

*Atlantic Sunrise Project – PA DEP Chapter 105 Joint Permit Application  
Transcontinental Gas Pipe Line Company, LLC  
Northumberland County*

**ATTACHMENT Q -2**  
**MITIGATION PERMITTEE RESPONSIBLE SITE SPECIFIC PLAN**  
***(UNDER SEPARATE COVER)***

*Revised July 2017*

standards, remedial action would be needed. The management technique used would be dependent on the type of invasive species colonizing the site (i.e. annual, or perennial, primary reproduction through vegetative spread or through seed). If the species are annual they can be managed via maintenance mowing and mechanical weed control methods to stop them from re-seeding into the site. After the seed bank is depleted, they drop out of the vegetative matrix. If they are perennial in nature, chemical herbicides need to be used; mechanical weed control is still used to stop further spreading through seed if they are a species that has high germination rates.

Once the invasive species control has begun, additional seeding or planting would need to be conducted to re-introduce a native plant community into the area of concern. Depending on the type of invasive species (i.e. broad leaf or monocot), replanting and reseeding strategies can be used to allow for continued chemical control of the invasive species in the area while still allowing the native species to germinate and develop.

The likelihood of this scenario is low; once established, native plant communities are actually quite resilient to invasion by invasive species as long as they are not disturbed or impacted. Invasive species issues on a restoration site tend to be most problematic during the first 2 years, because there is bare soil immediately available for germination and colonization immediately following construction, and there may be invasive species in the existing seed bank to germinate and establish. As previously stated, the primary restoration technique being used on this site is enhancement and therefore, the risk of this happening is extremely low.

In the event that the site is not meeting its performance standards for native herbaceous cover, additional seeding would be conducted. Again, the most important factor for establishing a healthy stand of upland herbaceous species is proper maintenance during the first 2 to 3 years of establishment, specifically mowing in upland areas. This ensures enough light is reaching the developing seedlings, while also eliminating competition from annual weedy species that may be trying to colonize the site. In the wetland areas, mowing cannot be conducted, but mechanical weed control with weed whips can be used.

## **13.0 Financial Assurances**

### *Performance Bond*

FPR will establish a performance bond to ensure that the PRM Site construction is completed and all success criteria are met. A sample performance bond is provided in Appendix H: Performance Bond. The financial assurance mechanism will be a surety bond for each PRM Site that will cover construction, maintenance and monitoring costs associated with each PRM Site, and will take effect 60 days after approval of the joint permit. The performance bonding entity has a rating of A+ (A.M. Best Ratings, 2010).

After construction of the PRM Site is completed and the as-built plans are approved by the PADEP and USACE, the bond will be reduced by 50 percent the first year the project meets its hydrologic performance standard. For each subsequent monitoring and maintenance year that demonstrates the PRM Site is meeting its hydrologic performance

standard, the remaining 50 percent of the bond will reduce by a proportional amount over the remaining monitoring years. The bond will be closed once all performance standards are met, and final sign-off on the PRM Site has been provided by the USACE and PA DEP. The following table presents the performance bond release schedule and target milestones.

<b>Table7: Performance Bond Release Schedule and Target Milestones</b>					
<b>Type of Financial Instrument Used</b>	<b>Project Phase Covered</b>	<b>Specific Items Covered</b>	<b>Amount Reduced (Percent)</b>	<b>Amount Available (Percent)</b>	<b>Explanation</b>
<b>Surety Bond</b>	Construction/ Development	Construction	0%	100%	100% of funds remain in-place until construction is complete
		Hydrologic Performance Standard First Attained	50%	50%	The first year the PRM Site attains its hydrologic performance standard 50% of the Bond amount is reduced
	Maintenance and Monitoring	Year 1- 7 Maintenance and Monitoring	50%	0%	The remaining 50% of the Bond will cover Maintenance, Monitoring and Reporting for the remaining active phase of the PRM Site.
		Reporting			

### *Long-term Stewardship Funding*

Prior to construction of the Project, the Permittee shall deposit \$10,000.00 into an escrow account to cover long-term stewardship of the PRM Site. These funds are sufficient to cover the full cost of long-term stewardship activities for the entire PRM Site. The total sum for this escrow amount includes all expenses for long-term management and allocates funds for invasive species management contingency funds.

## **14.0 References**

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- Countryside Conservancy (2010). About Countryside Conservancy. Accessed October 8, 2015. From <http://www.countrysideconservancy.org/about-us.html>.
- National Audubon Society, Inc. (2015). Pennsylvania’s Important Bird Area Program. Accessed December 16, 2015. <http://pa.audubon.org/pennsylvanias-important-bird-area-program>.
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From <http://www.susquehannagreenway.org/about-greenway>.

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United States Department of Agriculture Natural Resources Conservation Service. Soil Survey for Schuylkill County. <http://soils.usda.gov/>.