Testimony
of the Pennsylvania Gas Association

by

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Good morning. My name is Donald K. Gartman, and I am speaking on behalf of the Pennsylvania Gas Association (PGA). PGA is a statewide trade association whose members include natural gas local distribution companies, interstate pipeline companies, and individuals and companies otherwise associated with the natural gas industry in Pennsylvania.

I am with the Environmental Affairs Department of Columbia Gas System, Inc., which is headquartered in Wilmington, Delaware. I have a Masters' degree and Ph.D. in Aquatic Biology from Ohio State University. I am a certified Fisheries Scientist and Wildlife Biologist with the American Fisheries Society and the Wildlife Society, respectively. Since 1974 I have been with Columbia's Environmental Affairs Department, where I have worked on energy projects in numerous states and Canada. I have closely examined the environmental impacts of pipeline construction across streams and wetlands, and I have monitored pipeline projects which have involved wetland construction.

Based on my training and experience, I find that with properly planned and implemented construction procedures, wetlands can be traversed with little or no loss in wetland value or function. Pipeline installation imposes a temporary, minor, and self–correcting impact. In fact, it could be argued that having a buried pipeline across a wetland area *helps* to assure continuance of this landscape. Consistent with standard operations, natural gas pipeline easements preclude the construction of facilities or structures on the right-of-way. Once the wetland restores itself, the

easement provides the pipeline company with a vested interest in ensuring that the wetland is not disturbed in the future.

Pipeline construction is a relatively fast-moving operation and wetland crossings can be completed in a variety of ways. The typical "open cut" construction procedure involves the following steps:

- In right-of-way clearing, vegetation is normally cut off at ground level. Most wetland vegetation regrows from the rootstocks rapidly.

- Tree stumps are removed and limited grading takes place only in the immediate vicinity of the trench (typically the right-of-way is 30-75 feet wide, while the trench width is normally 8-10 feet).

- The top one foot of topsoil from the trench is then segregated from the deeper soil. This top "live layer" has the rootstocks, rhizomes and seeds which, when placed back on top, results in rapid revegetation.

- All equipment typically works off pallets or with low-pressure tracks as needed to minimize compaction of the wet soils.

- When water conditions allow, the welded pipe is pushed or pulled into the water–filled trench with floatation and then lowered into the trench when in place.

- The trench is then backfilled (minimum of 3 feet of cover) with the live layer placed back on top of the substrate.

- A very important requirement in wetland construction is to return the disturbed area to original grade. Wetland vegetation is very responsive to changes in elevation (and therefore hydrology).

- Any excess spoil is to be disposed of at an upland site—although typically there is no excess spoil. It would seem logical that the volume of the material displaced by the pipeline would require disposal. However, construction actually causes the reduced muck material to lose volume through oxidation and degassing. This, along with minimal compaction and minor filling of depressions, results in virtually no excess material.

- Because wetlands rapidly revegetate with native species, they are not normally seeded unless specified by a government agency.

It has been my observation that pipelines can be constructed across virtually any wetland with little or no loss in wetland function. In fact, most wetland crossings return to pre–construction status within two growing seasons. Obviously, in the case of forested wetland there is a change from a dominance of woody vegetation to herbaceous species. This has the effect of making the pipeline right-of-way wetter after construction, since herbaceous vegetation generally entails a smaller transpiration loss than occurs with trees and shrubs.

To illustrate these points, I have attached several photographs showing pre– and post-construction views of pipeline rights-of-way. These photographs clearly show the rapid recovery of wetland communities. Of particular note, the revegetation takes place totally on its own from the root and seed stocks in the backfilled wetland soils.

All natural gas pipeline construction must meet specifications issued by the Army Corps of Engineers under the federal Clean Water Act. The clear majority of this construction takes place in accordance with the Army Corps of Engineers' Nationwide Permit 12. This permit includes 26 conditions, many designed to ensure that disturbance to wetlands is minimized. To illustrate, the Nationwide Permit 12 conditions include:

- Topsoil (live layer) to be segregated

- Navigation to remain unaffected
- Erosion and siltation controls
- Aquatic life movements cannot be disrupted
- Equipment to be placed on mats to minimize soil disturbance
- Permit not valid for National Wild and Scenic River System
- Tribal rights may not be impaired
- Clean Water Act 401 certification is required
- Endangered Species may not be jeopardized
- Historic properties may not be affected
- No discharge in proximity of public water supply intake
- No discharge in shellfish production areas

- No discharge of contaminated sediments

- No discharge in spawning areas

- No discharge in migrating waterfowl breeding areas

- All fill areas to be restored to pre-existing elevations

Thus, Nationwide Permit 12 takes into consideration the conditions which normally would be placed on any individual permit from a state or federal agency. Even with all of these conditions, virtually all pipeline construction qualifies for inclusion under Nationwide Permit 12. (Those few projects that do not qualify for Nationwide Permit 12 receive site–specific review and permitting to mitigate effects on nearby natural resources.)

In my view, most routine pipeline construction and repair can be efficiently and adequately addressed with recognized construction practices, though Nationwide Permit 12 conditions, and through cooperation and information exchange between natural gas companies and state agency resource personnel.

Therefore, it would seem that in the context of pipeline construction Pennsylvania's General Permit 5 (GP-5) program should be conformed to the conditions in Nationwide

Permit 12. The GP-5 program is generally workable as is, and it marks an advance in cooperative environmental regulation. Currently, however, GP-5 permits are available only where the impacted wetland is 10 acres or less. This limit is inappropriate for pipeline construction or other long–distance, linear, narrow–width projects. By making GP-5 no more stringent than the federal Nationwide Permit 12, Pennsylvania would simply be extending a successful program to a broader set of circumstances. In the same vein, the GP-5 program should be amended so that routine right-of-way maintenance procedures (mowing, overland surveys, inspections) could be conducted without a permit. Finally, in cases where a company needs to conduct emergency repairs on a pipeline in a wetland area, the regulations should expressly permit the repair to go forward as needed, with the pipeline company providing the PADEP with follow-up notification once the work is completed.

It is my hope that the above information will demonstrate the intent of the natural gas industry to build and operate its facilities in a manner consistent with protecting valuable wetland ecosystems. Based on monitoring many pipeline construction projects, across a wide spectrum of wetland types, I conclude that wetlands and pipelines are compatible.

I would welcome any questions you might have. Thank you.