

PI-74-0108

April 22, 1974

Mr.H. R. Garabrant
Arizona Corporation Commission
Utilities Division
1688 West Adams
Phoenix, AR 85007

Dear Mr. Garabrant:

Thank you for you letter of April 10, 1974, asking whether the Federal Gas pipeline safety standards (49CFR Part 192) require leakage surveys in advance of scheduled street repairs.

As you point out, section 192.723 of the standards sets forth the requirements concerning leakage surveys. This section requires surveys to be made periodically as provided in the operator's operating and maintenance plan but not less frequently than every year or every 5 years, depending on pipeline location. The section does not specifically require surveys in advance of street construction. However, if such surveys are prescribed in an operating and maintenance plan, then the operator concerned must conduct them. The procedures of an operating and maintenance plan are as binding on the operator as the Federal standards (section 192.13(c)).

You enclosed a copy of the Arizona Public Service Company's operating and maintenance plan. We have reviewed the plan, and it does not appear that any of its provisions would require a leakage survey in advance of street repairs.

Inasmuch as the Federal standards and the operating and maintenance plan do not require this type of survey, compliance action based on either the standards or the plan would be inappropriate. However, if you feel that a leak survey should be required in advance of street repairs, we suggest that your Commission adopt standards more stringent than Federal standards for intrastate pipeline facilities.

Sincerely,

/signed/

Joseph C. Caldwell
Director
Office of Pipeline Safety

April 10, 1974

Mr. Joseph C. Caldwell
Office of Pipeline Safety
Department of Transportation
Washington, D.C. 20550

Dear Mr. Caldwell:

I may have treaded on some thin ground or else I am about to do some good when I started questioning one of the major gas distribution companies in Arizona as to what their policies were in regards to leakage surveys and repairs ahead of street improvement. A representative of the company, after receiving my letter of April 8, 1974, told me that I was exceeding my authority and looking into areas that belonged to the gas company operations only. This may be and I could use some clarification.

Not only does the public get upset when new streets are dug up for repairs by a utility company, my personal experience in the past has shown that new street resurfacing, even a thin spray type seal coat on an asphalt street, slows dissipation of gas through old paving, thus causing greater gas migration whereby the gas in effect gets closer to a possible source of ignition or increases the likelihood of planted vegetation damage adjacent to the street. As I understand it "property" is also to be protected by public law 90-481.

About 25 years ago when working for a gas company, I remember investigating why it seemed that so many new streets were being cut. We reached the conclusion that it was the issuance of repair orders as a result of vegetation surveys and customer complaints of dying vegetation that occurred there before the improvement. It was also conjectured that soil vibration from heavy equipment could be loosening the crust around pitholes in the pipe as well as better sealing of the street. At that time for minor street improvements, we were not running a complete thorough leakage survey, usually only a vegetation survey which appeared to be insufficient.

In view of the above, when the opportunity arises(as in this case) I try to bring to light and promote coordination and cooperation between people involved in street improvements and the utility company.

DOT 192.723 does not specifically cover surveys ahead of street improvements unless in 192.723(b)(2)_ "...must be made as frequently as necessary..." could be construed that it is necessary ahead of a street improvement due to the general knowledge. That investigation beforehand helps reduce damage to streets and vegetation afterward. If the knowledge is not generally known, I consider it part of my job to spread the knowledge gained through my experience for consideration.

Also, DOT 192.613 possible could be quoted in support of requiring such an investigation as this section is sort of a catch all, but I can't really say that a street improvement is unusual - neither is it routine in a small town.

I believe my best support lies under DOT 192.17 where the operator filed an operating and maintenance plan. Under Section III of his plan, I believe I have justification of looking into the accomplishment of leakage surveys and repairs ahead of street improvements as they are a "civic improvement".

The situation (not too serious at this time) somewhat puzzles me as I am reasonably sure the company involved does make such surveys in larger cities, however, they may not be actively pursuing surveys ahead of street improvements in small towns that they serve. It also may be that they are just resisting what they may consider governmental interference in their business.

Before I probe deeper in this, I need to know if I have a proper foundation or a leg to stand on. Arizona has adopted no laws, rules or codes etc. that would be applicable in this case except those of DOT's.

For the record, it should be noted that the short visit at the job site in the small town in question was not a part of a formal inspection and no attempt was made to cite the gas company as you can see from the attached letter. Had it been a part of a formal inspection, I would have had a gas company representative with me and we would have determined if a leakage survey had been conducted without the knowledge of the city personnel even though city personnel were not aware that making a request for leakage surveys ahead of street improvements is a normal and proper procedure.

Awaiting your comments.

Very truly yours,
Arizona Corporation Commission

H.R. Garabrant, Gas Utilities Safety Engineer
Utilities Division

ENC: as stated.

April 8, 1974

Mr. Pete Watkins
Arizona Public Service Co.
P.O. Box 21666
Phoenix, AR 85036

Dear Mr. Watkins:

On April 3, 1974 I was returning to Phoenix and was passing through the town of Tolleson when I observed a Municipal Street Paving crew in the process of working on a major street improvement job 5 or 6 blocks long, on 92nd Ave. North of Van Buren.

On stopping and talking with the crew, I found that the gas company (APS) had properly given them gas pipe location information. Also, when talking to Mr. Green, the Public Works Director for Tolleson, I found that he was unaware that it is in the best interest of all concerned to notify the gas company and other utilities to survey their facilities for needed repairs or replacement of facilities as soon as the major street improvement is budgeted, preferably at least 3 or 4 months ahead of the proposed work.

Could you please advise me what APS's standard practices are along this line and if you promote the request for notice ahead of street improvements?

My definition of a major street improvement is the removal of old paving the width of the street, grading, adding necessary ballast, compacting, and installing entirely new paving. The job may or may not include work pertaining to curbs, gutters and sidewalks.

A minor improvements consists of adding 2" or less additional paving on top of existing paving.

I don't know if there is sufficient time available in this case, but a leakage survey and repairs if needed would be desirable as it is a shame to have new streets torn up due to lack of surveys and coordination of repairs.

Sincerely,
Arizona Corporation Commission

H.R. Garabrant
Gas Utilities Safety Engineer
Utilities Division
ARIZONA PUBLIC SERVICE COMPANY A.C.C.No. 982
Phoenix, Arizona Original Sheet No.1
Filed by: B. Paul Hart
Title: Manager, Rate Services
Date Original Filing: FEB.10, 1970
District: All Company's Gas Areas Effective: Mar.12,1970

Complying with Arizona Corporation Commission Amended General Order U-47 dated Nov. 17, 1969, the following is presented as the Company's plan for operation and maintenance of gas pipelines.

GAS DISTRIBUTION OPERATING & MAINTENANCE PLAN

GENERAL PLAN

To operate and maintain the Gas Distribution System to give adequate, safe, dependable and economical gas service to all customers. This plan will comply with the regulations and standards imposed upon the Company by certificates of convenience and necessity, by county and city franchises, and by applicable state and federal laws., orders and regulations.

SPECIFIC PLAN

- I. New Additions
 - A. Report of Additions

1. Design according to standards (USA BBB.8-1968).
2. Qualifying tests for design operating conditions (USA BBB.8-1968).
3. Inspection reports verifying construction standards (USA BBB.8-1968).

II. Operating Procedures

- A. There shall be methods or means of monitoring and controlling gas distribution system pressures to provide a margin for safety and to insure adequate gas supplies to all customers.
- B. Records shall be maintained of gas quality, BTU and specific gravity.
- C. A periodic inspection of regulator stations, valve stations and system metering stations will be made. A record will be made of these inspections and ancillary tests, for odor, leaks, water, drips, valve operation, bleeds, vents, covers and ring, and encroachment of others.

III. Maintenance Plan

- A. The Gas Distribution System (all gas carrying pipes and equipment with appurtenances, protective devices and materials) will be under regular surveillance as follows:
 1. Systematic patrol using mobile leak detector, where practicable.
 2. Barhole testing as necessitated by mobile inspection.
 3. Foot patrol and "hand-held" detectors on mains and services not accessible to mobile patrol.
 4. Numbers 1 through 3. to watch for vegetation signs of leakage, changes in surface conditions, encroachment of other services and civic improvements.
- B. As a follow up to surveys described in A above, APS will where required:
 1. Make replacement and abandonments ordered on mains and equipment found unsafe under operating conditions.
 2. Accelerate patrols and leak surveys scheduled.
 3. Downgrade operating conditions, where pipe conditions require.
 4. Upgrade or delay further patrols/inspections, when pipe and leakage tests warrant.
- C. Repairs made and tested shall be reported as completed.

- D. Abandonments records shall be made from orders directing this action.
- IV. Emergency Plan pursuant to USA B31.8-1968 will be maintained.
- V. Welders qualifications test shall be in accordance with USA B31.8-1968 and references, which include sampling of field welds selected for quality control.
- VI. Pipeline Inspection Reports (corrosion)
- Whenever the pipe distribution system is uncovered, a pipe inspection report shall be made on suitable form and entered in record.
- VII. Odor reports shall be made from monthly tests and random points.
- VIII. Cathodic records shall show test conducted on the basis of engineering requirements.
- IX. Safety rules shall be promulgated for all classifications of APS personnel working with the Gas Distribution System.
- X. Accidents/incidents will be reported as required by applicable law and regulations.
- XI. Public information program for location and underground facilities and full-time service personnel on call for emergency service are maintained.