



To: VGS ANGP Phase 1 Project File

Date: July 1, 2015

Memorandum

Project #: 57563.00

From: Jeffrey A. Nelson & Joshua Sky

Re: Natural Resource Assessment for Proposed MLV-1
Relocation
Vermont Gas Systems Addison Natural Gas Project – Phase 1

VHB has prepared this memorandum to provide our assessment of impacts to certain criteria reviewed under 30 V.S.A. Section 248(B)(5) with respect to the Project Change related to the proposed relocation of mainline valve 1 ("MLV-1"). The Vermont Gas Systems, Inc. ("VGS") Addison Natural Gas Project Phase 1 ("ANGP" or "Project") has previously received a Certificate of Public Good ("CPG") in Public Service Board ("PSB") Docket No. 7970. Based on the evaluation presented below, VHB concludes that the proposed Project Change does not result in changes to impacts, nor alter our prior conclusions with respect to the conformance with the natural resources criteria to which the Board must give due consideration, given the applicability of past testimony and previously issued Vermont ANR permits for the Project.

The Project Change covered under this assessment is shown on the update to Sheet 8 of the Natural Resource Series (dated July 1, 2015) provided as Attachment A to this memorandum, and Sheet EPSC-015 of the EPSC Plan set prepared by CHA. The Project Change is described in more detail in the Non-Substantial Change Summary Memorandum prepared by Mr. John Stamatov on behalf of VGS.

This memorandum reviews the proposed MLV-1 relocation with respect to the specific criteria covered by the testimony of Mr. Jeffrey A. Nelson for the Project, for which due consideration is to be given by the PSB, including:

- Outstanding Resource Waters (10 V.S.A. § 1424a(d))
- Headwaters (10 V.S.A. § 6086(a)(1)(A))
- Waste Disposal (10 V.S.A. § 6086(a)(1)(B))
- Water Conservation (10 V.S.A. § 6086(a)(1)(C))
- Floodways (10 V.S.A. § 6086(a)(1)(D))
- Streams (10 V.S.A. § 6086(a)(1)(E))
- Shorelines (10 V.S.A. § 6086(a)(1)(F))
- Wetlands (10 V.S.A. § 6086(a)(1)(G))
- Water Supply (10 V.S.A. § 6086(a)(2)&(3))
- Soil Erosion (10 V.S.A. § 6086(a)(4))
- Rare or Irreplaceable Natural Areas ("RINA")(10 V.S.A. § 6086(a)(8))
- Necessary Wildlife Habitat and Endangered Species (10 V.S.A. § 6086 (a)(8)(A))

Based on VHB's natural resource field studies that include the revised MLV-1 location on parcel LLN 23 (Chittenden Solid Waste District), the change does not impact any of the above criteria, or cause increased impacts as to any of these criteria. More specifically, Outstanding Resource Waters, Headwaters, Floodways, Shoreline, Streams, Class II Wetlands or Buffers, Class III Wetlands, Floodways, RINA, and Necessary Wildlife



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Habitat resources are not present at the relocated MLV-1 site. Therefore there are no changes to impacts of these resources. There are also no changes in impacts with respect to Waste Disposal, Water Conservation, and Water Supply criteria. The Project EPSC Plans were updated to show the revised MLV-1 location and all associated earth disturbance will occur within the Limits of Disturbance ("LOD") previously permitted under the Project's INDC. The revised EPSC plan sheet for this area was provided to ANR on June 30, 2015. There would be no changes to the prior VHB testimony with respect to impacts under these criteria resulting from the revised MLV-1 relocation and thus there is no change from our prior conclusions that the Project conforms to the requirements of these criteria.

There is also no change to assessment outcome with respect to Historic Sites or Archeological Resources(10 V.S.A § 6086(a)(8)) as the relocated MLV-1 is within the Area of Potential Effect previously evaluated by UVM CAP and determined to be absent significant cultural resources.

VHB's assessment relies in part on an updated EPSC Plan set prepared by CHA (last revised June 30, 2015) and a supporting memorandum prepared by VGS describing the modification in greater detail, as well as the following Vermont ANR permits which have been issued to the Project:

- Vermont Individual Wetland Permit #2012-184 ("VWP"), issued June 9, 2014.
- Vermont Individual Stream Alteration Permit #SA-5-9029 ("SAP"), issued June 9, 2014.
- Vermont Individual Clean Water Act Section 401 Water Quality Certification ("401 WQC"), issued June 9, 2014.
- Vermont Individual Construction Stormwater Discharge Permit #6949-INDC ("INDC"), issued June 9, 2014.

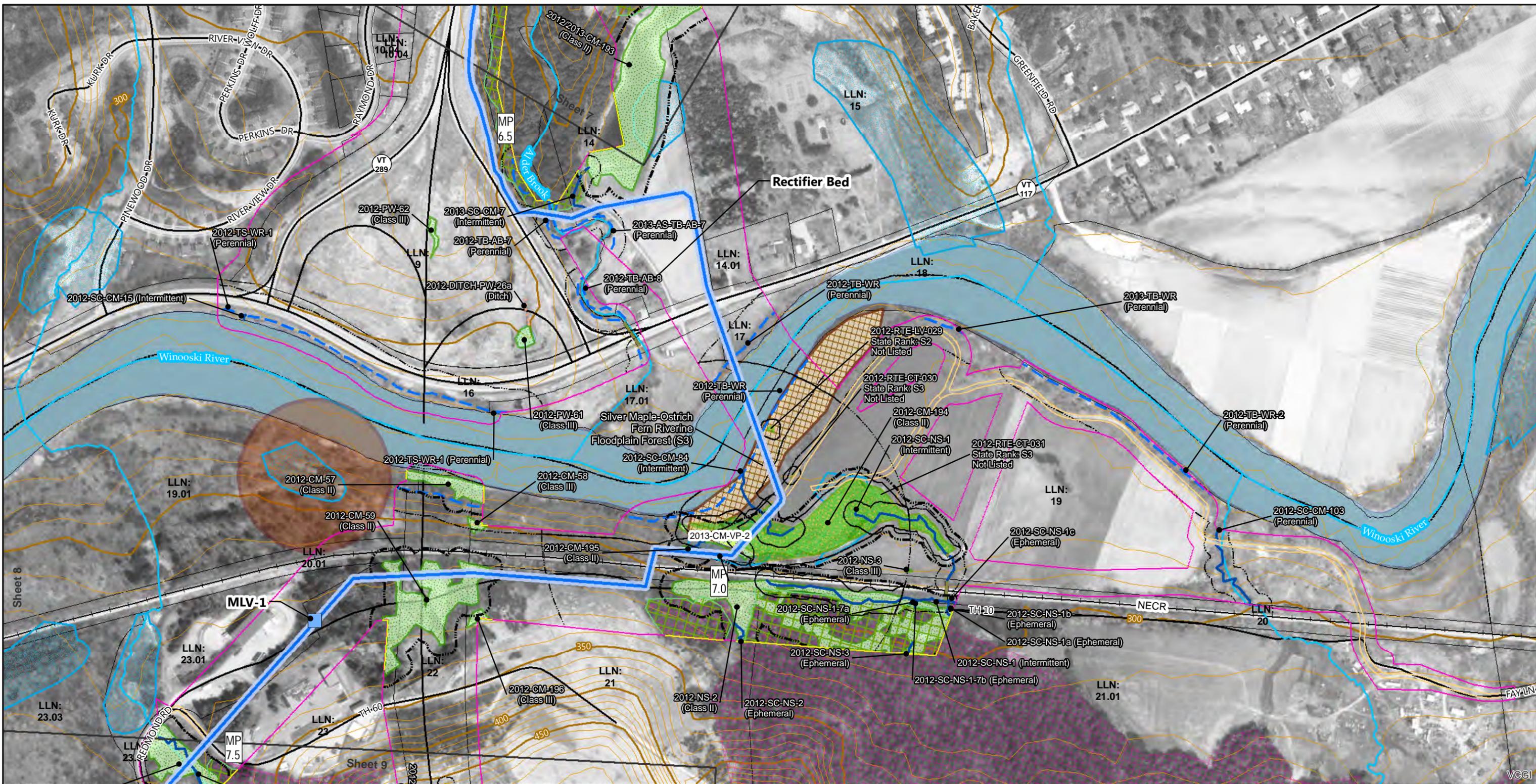
These permits remain valid and we do not believe that any amendments to these permits are required related to this Project Change.

In summary, it is our professional opinion that the proposed Project Change does not result in any change in impacts to the criteria that we have evaluated, nor to our conclusions that the Project conforms with these natural and cultural resources criteria, to which the Board must give due consideration, as supported by testimony and issued Vermont ANR permits for the Project.

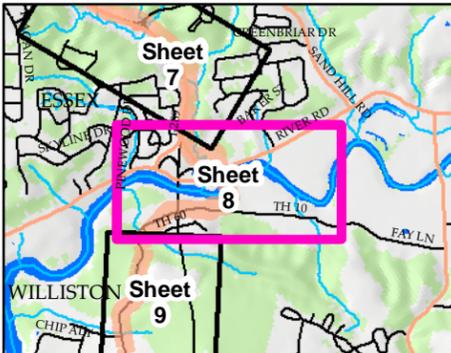
ATTACHMENT A

- Excerpted Sheet 8 of 63 from VHB Natural Resource Map Series (revision date: July 1, 2015)

ATTACHMENT A



Sources: Background By VMP (2005-2011); Study Areas by VHB (2012-2015); Delineated and Approximate Wetlands and Streams, Vernal Pools, Ordinary High Water, & Bridge/Culverts by VHB (2011-2015); RTE Species, Veg. Nat. Communities, & Bat Trees surveyed by Gilman & Briggs (2012-2015); WDP Element Occurrences by ANR (2013); VSWI Wetlands by ANR (2013); Deer Wintering Areas by VHB (2012/13); 10' Contours generated by VHB from HydroDEM by VCGI (2008); Statewide datasets from VCGI (2010) include: Roads by VTrans (2012), Town and County Boundaries by VCGI (2008), Streams and Waterbodies by VHD (2008), Railroads by VTrans (2003), Parcel Boundaries provided by CHA (2014); VELCO Structures from VELCO (2012); Proposed Transmission/Distribution/Network by CHA (2012-2015).



<ul style="list-style-type: none"> — VHB Study Area — Existing Gas Transmission Main — Proposed Transmission Mainline — Proposed Distribution Mainline — Proposed Distribution Local Network ■ Wetland (Proposed Class) ■ Approximate Wetland (Proposed Class) — Stream (Proposed Type) — Stream Centerline — Stream Top of Bank or Slope — Ditch 	<ul style="list-style-type: none"> ■ Vernal Pool ■ Potential Vernal Pool ■ RTE Plant Area (G&B) ● RTE Plant Location (G&B) ✱ Surveyed Potential Bat Tree ✱ Potential Bat Tree ■ Deer Wintering Area (VHB) ■ 50 ft. Class II Wetland Buffer ■ Natural Resource Buffer 	<ul style="list-style-type: none"> ■ Veg. Natural Community (G&B) ■ Natural Resource Feature Continues ■ Mitigation Plant Sites PreExisting ■ RTE Species/Communities ● VELCO Structure Location ■ Transmission Lines (VELCO) ■ Deer Wintering Area (ANR) ■ Bridge ■ Culvert ■ VSWI Wetland 	<ul style="list-style-type: none"> ■ Parcel Boundary — Railroad (VTrans) — Roads (VTrans) — 10' Contour — 50' Contour — Stream (VHD) — Proposed Access Road
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Vermont Gas - ANGP Phase I
Chittenden and Addison
Counties, VT
Natural Resource Series
 Sheet Number 8 of 63
 December 13, 2012
 Last Revised: July 1, 2015