

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7970

Petition of Vermont Gas Systems, Inc., requesting a Certificate of Public Good pursuant to 30 V.S.A. § 248, authorizing the construction of the “**Addison Natural Gas Project**” consisting of approximately 43 miles of new natural gas transmission pipeline in Chittenden and Addison Counties, approximately 5 miles of new distribution mainlines in Addison County, together with three new gate stations in Williston, New Haven and Middlebury, Vermont

**MEMORANDUM OF AGREEMENT
BETWEEN VERMONT GAS SYSTEMS, INC. AND THE VERMONT AGENCY OF
NATURAL RESOURCES**

This Agreement (“Agreement”) is made as of the 13th day of September, 2013, between Vermont Gas Systems, Inc. (“VGS”) and the Vermont Agency of Natural Resources (“ANR” or the “Agency”). ANR and VGS are also referred to herein as the “Parties,” and each as a “Party.”

PRELIMINARY STATEMENT

WHEREAS, on December 20, 2012, VGS filed with the Vermont Public Service Board (“Board”) a petition for a Certificate of Public Good (“CPG”), along with supporting testimony and exhibits, for expansion of VGS’s existing natural gas pipeline system into Addison County, Vermont (the “Project”);

WHEREAS, during the course of this proceeding VGS has updated its Project plans and analyses in filings made on February 28, 2013 and June 28, 2013;

WHEREAS, ANR has filed testimony in Docket 7970, through its witnesses and has opined that the Project, without sufficient avoidance, minimization, or mitigation, could have the potential to result in an undue adverse impact to the natural environment because of its impacts to significant wetlands, wetland functions, state significant natural areas, rare and irreplaceable natural areas, and rare and threatened and endangered plants;

WHEREAS, the Parties have engaged in ongoing and good faith discussions concerning the proposed Project, the proposed construction plans and schedule, and the impacts of the Project on Natural Resources;

WHEREAS, VGS has worked with ANR to refine and improve the Project in an effort to avoid and minimize potential natural resource impacts of the Project;

WHEREAS, the Parties agree that with the implementation of the following conditions, the Project will not result in an undue adverse impact to the natural environment;

WHEREAS, in addition to its CPG application, VGS has applied to the Vermont Agency of Natural Resources to obtain the following permits for the Project: Vermont Wetlands Permit; Vermont Individual Construction Stormwater Permit; Vermont Stream Alteration Permit; Vermont 401 Water Quality Certification (“Collateral Permits”);

WHEREAS, the Parties desire to address all outstanding issues regarding the CPG in the Stipulation set forth below;

NOW THEREFORE, in the interests of compromise and in consideration of the mutual covenants contained herein, the Parties agree as follows:

STIPULATION

State Significant Natural Communities

1. The Project will pass through or in the vicinity of the following seven (7) state significant natural communities:

(1) a Pine Oak Heath Sandplain Forest in Colchester and Essex which occurs in four patches (MP 0.87-0.96; MP 1.06-1.29; MP 1.37-1.47; and MP 1.62-1.96)¹;

(2) a Wet Clayplain Forest adjacent to the LaPlatte River in Hinesburg (MP 19.20 to MP 19.27);

(3) a potential Wet Clayplain Forest south of Lewis Creek in Hinesburg (MP 22.4 to MP 22.5) that cannot currently be verified due to absence of landowner permission;

(4) a potential Wet Clayplain Forest south of Rotax Road in Monkton (MP 24.7);

(5) a Red Maple-Black Ash Seepage Swamp/Northern White Cedar Swamp and large open wetland complex in Monkton (MP 27.08 to MP 27.72)(the “Monkton” or “Mt. Florona Swamp”);

(6) a Red/Silver Maple Green Ash Swamp at the Monkton-New Haven town line (MP 31.05 to 31.6); and

(7) a Wet Clayplain Forest and Northern White Cedar Swamp at Little Otter Creek in New Haven (MP 32.15 to MP 32.38).

¹ All Mile Post (“MP”) references herein are approximate, and refer to distances as shown on EPSC plan set dated 6/28/13.

2. The Parties agree that VGS will undertake construction and operational phase activities with respect to each of these state significant natural communities, as follows:

2.1 With respect to the Pine Oak Heath Sandplain Forest,

- a. This natural community occurs in four patches (Patch A: MP 0.87-0.96; Patch B: MP 1.06-1.29; Patch C: MP 1.37-1.47; and Patch D: MP 1.62-1.96). Consistent with ANR recommendations (Rebuttal testimony of E. Sorenson at page 6), VGS will construct the Project using HDD beneath patches A through C, as further described below.
- b. Construct pipeline segment from approximately MP 0.85 to MP 1.65 using Horizontal Direct Drilling (“HDD”) in two segments, split at approximately MP 1.3, on State of Vermont Parcel (LLN 3.0), just west of existing VELCO corridor (see VGS Erosion Prevention Sediment Control “EPSC” Sheets 2-4²). Final design of the HDD to be completed and may result in minor adjustments to the above distances. However, the result will be that the HDD segment shall extend beneath sandplain patches A, B, and C, with impacts to patch B.
- c. The areas of sandplain forest impacts for drill rig setup areas will be less than one acre (current best estimate 0.75 acres). HDD construction site activities will require tree clearing, stumping, minor site grading, and temporary stabilization. The only area where direct sandplain forest impacts will occur are on the west side of the VELCO right-of-way within patch B for set ups for the HDD. A sandplain forest revegetation and restoration plan for this 0.75 to 1.0 acre area will be developed by VGS for ANR review and approval. The goal of this plan will be to commence re-vegetation using native tree, shrub, and herb species and to monitor and control invasive plant species.
- d. During the operational phase of the Project, VGS will maintain a staked walking path along this section of the pipeline, using blazed trees, signage, and VGS standard pipeline markers, as outlined in the Vegetation Management Plan, Attachment 1.
- e. In areas where the HDD is less than fifteen feet deep, and for a distance of no more than 100 feet from the ends of the HDD segments, VGS reserves the ability to conduct selective tree removal of trees that may pose a risk to pipeline integrity. In the event that VGS determines that repairs to the pipeline are necessary within the sandplain and can be completed with soil disturbance impacts of less than 1,000 square feet and vegetation clearing impacts without soil disturbance or removal of stumps of less than 10,000 square feet, including any temporary or permanent access roads, VGS may repair the pipeline. Prior to conducting the repairs, VGS will confer

² Except as otherwise noted herein, all EPSC plan sheet references apply to June 28, 2013 plan set.

with ANR to select the least disruptive method to conduct the repair which may include re-vegetation management. Otherwise, VGS agrees to abandon the pipeline in place if the pipeline becomes inoperable. Revegetation, restoration, and invasive species monitoring and control plans will be developed by VGS and provided to ANR for review and approval for any such disturbance.

- f. VGS will adhere to the vegetation management practices outlined in the Vegetation Management Plan attached hereto as Attachment 1.
- g. Prior to construction in the Pine Oak Heath Sandplain Forest, VGS will obtain for the benefit of the Vermont Agency of Natural Resources, a permanent conservation easement to protect wetland and sandplain resources, or will acquire in fee and convey to the Agency of Natural Resources, on a parcel identified as LLN 3.02 on EPSC sheet 003. This parcel, which is approximately 62.7 acres in size, contains approximately 15.8 acres of sandplain forest, as well as streams and significant riparian wetlands. If VGS is not able to obtain this conservation easement, or fee acquisition, it will acquire another permanent conservation easement sufficient to provide conservation of a sandplain community that provides similar functions as the parcel LLN 3.02 at a 10:1 ratio, which is approved by ANR. The substitute parcel must be acquired prior to construction or disturbance in the Pine Oak Heath Sandplain forest.

2.2 With respect to the Wet Clayplain Forest adjacent to the LaPlatte River in Hinesburg,

- a. VGS will construct the Project in this area by open trenching using Type 2D construction as identified in the Erosion Prevention and Sediment Control Plan.
- b. Re-seeding of this area following construction will utilize the “riparian and wetland seeding mix” in accordance with the revised Detail 4 on EPSC Sheet ANGP-T-G-018.
- c. During the operational phase of the Project, VGS will only conduct vegetation management within the existing maintained VELCO right of way. (VMT Type B3 as described in the Vegetation Management Plan (see Attachment 1)). VGS reserves the ability to conduct selective removal of trees that may pose a risk to pipeline integrity.

2.3 With respect to the potential Wet Clayplain Forest south of Lewis Creek in Hinesburg,

- a. VGS will construct the Project in this area in accordance with the Project plans submitted in this docket by VGS on June 28, 2013, which will be

revised to show no construction phase vegetation removal between MP 22.85 and 23.00.

- b. During the operational phase of the Project, VGS will only conduct vegetation management within the existing maintained VELCO right of way (as described in the Vegetation Management Plan (see Attachment 1)). VGS reserves the ability to conduct selective removal of trees that may pose a risk to pipeline integrity.

2.4 With respect to the Wet Clayplain Forest south of Rotax Road in Monkton,

- a. VGS will field verify the extent of this feature prior to the start of construction. If the permanent VGS easement is fully outside of this feature, no change to the alignment as depicted on the construction EPSC plan dated June 28, 2013 will be required. If the currently proposed permanent VGS easement overlaps with the feature, VGS will relocate the easement to avoid the feature.

2.5 With respect to the Mt. Florona Swamp,

- a. VGS will construct in this area in accordance with the Project plans submitted in this docket by VGS on June 28, 2013.
- b. If any portion of HDD section of the Pipe under the swamp becomes inoperable, VGS will abandon in place.
- c. For the portion of the alignment adjacent to the Northern White Cedar swamp (MP 27.08 to 27.27), for operational phase, VGS will only conduct vegetation management within the existing maintained VELCO right of way, with the exception of the selective removal of trees the roots of which may pose a risk to pipeline integrity (VMT Type B3, as described in the Vegetation Management Plan (see Attachment 1)).
- d. For the portion of the alignment installed using HDD under the Mt. Florona Swamp wetland complex, VGS will not conduct ongoing vegetation management (VMT Type C as described in the Vegetation Management Plan (see Attachment 1)).

2.6 With Respect to the Red/Silver Maple Green Ash Swamp at the Monkton-New Haven town line,

- a. Construct pipeline using trenching with no clearing/disturbance or work outside existing maintained VELCO ROW within this segment (MP 31.05 to 31.6), to be depicted in modification of construction type 2DW detail.

- b. VGS to coordinate with VELCO regarding additional potential construction travel lane within the VELCO corridor.
- c. During the operational phase of the Project, VGS will limit vegetation management over the pipeline in this specific segment to annual mowing 5 feet wide, plus additional mowing as needed, but not more frequent than once every three years, to maintain herbaceous ground cover and prevent woody vegetation growth (VMT B4).
- d. Prior to the construction in the Red/Silver Maple Green Ash Swamp, VGS will obtain for the benefit of the Vermont Agency of Natural Resources a conservation easement or fee acquisition of property that conserves portions of the Red/Silver Maple-Green Ash Swamp and its upland buffer. The parcel on the eastern side of the swamp and bordering Parks Hurlburt Road (approximately 11 acres) provides these functions. If VGS is not able to obtain a conservation easement or fee acquisition of this recommended parcel, it will acquire another conservation easement or fee acquisition with similar Red/Silver Maple-Green Ash Swamp attributes, or other features acceptable and approved by ANR, prior to construction in the Red/Silver Maple Green Ash Swamp.
- e. During the operational phase of the Project, VGS will only conduct vegetation management within the existing maintained VELCO corridor. (VMT Type B4 as described in the Vegetation Management Plan (see Attachment 1)). VGS reserves the ability to conduct selective removal of trees that may pose a risk to pipeline integrity.

2.7 With respect to the Wet Clayplain Forest/Northern White Cedar Swamp/Little Otter Creek in New Haven,

- a. Construct pipeline segment from approximately MP 32.15 to MP 32.43 using Horizontal Direct Drilling (“HDD”).
- b. During the operational phase of the Project, VGS will only conduct vegetation management within the existing maintained VELCO corridor (as described in the Vegetation Management Plan (see Attachment 1)).
- c. In the event that VGS determines that repairs to the pipeline are necessary within this segment and can be completed with soil disturbance impacts of less than 1,000 square feet and minimizes temporary impacts to the wetland by matting, VGS may repair the pipeline. Otherwise, VGS agrees to abandon in place if the pipeline becomes inoperable. Re-vegetation, restoration, and invasive species monitoring and control plans will be developed by VGS and provided to ANR for review and approval for any such disturbance.

Wetlands

3. Where bedrock is encountered during construction of the Project within Class Two wetlands, buffers or vernal pools, VGS will install a bentonite plug at the base of the trench, through the blasted segment of the wetland.
4. With respect to wetland breeding bird habitat, three wetlands of potential concern have been identified. These features are:
 - Wetland 2012-CM-193: Construction activities will occur within the wetland buffer which is currently an agricultural field, however no Project construction activities will occur within the wetland.
 - Monkton Swamp: Project construction will occur through HDD, and will avoid bird habitat impacts;
 - Wetland 2012-CM160/161: VGS agrees to either clear brush or install matting prior to March 1 or conduct a detailed springtime bird survey prior to construction. Should the survey determine the presence of the species of concern, VGS will not commence construction until after July 15.

Vegetation Management

5. VGS will adhere to the vegetation management practices outlined in the Vegetation Management Plan attached hereto as Attachment 1.

Collateral Permits

6. ANR acknowledges that upon receipt of the blasting information requested by ANR, the VGS Vermont Wetland Permit application will be technically complete.
7. The Parties agree that the terms and conditions of this MOU relative to wetlands shall be incorporated into the Vermont Wetlands Permit and Section 401 WQC for the Project.
8. The parties agree that adherence to the Blasting BMPs (see Attachment 2) will be included as a condition of the construction stormwater discharge permit.

Invasive Species

9. VGS will conduct an invasive species baseline survey during Spring 2014, prior to commencing clearing for construction. This will include plants on the noxious weed quarantine list and certain watch list plants as listed in the VMP.
10. VGS will conduct ongoing monitoring and management of invasive plants in accordance with Section 4.0 of the revised Vegetation Management Plan attached as Attachment 1 to the MOU.

Rare, Threatened and Endangered (“RTE”) Plants

11. There are no confirmed T or E plant species along the project corridor. A threatened plant species (Harsh Sunflower) has been previously identified within the VELCO corridor in the area of MP 26.2. Currently, neither Party has access to the property where this plant may occur. However, a follow up survey would be performed by VGS at an appropriate time when the plant would be recognizable, prior to construction in that area. If the plant is present in the Project corridor to be impacted during construction, VGS will re-align the pipe if feasible to avoid the plant species. If the species cannot be avoided, VGS will obtain a Takings permit prior to construction.
12. There are 19 locations along the Project corridor that contain rare plant species. Of these, at all but 8 locations impacts are avoided or less than 20% of the population is impacted. VGS plans to install temporary construction matting at locations depicted on the EPSC plan sheets during Project construction to minimize impacts to wetlands and other resources. With respect to rare plant occurrences, VGS agrees that mat placement for greater than 6 days during the growing season could result in plant mortality. VGS further agrees that an area of impact of 20% or greater is a reasonable threshold for the imposition of follow up monitoring and mitigation. The specific monitoring and mitigation protocols are presented in the amended VMP.
13. Notwithstanding the above, VGS agrees to use reasonable best efforts to minimize the duration of matting in areas of known rare plant occurrences during the growing season. For example, where matting is used for the temporary stockpiling of soil from trenching operations, it is the intent of VGS to remove matting immediately after backfill operations and to maintain the matting in place for no longer than 28 days where feasible.
14. VGS agrees to modify project plans for Access Road “H” (depicted on EPSC sheets ANGP-T-G-007B and ANGP-EPSC-014), to avoid impacts to rare plant 2012-RTE-CT-030. The access road will be relocated so no disturbance of the plant population

will occur, and the area will be fenced off to prevent unintended vehicular access during construction. Amended EPSC Sheets will be prepared prior to construction.

15. VGS agrees to modify project plans at MP 18.95 to 19.05 to place matting over the rare plant populations CT-081 and CT-082 during construction. Amended EPSC Sheet ANGP-EPSC-039 will be prepared prior to construction.

16. In areas where the Project is not co-located with the VELCO right of way, VGS agrees to re-delineate and re-map previously identified RTE species in its corridor at a frequency no greater than every eight years, to begin no later than 2020.

17. In areas where the Project is co-located with the VELCO right of way, VGS agrees to re-delineate and re-map previously identified RTE species in its corridor at a frequency no greater than every eight years, to begin no later than 2020. This requirement is not intended to create new obligations for VELCO or to require that VELCO take any action beyond existing obligations and agreements.

Natural Resources HDD Segments

18. The following additional HDD segments are subject to additional operational restrictions as noted below:

- a. Approximate MP 6.8 to MP 6.88: Winooski River crossing
- b. Approximate MP 19.48 to MP 19.49: LaPlatte River crossing
- c. Approximate MP 22.83 to MP 22.88: Lewis Creek crossing
- d. Approximate MP 39.32 to MP 39.37: New Haven River crossing

19. For these segments, VGS agrees to the following limitations:

- a. For the Winooski River crossing³, for the operational phase of the Project, VGS will perform no surface vegetation management.
- b. VGS will perform surface vegetation management within the riparian buffer (50 feet) of the LaPlatte River, the New Haven River and Lewis Creek

³ The Winooski River crossing is defined as the segment from the northern edge of the 100 foot riparian buffer to the southern end of the HDD segment.

crossings, using Vegetation Management Type B5 as set forth in the Vegetation Management Plan (See Attachment 1). VGS reserves the ability for the selective removal of trees the roots of which may pose a risk to pipeline integrity.

- c. In the event that VGS determines that repairs to the pipeline are necessary within the portions of this segment outside the water body and can be completed with soil disturbance impacts of less than 1,000 square feet and vegetation clearing impacts without soil disturbance or removal of stumps of less than 3,000 square feet, including any access roads, VGS may repair the pipeline. Otherwise, VGS agrees to abandon in place if the pipeline becomes inoperable. Revegetation, restoration, and invasive species monitoring and control plans will be developed by VGS and provided to ANR for review and approval for any such disturbance. A stream alteration permit may be required for activities in or near the water body.

Greenhouse Gas Emissions Reporting

20. The parties agree that VGS will provide the following information annually to the ANR:
 - a. The amount of natural gas purchased at each market point for the prior twelve months.
 - b. The estimated greenhouse gas emissions as reported by Vermont Gas to the Environmental Protection Agency through the greenhouse gas reporting system known as “e-GGRT.”
 - c. The unaccounted for gas as reported to the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration.
 - d. VGS will provide updates on the GHG reporting requirements for the natural gas industry and shall report to ANR annually on changes in those requirements. When new or updated GHG emissions data associated with VGS’ suppliers’ of natural gas production becomes available to VGS or publically available, VG shall provide it to ANR along with other information described in a, b, and c above.

General

21. This Memorandum of Understanding is governed by Vermont law and any disputes under this Memorandum of Understanding shall be decided by the Board.

22. Except as otherwise specifically provided herein, nothing contained in this Stipulation or any actions taken in furtherance of this Stipulation shall constitute or be deemed or construed as an admission of fact, liability, or wrongdoing or of any position whatsoever by any Stipulating Party in connection with any matters in dispute or otherwise.

23. The Stipulating Parties agree that, should the Board fail to adopt the recommendations contained in this Stipulation in all material respects, the Stipulating Parties' agreements set forth herein shall terminate, and the Stipulating Parties shall be placed in the position that each enjoyed in this proceeding before entering into the Stipulation. In such event, the Stipulating Parties' agreements in this Stipulation shall not be construed by any Stipulating Party, tribunal, or other entity as having precedential impact on any testimony or positions that may be advanced in this proceeding, shall not constitute any part of the record in this proceeding, and shall not be used for any other purpose.

24. The Stipulating Parties agree that this Stipulation shall have no precedential value nor shall it be used in any future proceeding, except a future proceeding to enforce the terms and conditions herein or in any Board Order approving this Stipulation without any modifications.

25. Based on the foregoing agreements, the Stipulating Parties request that the Board adopt the recommendations contained in this Stipulation, in their entirety without material change or condition, as the full and final resolution of the claims presented in this proceeding.

IN WITNESS WHEREOF the Parties hereto have caused their representatives to execute and deliver this Agreement as of the date hereinabove set forth.

Dated at Burlington, Vermont this ____day of September, 2013.

Vermont Gas Systems, Inc.

By: _____
Alison M. Stone, Esq.

Dated at _____, Vermont this ____ day of September, 2013.

Vermont Agency of Natural Resources

By: _____
Judith L. Dillon, Esq.

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