at many locations along the pipelines in the area of Mr. Whetstone's
  residence.
- As Atmos personnel were repairing reported leaks, it is possible that new leaks were developing that led Mr. Whetstone to believe that his reports of leaks were being ignored by the operator.
- In December of 2007, Atmos employees were dispatched to investigate a leak call placed by Mr. Whetstone. The leak was identified during the September leak survey and was classified as a grade 2 leak not requiring immediate attention. At that time records show that no other leaks were found in the immediate vicinity of the reported leak.
- Due to documented leak reports and leak repairs, this area of bare steel continued to rise in priority on the bare steel pipe replacement list. Realizing that replacement of pipelines in this area was imminent and due to the location and classification of the reported leak, the operator felt that public safety was not at risk and made the decision that it would be an unnecessary expenditure of men and resources to repair the leak prior to replacing the pipeline in its entirety.

On May 23, 2008, Tom Woosley and Pete Hut of the GPSD inspection staff met with Mr. Whetstone as part of the GPSD evaluation of the matter. Mr. Whetstone identified several locations where the presence of a natural gas odor had been detected. Mr. Woosley and Mr. Hut investigated the section of E. 4<sup>th</sup> North Street in the vicinity of locations indicated by Mr. Whetstone, and detected the natural gas odor near 419 E. 4<sup>th</sup> North Street as well as at the intersection of N. James Street and E. 4<sup>th</sup> North Street (possibly a valve leak). At these locations, the bare steel lines remained in service while new service lines were extended, tested and connected. No gas odor was detected at the other locations identified by Mr. Whetstone.

Evidence in the form of recently placed gravel backfill was found at the end of Mr. Whetstone's

drive and appeared to be the location of a recent leak repair.

The GPSD inspectors reported that Mr. Whetstone indicated that he was satisfied with the

replacement effort. However, he remained concerned that the Atmos-Morristown Superintendent

had not met with him previously; when I spoke with the Superintendent, he stated that he was

never aware of a request to meet with Mr. Whetstone.

In an effort to follow up with Mr. Whetstone, a message was left with his assistant at his law

office on June 10. On June 11, I reached Mr. Whetstone on his mobile phone. At that time, he

stated that he met with the Superintendent and was satisfied with their effort and appreciated the

response and assistance from the GPSD office. He stated that he was very busy with a case and

would get back with this office at a later date.

In Summary, it appears that the leaks reported by Mr. Whetstone have been addressed by Atmos-

Morristown through completion of the pipe replacement project in the area. Once additional

information was provided, Mr. Whetstone's concerns about the initial response to leak reports

have been eased.

I will be available to provide an oral summary of this Staff Report during the resumption of the

public hearing in Docket No. 07-00251 at the June 23, 2008 Authority Conference.

cc:

Ron Jones, Director

Administrative Aides

**Division Chiefs** 

Paul Whetstone

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