

Impact of Exemptions on Operators

API/AOPL

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Overview

- Third party excavation damage is the leading cause of pipeline accidents that are fatal and injurious to the public and pose a significant risk to public safety.
- Excavation damage incidents occur for diverse reasons, ranging in resulting severity, but all pose a significant risk to human life.
- Many hits and near misses result from confusion of the scope of the exemption (either it did not apply to them, or the activity)
- Exemptions to the one-call notification system requirements have resulted in many hits and near misses.
 - For example, Texas has several One-Call exemptions, and operators have experienced hits and near misses by exempted parties such as the state DOT and railroads.

Exemptions Threaten Public Safety

- Every one-call exemption, and every failure to use the one-call system before excavation, threatens pipelines and public safety.
- All excavators, regardless of their expertise or sophistication of equipment, pose a hazard to a pipeline's integrity.
- While some exemptions may be necessary, they often lead to unintended consequences as excavators fail to understand the limitations of the exemptions.

Case Study 1 – Farming Exemption – Misapplication

- **Incident Occurred:** November 7, 2011
- **Location:** Tampico, Illinois
- **Cause:** Farmer used newly purchased field tiling plow behind his tractor without performing a One-Call
- Farmers are often exempt for surface farming, usually 12 to 18” tilling of the soil, which is often misunderstood. Farmers often believe ‘they’ are exempt rather than the specific activity they are undertaking. This misunderstanding can cause deeper soil disturbance activities than intended.
 - Deeper tilling or changing terrace designs
 - Tiling contractors working for farmers

Further Facts

- Depth of Cover to top of line – 4.1’
- Line well marked at edges of field
- Farmer was aware of the line (demonstrates effectiveness of Public Awareness)
- Line was bumped twice, third strike drove through both sides (pipe walls) of pipe
- Failure recognized by controllers (already isolated)
- Sheer coincidence – Pressure at 157 psig for nearby integrity work – typically 600 to 1000 psig, propane service

Scene of the Release



11/07

The Equipment



The Equipment



The Damage



Case 1 Discussion

- When the farmer struck the line, he exited the cab after turning the tractor off.
- While fleeing within the 700' diameter vapor cloud, the farmer was struggling to breathe but did manage to escape.
- No fire was involved.
- This situation was nearly a tragedy.
- The existence of farming exemptions has created confusion with serious ramifications.

Case Study 2 – Municipalities and Other Government Entities

- **Incident Occurred:** June 4, 2003
- **Location:** Chilton County, Alabama
- **Cause :** Road grading machine operated by County Employee struck 8MG pipeline
 - Chilton County Road Department did not submit a One-Call locate request for the road grading they were performing.
 - County Crews in Alabama are exempt from One-Call requirements when conducting maintenance

Section 4. Notice of Intent to Excavate or Demolish

(f) **Compliance with the notice requirements of this section is not required of any governmental entity doing maintenance work within dedicated state, county or city road rights-of-way; or of persons plowing less than 12 inches in depth for agricultural purposes; or of municipal or public corporations operating water and sewer boards, which produce, treat and sell water and provide fire protection in accordance with Insurance Service Office fire protection standards while doing work on any easements, rights-of-way or other property owned by said board or to which said board had access; or of any rural water system.**

Sequence of Events

- 09:04 – SCADA data indicated PPL’s Clanton Pump Station went down on Low Suction Pressure
- 09:14 – Line was shutdown and origin point, end point, and midpoint block valves electronically closed off by OCC
- 09:20 – Area Emergency Response Procedures Activated
- Personnel dispatched from locations upstream and down stream to ride the line;
 - Began plans to dispatch Helicopter
- 10:22 – Received call from Chilton Co. Road Dept. stating that one of their road grading machines had hit our line
- Later learned that Grader Operator reported a gas leak
 - The assumption was that it was an ALAGASCO line
 - Thorsby Fire Dept. arrived and determined the leak was diesel and that the line belonged to PPL.
- 10:28 – Area Manager contacted Chilton Co. Sheriff’s Dept. and was advised by the County Dispatcher that EMA director, Fire Dept., & Thorsby Police were on site
- 3 mobile homes were evacuated

Case 2 Discussion

- Damage Included:
 - **Volume Released**
 - 230 BBLs of Low Sulphur Diesel
 - **Cost:**
 - \$250,000
 - **Community Impact:**
 - 5 Mobile Homes impacted
 - Product flowed under one Mobile Home
- This situation was nearly a tragedy.
- Municipalities and Government entities should not be exempt from placing One-Calls for the same activities as private entities.

Effect of One-Call Exemptions

Exemptions Strain Operator Resources and Time

- Operators must engage in more frequent patrolling.
- Operators must participate in more monitoring in known areas.
- Operators must expend extra effort to persuade exemptees to call One-Call.
- Operators must uncover pipeline when it has been crossed to ensure the pipeline integrity.

API-AOPL Model One-Call Recommendations

- Recommendations are intended for States and PHMSA.
- Recommendations are supported by Common Ground Alliance Best Practices or other safety principles.
- A top priority recommendation is to possess minimal One-Call exemptions.

Activities That Should not be Eligible for One-Call Exemptions:

- Tilling of the soil for agricultural purposes (plowing, planting, installation or repair of drainage tile) at a depth of 16 inches or greater;
- Road construction and repair, regardless of entity conducting the excavation, including foundation upgrades such as crack and seat technology;
- Grading or clearing of roadside ditches or drainage ditches by state, county or municipal government agencies or their contractors using mechanized excavation equipment which disturbs or removes soil;
- Dredging, pile driving, wheel washing, spudding or large vessel anchoring in waterways regardless of entity conducting the excavation;
- Railroad excavations even in their own ROW where the soil is disturbed including, but not limited to track repair and soil disturbances from derailments or release cleanup efforts;
- Trenchless excavation (directional drilling).

Conclusion

- One-Call exemptions have caused, and will continue to cause hits and near misses.
- One-Call exemptions lead operators to spend additional resources training, patrolling, and monitoring assets.
- The states and PHMSA should utilize the Model One-Call provisions to ensure greatest safety for the public.