## STATE OF NEBRASKA



#### Notice of Probable Violation



Jim Heine Fire Marshal

Pete Ricketts Governor

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 23, 2016

Scott L. Keep President Metropolitan Utilities District 1723 Harney Street Omaha, NE 68102

RE: Incident at 422 South 11th Street, Omaha Nebraska

The State Fire Marshal Office, Fuels Division, Pipeline Safety has conducted an investigation of the incident at 422 South 11<sup>th</sup> Street, Omaha Nebraska within the operating natural gas system of Metropolitan Utilities District. As a result of this investigation, we believe there is probable violation of Title 155 Nebraska Administrative Code Chapter 1.001 adopting by reference Pipeline Safety Regulations Title 49, Code of Federal Regulations, Part 191, 192, 199, & 40.

Therefore, the purpose of this letter is to request a response from Metropolitan Utilities District for the probable violation. I am requesting that Metropolitan Utilities District respond to within 30 days of receipt of this letter. Please reference 20160401-N in the response. The response may accept the findings and state a plan of action to address the probable violation or, the response may disagree with the findings. If Metropolitan Utilities District chooses to disagree with the findings, please justify your position in the response.

The following details the specific findings of the investigation as they relate to the probable violation. Items listed in blue are Part 192 reference; items listed in black are findings.

§192.605 Procedural manual for operations, maintenance, and emergencies Each operator shall include the following in its operating and maintenance plan.

(a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least one each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted



§192 614 Damage prevention program

- (c) The damage prevention program required by paragraph (a) of this section must, at a minimum:
- (5) Provide for temporary marking of buried pipelines in the area of excavation activity before as far as practical, the activity begins

Metropolitan Utilities District personnel did not respond in an appropriate manner to a locate request as per Metropolitan Utilities District Operation and Maintenance Procedures. For locate request # 153640287 dated 12/30/15, Metropolitan Utilities District personnel did not travel to the location for identifying, locating and marking of gas pipeline for 422 S 11<sup>th</sup> Street Omaha, NE.

Metropolitan Utilities District personnel failed to sufficiently mark gas pipeline for 422 S 11<sup>th</sup> Street Omaha, NE., as per Metropolitan Utilities District Operation and Maintenance procedures. Visually the markings for the gas service at 422 S 11<sup>th</sup> Street were non-existent. The markings that were located on the concrete sidewalk in front of 422 S 11<sup>th</sup> Street, (two opaque dots) were not consistent with markings of other gas service lines in the immediate area leading the excavator to believe no gas service line existed at the location where the damage occurred.

At present we consider the findings to be a probable non-compliance with Title 155 Nebraska Administrative Code Chapter 1.001 adopting by reference pipeline safety regulations Title 49, Code of Federal Regulations, Part 192.

#### 81-546. Violations; notice; failure to comply; penalty.

Whenever the State Fire Marshal has reason to believe any person is violating any provision of subsection (1) of section 81-545 of the Nebraska Natural Gas Pipeline Safety Act of 1969 or any regulation under the Nebraska Natural Gas Pipeline Safety Act of 1969, the State Fire Marshal may request the Attorney General of Nebraska to bring an action under section 81-547 of the Nebraska Natural Gas Pipeline Safety Act of 1969 in the district court of the county in which the defendant's principal place of business is located. The district court may impose a civil penalty not to exceed ten thousand dollars for each violation for each day that such violation persists, except that the maximum civil penalty shall not exceed five hundred thousand dollars for any related series of violations. The district court shall have jurisdiction to restrain violations of the Nebraska Natural Gas Pipeline Safety Act of 1969 including the restraint of transportation of gas or the operation of a pipeline facility.

If you have any questions regarding the substance or propriety of this notice, please contact our office at Nebraska State Fire Marshal, Fuels Division, Pipeline Safety Section, 246 South 14th Street, Lincoln, NE 68508-1804 or telephone 402-471-9465.

Arnie Bates, Deputy

Fuels Division, Pipeline Section Nebraska State Fire Marshal Clark Conklin, Chief Deputy

Fuels Division

Nebraska State Fire Marshal

\*\* MAIN OFFICE

1 DISTRICT A
246 South 14° Street
Lincoln, NF 66508-1804
r4021471-2027

DISTRICT B 438 West Market Album, NE 08620-1241 14021395-2164 FUELS DIVISION
FUELS DIVISION
FUELS IN Pipeline
246 South 14th Street
Lincoln, NE 08508-1804
(402) 471-9465

TRAINING DIVISION 3347 W Capital Ave Grand Island, NE, 18801 1308; 385-6893



## Nebraska State Fire Marshal Pipeline Safety Section Investigation Supplemental

SFM Deputy Conducting Inspection:

Call#:

Report Date:

**Arnie Bates** 

8738

1/22/16

Inspection Type:

Inspection Date(s):

**INCIDENT INVESTIGATION Supplemental** 

olemental 01/20/16

Operator Name:

Unit:

Town/Site:

Facility ID:

Metropolitan

Distribution

Omaha: 422 S 11th

15-01-463

**Utilities District** 

EXHIBIT

## NEBRASKA STATE FIRE MARSHAL'S OFFICE

Investigation Supplemental Report IR 160031

Name of Operator	Metropolitan Utilities District
Operator Address: Local Area	
Metropolitan Utilities District 1723 Harney Street Omaha NE 68102	Phone Number:       402.504.7150.         Fax Number:       402.         Emergency:       402.554.7777         Federal ID:       12390
Person conducting Inspection Arnie Bates DSFM8738	Date: January 20, 2016

DATE OF INCIDENT: Jan

January 09, 2016

LOCATION: 422 South 11th Street, Omaha NE 68102

**DESCRIPTION:** At approximately 1450 hours 01/09/2016 at 422 South 11th Street, Omaha, an excavator hit and damaged a gas service directly outside of 422 S. 11th Street. There was a release of natural gas from a damage natural gas service line operating at 9 psig. This release of natural gas was ignited causing an explosion and ensuing fire. The fire continued to be fueled by escaping natural gas until gas flow was stopped at approximately 1628 hours. The fire continued to progress, eventually consuming the structure. There was no loss of life and no injuries that required over-night hospitalization.

SUMMARY: On this date it was apparent to this deputy that the markings for the gas service locate 1) were not recent 2) were not sufficient to give excavator indication for the presence of a gas line.

#### FINDING:

- 1) Was a pipeline/or pipeline facilities involved? Yes, excavation damage to gas service line.
- 2) Were there contributing factors? Yes, actions by gas operator and weather conditions.
- 3) Violations of the pipeline Operator? Highly possible.
- 4) Recommendations to the operator to prevent reoccurrence. Not at this date.

CONCLUSION: The service line was not marked! It appears that the service line was not located? Did locators have knowledge, or should they have known, that there was a service line there?

Are there additional service line(s) that are not on some type of mapping system in order for field personnel can identify them? Is this a mapping issue; a knowledge issue; a training issue; a qualification issue; and or a communication issue?

It appears that MUD mapping does not show this service line, neither the map sent to me, or on the computer version observed on 1/10/15 (Ron Charvat) was the service line identified. When the valve for 419 S 11th Street was shut off (why wasn't the service valve for 422/424 S 11th closed at the same time?

MUD was aware of the meter and location, why didn't they know of the service line? For every meter there should be an identified service line.

## PERSONS MENTIONED IN THIS REPORT

Douglas Krysl, Capt Investigator, Omaha Fire Department
David Sobotka Jr. Investigator, Omaha Fire Department
Dave Dooley, Investigator, Omaha Fire Department
Mike Conrad, Metropolitan Utilities District, Claims & Investigation, Omaha NE

Stephen Lucas, Deputy, State Fire Marshal-Pipeline Safety Section Clark Conklin, Chief Fuels Division, State Fire Marshal Jay Davis, Omaha Building/Codes Enforcement, Omaha Ken Scurto, Fire Investigations, Lincoln NE Scott Jacobson, OSHA Compliance Officer, Omaha Tom Vacek, Metropolitan Utilities District, Locator

#### BODY OF REPORT

January 20, 2016, Received call from Stephen Lucas 0817 hrs 01/20/2016 indicating that Omaha Fire Deptartment had contacted him and, arrangements were underway for the streets to be exposed for the purpose of viewing the area and locating the existing gas service line at 0900 hours.

Departed La Vista 0837 hrs arriving at S 11th Street and Howard Street, Omaha at 0907 hrs Met with Chief Krysl, Omaha Fire Department and was briefed on todays' events, and how it would be organized. (short list)

Open fence for photos from east sidewalk,

Assigned workers would remove tarps and snow covering the street,

Heating hoses would be removed,

Area to curb of 422 S 11th Street would be open for investigation and photos, when all parties satisfied, and coordinates of specific locations had been made,

Locator would be brought in and the existing gas service would be located.

Area would be open for photos and inspection again.

Met with Deputy Lucas

Signed in upon Omaha Investigative log.

Met with Mike Conrad (MUD); Ken Scurto (Insurance Investigator), Capt Dooley (Omaha Fire Investigator), Jay Davis, (Omaha Building Inspector), Scott Jacobson (OSHA Compliance Officer)

At 936 hours called Clark Conklin, left message indicating change in itinerary.

At approximately 950 hours contacted Clark Conklin updated him on activities.

At approximately 1000 am fence was opened up for viewing area and observance of uncovering street.

At approximately 1113 hours 75% street in front of M's Pub (422 S 11th) is cleared, photos being taken

1115 hours can visually see curb line in front of M's Pub, with camera able to identify (old gas service curb box and blue markings for water line) no visible indicators of recent locate mark for gas service line.

1118 last tarp removed, service valve boxes now exposed. Visually scanning, searching area for any yellow paint marks over anticipated service line location. (not able to verify any markings above service line for 422 S 11th Street) There are two yellow paint dots upon the side walk near where gas service could be. These do not appear to be recent paint dots.

1124 identify MUD representatives visually surveying area for paint markings.

1213 Locator to starts setting up equipment

1216 Location of gas service line begins

1230 Locating and flagging process completed

1235 investigative process ends for today

1245 depart secured area.

1251 depart area to La Vista arrive at 1307

1331 depart La Vista for Lincoln, arrive at SFM 1422 hours

Visual observation of area upon street in front of 421/422 South 11th Street.

As the tarps were rolled back away from of service valve box for 422 S 11th Street, it was visually apparent that some of the gas lines had been previously located and marked with yellow paint. It was also visually apparent that the service line for 422/424 S 11th Street had not been recently marked with yellow paint.

A visual search of the street surface and west curb line, in the area of 422 S 11th Street, indicated that water line(s) had been marked with blue paint. Visually there were apparent color variations of blue for the markings. The Markings had faded blue appearance and brighter blue appearance. Underground Utility markings with red paint were also observed.

The color variation indicating to this deputy, that the markings had been applied at two different time intervals. This corresponds to yellow paint markings found along the east side of S 11th Street. Yellow markings in same area or alignment with two color variations. Faded or pale yellow and bright yellow.

Observation of locating existing gas service line for 422 S 11th Street.

Call was made to Nebraska811 for the locate process.

Tom Vacek (MUD Locator) was individual performing the line locate.

Service valve box cover was removed. A yellow tracer wire was exposed.

Equipment was setup (ground established and transmitter turned on).

Transmitter was attached to tracer wire, the receiver (hand held locate devise) was turned on and checked for power level (the strength of radio signal received).

Tom proceeded to locate the 2" PE service line, from the Service valve box to the curb line at 422 S 11th Street, marking the gas line route with flags. There was no apparent loss of signal along the pathway.

Pictures were taken of this activity.

It became visually apparent that this pipe segment had not been marked with yellow paint. This deputy questions if the 2" PE service line had been located for any of the locate requests, since there were no apparent markings, old or new.

With all activities completed for the day. This deputy departed the area and contacted Clark Conklin 1257 hours:

Issues: The service line was not marked!

It appears that the service line was not located?

Did locators have knowledge or should have known that there was a service line there? Are there additional service line(s) that are not on some type of mapping system in order for field

personnel can identify them? Is this a (Mapping issue?) Knowledge issue? Training issue? Qualification issue? Communication issue?

It appears that MUD mapping does not show this service line, neither the map sent to me, or on the computer version observed on 1/10/15 (Ron Charvat) was the service line identified.

When the valve for 419 S 11th Street was shut off (why wasn't the service valve for 422/424 S 11th closed at the same time?

MUD was aware of the meter and location, why didn't they know of the service line? For every meter there should be an identified service line.

Contacting an excavator and asking them if the marks are still visible or need refreshed, is not the same as verifying that gas pipelines have been located. (If the pipe segment is not marked, we can not expect the excavator who utilizes directional drilling technology to know a gas line is present) You don't know, what you don't know.

#### END OF REPORT

Attachments: none



# Nebraska State Fire Marshal Pipeline Safety Section Investigation Supplemental

SFM Deputy Conducting Inspection:

Call#:

Report Date:

Arnie Bates

8738

2/22/16

Inspection Type:

Inspection Date(s):

**INCIDENT INVESTIGATION Supplemental** 

02/04/16

Operator Name:

Unit:

Town/Site:

Facility ID:

Metropolitan

Distribution

Omaha: 422 S 11th

15-01-463

**Utilities District** 

EXHIBIT

## NEBRASKA STATE FIRE MARSHAL'S OFFICE

Investigation Supplemental Report IR 160031

Name of Operator	Metropolitan Utilities District
Operator Address: Local Area	
Metropolitan Utilities District 1723 Harney Street	Phone Number: 402.504.7150. Fax Number: 402.
Omaha NE 68102	Emergency: 402.554.7777 Federal ID: 12390
Person conducting Inspection Arnie Bates DSFM8738	Date: February 4, 2016

DATE OF INCIDENT: January 09, 2016

LOCATION: 422 South 11th Street, Omaha NE 68102

**DESCRIPTION:** At approximately 1450 hours 01/09/2016 at 422 S 11th Street, Omaha, NE. an excavator hit and damaged a gas service directly outside of 422 S 11th Street. There was a release of natural gas from a damage natural gas service line operating at 9 psig. This release of natural gas was ignited causing an explosion and ensuing fire. The fire continued to be fueled by escaping natural gas until gas flow was stopped at approximately 1628 hours. The fire continued to progress, eventually consuming the structure. There was no loss of life and no injuries that required over-night hospitalization.

SUMMARY: On this date it was apparent

## FINDING:

- 1) Was a pipeline/or pipeline facilities involved? Yes, excvation damage to gas service line.
- 2) Were there contributing factors? Yes, actions by gas operator and weather conditions.
- 3) Violations of the pipeline Operator? Probable, gas operator did not mark gas line in response to the most recent (
- 4) Recommendations to the operator to prevent reoccurrence. Not at this date

CONCLUSION: Interviews with M.U.D. "locators" indicated that

- 1) They have been well versed in locating pipeline.
- 2) Information about the gas service was not available, except through "As-Built Drawing"
- 3) Only one locator had the opertunity to physically locate and mark the gas service for 422/424 S 11th Street.
- 4) The specific M.U.D. locator indicated that he located and marked the gas service on December 9, 2016
- 5) The other two individuals that had opertunity to locate this pipeline, did not locate or mark this pipeline.

#### PERSONS MENTIONED IN THIS REPORT

Ronald Bucher, Metropolitan Utilities District, General Counsil

David Stroebele, Metropolitan Utilities District, Supervisor Field Services.

Chris Sacco, Metropolitan Utilities District, Locator

Dick Costello, Metropolitan Utilities District, Locator

Kevin Bumgardner, Deputy State Fire Marshal, Damage Prevention-Pipeline Safety

Regina Shields, General Counsil, State Fire Marshal

#### BODY OF REPORT

For 2/4/16 These questions will be directed at the locators of record, for the gas mains and services in the area of 422 S 11th Street.

Date Who

Nebraska811 request ticket number

11/23/2015 Dick Costello

153271405

12/09/2015 Chris Sacco

153430856

Refresh

12/30/2016

Ron Janowski

153640287

Refresh (Did not ever go to

this area to lacte, thus was dismissed from questioning.

Statement: There will be questions about gas mains and gas services in an area from Harney Street to Howard Street, on South 11th Street. The questions will include your process of locating and marking the gas main(s) and gas service lines in this area. Other questions will address the general characteristics of the M.U.D. gas system or specific questions of procedures or processes for making changes to the gas system.

You work for Metropolitan Utilities District?

Your primary work assignment is to locate natural gas mains/services and water lines for M.U.D.?

What training have you received to perform your primary work assignment?

On average, how many locates will you conduct for a day?

What is your general process for locating and marking gas mains and/or services?

What make of locating equipment do you generally use?

Is that the equipment that you used on (date) to locate the gas main and services for the area between Harney Street and Howard Street for the ROW of S 11th Street and alley approach between Harney and Howard Street on S 11th Street?

What frequency setting do you generally use to locate gas mains and services?

Are these gas mains and services steel or PE?

There is tracer wire with the PE?

Can you highlight on this map, where you located the gas mains and services in response to the locate request from North Central Service, for your specific ticket # in the area between Harney Street and Howard Street for the ROW of S 11th Street and alley approach between Harney and Howard Street on S 11th Street?

Can you indicate on the map where you connected your transmitter?

Are all the gas services in this area, electronically continuous with the mains?

If not continuous, where would you attach your equipment to locate a gas service?

Did you locate gas piping for the area between Harney Street and Howard Street for the ROW of S 11th Street and alleys or alley approach between Harney and Howard Street on S 11th Street?

Did you locate the service line from South 11th Street into M's Pub identified as 422/424 South 11th?

If yes, what date?

How did you mark the location of this line?

Dis you locate the service line to the meter set in the alley west of 11th Street, between South 12th Street and South 11th Street, between Harney and Howard Street?

If yes, what date?

How did you mark the location of this line?

Did you locate the service for 415 S 11th Street?

If yes, what date?

How did you mark the location of this line?

Did you locate the service for 419 S 11th Street?

If yes, what date?

How did you mark the location of this line?

Did you locate the service for 421 S 11th Street?

If yes, what date?

How did you mark the location of this line?

Do you see any of these service lines for 417, 419, 421, or 422 South 11th Street, on your mapping system?

You have access to a (computer) to allow you to visually see a mapped area?

This program is: Utilities Viewer or GIS screen?

Visually, where on your computer do you look for information about a service line?

Are there service lines within the system that do not show on the mapping system?

Have you ever encountered a situation where a gas service is not showing on your mapping system?

What is the process for you to report a service line that is not on the mapping system?

Are there service lines in the system, that you can't electronically locate?

What is the process to locate and mark this type of service line?

When there are multiple locate requests for a "large project" similar to the project for installing fiber optic in the Old Market area, what process do you use when there is a refresh request, to locate or mark existing gas facilities?

Do you ever call an excavator for clarification on where to locate?

Do you ever call an excavator to see if they need paint marks refreshed?

For David Stroebele: Not an interview for activities during event, but as standard review of Operator Qualification and Public Awareness Plan documentation which feeds the Damage Prevention Plan.

In an effort to be more efficient with time during our meeting Feb. 4th I will need the following documentation:

2015 Excavator stakeholder list.

Last five year dates of when "communication to excavators" were sent out.

Copy of tracking mechanism in order to validate that "communication" was mailed, and how many were delivered/returned without delivery.

Copy of most recent "communication" letter to excavators.

Dates of most recent (2015) meetings with Excavators (Lunch and presentations about One-Call system for excavators/contractors)

Outline of Operator Qualification process for "Locating/Marking Pipelines" task 35-92

Copy of written or oral Test for this task 35-92 Copy of Performance of task (Hands-on evaluation) for task 35-92 Training requirements for performance of task.

I will ask to view documentation of qualification of locators, specifically those individuals requested to be interviewed.

Is it possible to have a copy of the M.U.D. Locating Manual referenced in Covered Task OQ 35-92

The structure at 422 S 11th Street has been indicated that it receives gas from two points (1) a service in alley between Harney & Howard Street/between S 11th & South 12 Street delivering to an above grade bank of meters attached to Market House (2) an underground service entrance from S 11th Street to basement of 422 S 11th serving a bank of 8 meters.

The underground service line is not shown on the current mapping system of MUD. This service was replaced (old service line abandoned in place and new service line installed on 08/08/2009) The new service was not placed into the mapping system. Nor has it been placed into the mapping system as of this date.

It is theorized by this deputy that since the underground service line for (422 & 424 S 11th Street) did not show upon the mapping system relied upon by MUD field personnel locator(s) and operations personnel, when there was request for locate(s) the service line (#1 above) was the only service line that personnel located and marked, because they could visibly see the riser in the alley.

This theory was re-enforced by the fact that on 01/10/16 while at this address, I contacted a field technician as asked to see the map of the area. The technician brought up mapping system for the area and showed me the service (#1) for 422 S 11th Street. It was only after another field technician indicated that there was a second service, (providing the meter number for the service) that it became apparent that the service line (#2) was not on the mapping system. By calling up the meter account information the technicians were able to gather information as to the service curb valve location for service line #2, but no map of this service line.

Investigation into the process of "locating" has indicated that this specific service for 422 S 11th Street was not located electronically, but located by use of maps (As Built Drawing) upon initial notification of excavation activities on or about December 9, 2015.

The Operator did respond to each request for locate in this specific area in some fashion. Three specific notifications of excavation for this area were given prior to the event. On two prior occasions pipeline segments near this address were located and marked. On the most recent request for locate, the individual locator did not go to the site but rather communicated with excavator by phone to see if markings were still visible.

This explains "why" on repeated occasions the MUD locator(s) indicated that the service was located and marked for the locate request ticket response [this being service #1].

It appears that the excavator was left to determine if there was a service line for 422/424 S 11th Street. Most all other service line markings were communicated by yellow paint markings on brick streets, curb face and sidewalks in the area. Markings for 422/424 S 11th Street were not

consistent with other markings for mains and service lines in the area. At time of investigation there were no markings readily apparent to identify or communicate the presents of a gas pipeline for this structure, upon the street or sidewalk.

## END OF REPORT

Attachments: none

## 3/2/16 Omaha investigation continued

Visited site (422 S 11<sup>th</sup> Street) to view activities. It appeared that part of the canopy over side walk, northeast corner of M's Pub had been removed.

Visually surveyed the area and businesses for video security surveillance camera(s) there is a camera within "All About Me Boutique" 419 S 11<sup>th</sup> Street, however it does not include a view of S 11<sup>th</sup> Street. There is an additional video security surveillance camera on the ATM at Howard & S 11<sup>th</sup> Southwest corner. Will follow up on view with Bank of The West.

Met with Investigator Krysl, reviewed documents of Fire report (specifically) statements from Dan Osterdyke, Mike Conrad.

Requested that statements be released to me for inclusion with my investigative file.

Investigator Krysl indicated that he would again speak with investigator Dooley on Thursday March 3.

If Investigator Dooley releases statements; Investigator Krysl will email to me.

From photo documentation of Omaha Fire Investigations, (arriving at location prior to Engine company laying out hose line to hydrant) there is no vehicle parked in the parking stall on east side of S 11<sup>th</sup> Street directly in front of 419 S 11<sup>th</sup> Street, that contained the service valves for 419 & 422/424 S 11<sup>th</sup> Street on east side.