

### Survey and Environmental Fieldwork for Tennessee Gas Pipeline Company, LLC

### An Information Guide for Private Property Owners

#### Introduction

Tennessee Gas Pipeline Company, LLC., a Kinder Morgan Company ("Tennessee) is investigating the possibility of constructing and operating a natural gas pipeline in your area. Tennessee will be submitting engineering plans and detailed environmental data to local, state and federal agencies to allow for a thorough analysis of potential project impacts. As part of the planning process, Tennessee will be conducting field surveys and evaluations of the proposed construction location. The information gathered answers many of the survey-related questions commonly asked by landowners.

Generally, up to five types of surveys may be required on an individual's property: (1) civil surveys which identify the boundaries of the corridor for all other surveys, obtain an accurate description of existing features, and locate the future pipeline, (2) geotechnical surveys (3) archaeological surveys, (4) wetland and stream surveys, and (5) Surveys for rare, threatened, or endangered species. Highly trained engineers, scientists and technicians operating under the guidance of project managers perform these surveys.

### Why do you need to survey?

Having accurate, current information along the proposed

Pipeline route is necessary for the regulatory permitting processes and to identify appropriate construction techniques. Some of this information is found in maps, aerial photos, and public records. However, some data must be obtained on site.

# What happens during civil surveys?

A Tennessee representative (right- ofway agent) will contact you prior to survey crews entering your property. The survey crews will place stakes at intervals along the proposed pipeline centerline and at certain other locations to mark features such as angle points or property lines. Surveyors' stakes are left in place to serve as a guide to other specialists (e.g., engineers, appraisers, environmental scientists) who may need to conduct investigations of the right- of-way. When the final survey crew has completed their work, the stakes will be removed. Occasionally, incidental damages can result, which are typically very minor but understandably important to Tennessee and landowners. Tennessee will fairly compensate landowners for any documented damages if they occur.

### What is a geotechnical survey?

In order to design the pipeline, it is important to gather information about the types of soil and underground rock in areas where the pipeline would cross features

such as large rivers or roads. At specific sites, a truck mounted or track/skidder drilling rig will drill a 3- to 6-inch- wide hole and obtain soil and rock samples. Two to four small trucks with trailers will support this work. Tennessee will need landowner directions and permission to move these vehicles to and from the site. After the samples are collected, the borehole is completely filled and the work site restored. Each boring typically takes 2 to 5 days depending on the types of soils and the depth of the boring. The Tennessee Right of Way Agent will inform you if this type of survey is needed on your property.

# What do you look for during environmental fieldwork?

This varies depending on the types of property crossed and applicable regulatory requirements. Frequently, we need to conduct archaeological surveys and wetland delineations. Other studies, such as surveys of vegetation and wildlife, soil testing, or stream crossing surveys, may also be necessary.

# How will this survey work affect me?

Generally, environmentalfield studies cause little or no disruption to landowners. Field crews may walk along the proposed right-of-way crossing your property. In some cases they may need to dig small holes or leave small wooden stakes (called lath) behind. Disturbance is minimal and short term.



# What does an archaeological survey entail?

Archaeological surveys document the presence of historic and prehistoric artifacts and structures within the proposed pipeline right-of-way. Professional archaeologists walk along the proposed right-of-way and look for artifacts. Shovel tests are conducted if visibility is obscured by vegetation or if there is a likelihood of buried artifacts. Soils from shovel tests are screened and any artifacts collected. Holes are then filled and sod is replaced.

# What if you find an Archaeological site on my property?

In most cases, the archaeological sites found on the proposed right-of-way have been disturbed by previous activity. Sometimes a site is found that can yield important information about the past. In this

case, Tennessee's archaeologists may need to return to conduct further work. Our right-of-way agent will contact you if this is necessary.

### Am I liable for injuries to field crews on my property?

No. Contractors carry worker's compensation insurance. Safety is a top priority for all personnel working on Tennessee projects.

### What is Wetland Delineation?

Delineation or mapping of wetlands found on the proposed right-of-way, is conducted to describe environmental resources and determine if special construction methods will be necessary.

Typically, teams of 2 to 3 people will walk the proposed route to perform a visual check and limited soil probes. Teams will sometimes leave pin flags or laths behind, marking areas that may require further surveying. This information is then used to develop construction plans and file applicable permit applications.

# What happens if you find a wetland on my property?

If a wetland is identified, it would require Tennessee to use special construction methods on that section of the proposed right-of-way. Identification of wetlands does not affect or alter your existing use of the land and future uses will remain your prerogative, subject to existing regulations.

# What other kinds of work may be done?

Tennessee may need to identify existing vegetation, assess wildlife habitats, evaluate soil conditions, investigate stream crossings, or conduct other field work depending on site-specific needs. Information collected during this work is used to develop sound, appropriate construction methods. Regardless of the type of fieldwork, you will receive advance notice. Tennessee's survey methods will be low-impact and cause minimal disruption.

### Why conduct an endangered species survey?

If it appears that protected species (or habitat for that species) may be present, environmental agencies may ask Tennessee to field-verify these conditions. If endangered Species are identified on your property, Tennessee will work with the applicable agency to determine the best means to address this issue.

# What if this work results in damage to my property?

Tennessee's environmental surveyors have extensive experience in completing work on private property and are careful not to disturb livestock or to damage properties. A Tennessee right-of-way agent will contact you to discuss any site-specific issues regarding your particular property.

### When will these surveys be conducted?

Fieldwork is part of an extensive pre-construction planning effort, and is usually conducted during the Spring-Fall seasons, or as conditions permit during the winter months.

### For more information, please contact:

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