IX. IDENTIFYING ALTERNATIVES TO PROVIDE NEW OR IMPROVED WASTEWATER DISPOSAL FACILITIES

2007 Report Chapter IX – Identifying Alternatives to Provide New or Improved Wastewater Disposal Facilities

A. Conventional Sewage Collection, Conveyance, Treatment, and Discharge Alternatives

This Section is retained unaltered with the following exceptions:

The second paragraph states that due to the distance of (the Study Areas) to any existing municipal (WWTP) facilities (i.e., Tamaqua Borough), it may not be economically feasible to extend any existing services or sewer lines to (the Study Areas).

The distance between Service Area 1 - South Tamaqua and the existing Tamaqua Borough Owl Creek Road Sewage Pumping Station is approximately 12,000 feet along State Route 309. The distance from Clamtown to South Tamaqua is approximately 8,000 feet. With the recent advances in directional drilling construction for the installation of polyethylene pipe force main, this alternative is now economically feasible.

The previously described meetings with Tamaqua Borough Authority, their available WWTP capacity and willingness to serve have been established. RETTEW has also had preliminary discussions with PennDOT District 5-0 to determine the viability of a highway occupancy permit for SR 309 and SR 443 shoulders. With the use of directional drilling construction, PennDOT could support such an application [Appendix R-IX-1].

Collecting sewage from the Service Areas and pumping the wastewater to Tamaqua Borough WWTP is a viable alternative. Therefore, the above collection and pumping to an existing public WWTP is evaluated for each Service Area.

B. The Use of Individual On-Lot Sewage Disposal Systems

This Section is retained unaltered with the following exceptions:

The previous 2007 report provided a general description of the Use of Individual On-Lot Sewage Disposal Systems that remains current. However, the concluding statement paragraph is superseded by the "2012 Needs Assessment" [Appendix R-VI-2]. *This recent report explains the current functionality of each individual on-lot system and the malfunctioning on-lot systems that can be corrected on-site.*

C. The Use of Small Flow Sewage Treatment Facilities or Package Treatment Facilities to Serve Individual Homes or Clusters of Homes

This Section is retained unaltered.

D. The Use of Community Land Disposal Alternatives

This Section is retained unaltered.

E. The Use of Retaining Tank Alternatives on a Temporary or Permanent Basis

This Section is retained unaltered.

F. Sewage Management Programs to Assure the Future Operation and Maintenance of Existing and Proposed Sewage Facilities

This Section is retained unaltered.

G. Non-Structural Comprehensive Planning Alternatives Undertaken to Assist in Meeting Existing and Future Sewage Disposal Needs

This Section is retained unaltered.

H. "No-Action" Alternative

This Section is retained unaltered with the following exception.

The previous 2007 report provided a general description of the Use of Individual On-Lot Sewage Disposal Systems that remains current. The concluding summary statement paragraph states a "No-Action" Alternative will not be considered for the Regional Plan. This remains true for public alternative solutions implementation. However, the recent Door-to-Door Survey and Long Term On-Lot Disposal Potential Evaluation, dated October 19, 2012 [Appendix R-VI-2] *revealed that the prior 2007 "Needs Assessment" significantly overstated the number of properties with on-lot* sewage malfunctions. *This recent report explains the current functionality of each individual on-lot system and the malfunctioning on-lot systems that can be corrected on-site. Therefore many property owners may resolve their sewage facility needs individually on their own property without participating in a community system.*

I. Sewage Alternative Selected for Evaluation

This Section is retained unaltered with the following exceptions:

1. *The previous 2007 report lists seven (7) different sewage alternatives selected for evaluation. Many of these alternatives have not been re-evaluated by RETTEW. However, RETTEW did focus more in-depth on two (2) of the alternatives previously discussed:*

   Alternative 2 – Community On-Lot Disposal Systems through the detailed soils analysis contained in the RETTEW "Feasibility Study for Community On-Lot

Sewage Disposal Systems, dated June 2011 [Appendix R-V-1]. *A recent Addendum memo to this report was provided to address the lower anticipated flows for COLDS within each study area village, dated May 9, 2013* [Appendix R-V-2]

Alternative 7 – Conventional Collection, Conveyance, Treatment and Discharge Alternatives through a detailed cost and present worth analysis of both package treatment plant and stream discharge at each Service Area and pumping to an adjacent existing WWTP.

2. *The previous 2007 report discussed each of the six (6) Service Areas individually and the seven (7) identified alternatives for each and then narrowed the alternative to six (6) bulleted alternatives. RETTEW did focus on the alternatives of pumping to an existing WWTP; constructing a package treatment plant for the Service area for stream discharge; and the three (3) community land disposal options (COLDS). In regards to Service Area 5 – Medical Crossing and Service Area 6 – Balance of West Penn Township, RETTEW did not re-evaluate these Service Areas.*