

V. Identify Alternatives to Provide New or Improved Wastewater Disposal Facilities

A. Conventional collection, conveyance, treatment and discharge alternatives including:

1. The potential for regional wastewater treatment. (Reference-Title 25, §71.21.a.4).

Regional wastewater treatment, that is, the ability to provide public sewers to the entire service area, is the alternate of choice for this Study. The Township has become a member of the C.D.C.A., and treatment is to take place at Delcora, in the city of Chester.

A network of six (6) pump stations, forcemains, low-pressure systems and gravity lines will collect and convey flow to the C.D.C.A. system.

2. The potential for extension of existing municipal or non-municipal sewage facilities to areas in need of new or improved sewage facilities. (Reference-Title 25, §71.21.a.4.i).

All the existing facilities are either at capacity, or have “paper flow” capacities built into their flow projections. To expand the existing facilities would not be economically feasible.

All the proposed infrastructure is proposed, without extending the existing facilities into the areas of need. Namely, the NTMA facilities existing in the Township, are to remain operational, and newly constructed facilities are proposed to sewer the service area.

The existing “Camelot” pump station is unable to provide conveyance without severe upgrades.

A proposed network of six (6) pump stations, forcemains, low-pressure systems and gravity lines will collect and convey flow to the C.D.C.A. system.

3. The potential for the continued use of existing municipal or non-municipal sewage facilities through one or more of the following: (Reference-Title 25, §71.21.a.4.ii).
 - a. Repair. (Reference-Title 25, §71.21.a.4.ii.A)
 - b. Upgrading. (Reference-Title 25, §71.21.a.4.ii.B).
 - c. Reduction of hydraulic or organic loading to existing facilities. (Reference-Title 25, §71.71).
 - d. Improved operation and maintenance. Reference-Title 25, §71.21.a.4.ii.C).
 - e. Other applicable actions that will resolve or abate the identified problems. (Reference-Title 25, §71.21.a.4.ii.D).

All the existing facilities are operating as designed without the need for repairs or upgrades. Inflow and Infiltration studies have been performed; the systems are operating within its permit requirements.

4. Repair or replacement of existing collection and conveyance system components. (Reference-Title 25, §71.21.a.4.ii.A).

All the existing collection and conveyance facilities are operating as designed without the need for repairs or replacements. Inflow and Infiltration studies have been performed; the system is operating within its permit requirements.

5. The need for construction of new community sewage systems including sewer systems and/or treatment facilities. (Reference-Title 25, §71.21.a.4.iii).

The existing community sewage systems which are currently in operation utilize soils for final disposal and treatment of effluent. Insufficient area of suitable soils exist to expand the existing facilities.

6. Use of innovative/alternative methods of collection/conveyance to serve needs areas using existing wastewater treatment facilities. (Reference-Title 25, §71.21.a.4.ii.B).

Innovative / alternative methods for collection and conveyance are not the primary concern of this Study, the principal concern is the volume of treatment for the Upper Crum Creek Watershed.

- B. The use of individual sewage disposal systems including individual residential spray irrigation systems based on:

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

1. Soil and slope suitability. (Reference-Title 25, §71.21.a.2.ii.C).

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

2. Preliminary hydrogeologic evaluation. (Reference-Title 25, §71.21.a.2.ii.C).

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

3. The establishment of a sewage management program. (Reference-Title 25, §71.21.a.4.iv). See also Part “F” below.

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

4. The repair, replacement or upgrading of existing malfunctioning systems in areas suitable for on lot disposal considering: (Reference-Title 25, §71.21.a.4).

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

- a. Existing technology and sizing requirements of Title 25 Chapter 73. (Reference-Title 25, §73.31-73.72).

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

- b. Use of expanded absorption areas or alternating absorption areas. (Reference-Title 25, §73.16).

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

- c. Use of water conservation devices. (Reference-Title 25, §71.73.b.2.iii).

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

- C. The use of small flow sewage treatment facilities or package treatment facilities to serve individual homes or clusters of homes with consideration of: (Reference-Title 25, §71.64.d).

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

1. Treatment and discharge requirements. (Reference-Title 25, §71.64.d).

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

2. Soil suitability. (Reference-Title 25, §71.64.c.1).

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

3. Preliminary hydrogeologic evaluation. (Reference-Title 25, §71.64.c.2).

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

4. Municipal, Local, Agency or other controls over operation and maintenance requirements through a Sewage Management Program. (Reference-Title 25, §71.64.d). See Part “F” below.

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

- D. The use of community land disposal alternatives including:

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

1. Soil and site suitability. (Reference-Title 25, §71.21.a.2.ii.C).

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

2. Preliminary hydrogeologic evaluation. (Reference-Title 25, §71.21.a.2.ii.C).

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

3. Municipality, Local Agency or Other Controls over operation and maintenance requirements through a Sewage Management Program (Reference-Title 25, §71.21.a.2.ii.C). See Part “F” below.

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

4. The rehabilitation or replacement of existing malfunctioning community land disposal systems. (See Part “V”, B, 4, a, b, c above). See also Part “F” below.

This section is non-applicable per the 12-17-2009 Task Activity Report preparation meeting with PADEP.

- E. The use of retaining tank alternatives on a temporary or permanent basis including: (Reference- Title 25, §71.21.a.4).

1. Commercial, residential and industrial use. (Reference-Title 25, §71.63.e).

The use of holding tanks was not considered an economically feasible long-term solution to the sewer needs of Newtown Township. No further discussion is warranted.

2. Designated conveyance facilities (pumper trucks). (Reference-Title 25, §71.63.b.2).

The use of pumper trucks has been used as a short term solution to residential / commercial / institutional buildings that utilize existing on-lot sewage disposal systems. All pump trucks are licensed and dispose of the waste at approved facilities. The continued use of pumping trucks as a long-term solution to the Newtown Sewer needs is not an economically feasible solution.

3. Designated treatment facilities or disposal site. (Reference-Title 25, §71.63.b.2).

All sewage hauled by pump trucks is conducted by licensed haulers and the wastes disposed of at licensed facilities (Media WWTP, Delcora).

4. Implementation of a retaining tank ordinance by the municipality. (Reference-Title 25, §71.63.c.3). See Part “F” below.

The use of holding tanks was not considered an economically feasible long-term solution to the sewer needs of Newtown Township. No further discussion is warranted.

5. Financial guarantees when retaining tanks are used as an interim sewage disposal measure. (Reference-Title 25, §71.63.c.2).

Newtown Township does not have, nor intend to adopt any financial guarantees when holding tanks are used as an interim sewage disposal measure.

- F. Sewage Management Programs to assure the future operation and maintenance of existing and proposed sewage facilities through:

The development at Springhouse Lane & Carriage Path has a community specific operation and maintenance agreement to ensure continued operation and maintenance of the existing facilities.

1. Municipal ownership or control over the operation and maintenance of individual on lot sewage disposal systems, small flow treatment facilities, or other traditionally non-municipal treatment facilities. (Reference-Title 25, §71.21.a.4.iv).

Newtown Township does not have, nor intend to adopt any regulations for municipal ownership or control over the operation and maintenance of individual on lot sewage disposal systems, small flow treat facilities or other facilities.

2. Required inspection of sewage disposal systems on a schedule established by the municipality. (Reference-Title 25, §71.73.b.1.).

The Township does not require routine inspection of sewage disposal systems.

3. Required maintenance of sewage disposal systems including septic and aerobic treatment tanks and other system components on a schedule established by the municipality. (Reference-Title 25, §71.73.b.2).

The Township does not require routine inspection of sewage disposal systems.

4. Repair, replacement or upgrading of malfunctioning on lot sewage systems. (Reference-Title 25, §71.21.a.4.iv) and §71.73.b.5 through:
 - a. Aggressive pro-active enforcement of ordinances that require operation and maintenance and prohibit malfunctioning systems. (Reference-Title 25, §71.73.b.5).

No current ordinance requires, nor does the Town plan to adopt such an ordinance, to aggressive and pro-actively enforce operation and maintain of septic systems. A state certified Sewage Enforcement Officer is retained by the Township.

- b. Public education programs to encourage proper operation and maintenance and repair of sewage disposal systems.

No such program is in place, or planned to be adopted.

5. Establishment of joint municipal sewage management programs. (Reference-Title 25, §71.73.b.8).

The Newtown Township is working with Edgmont Township route flow through the proposed system in Newtown. Newtown is proposing to jointly manage sewage through the cost sharing of pump stations and forcemain, and ongoing maintenance.

6. Requirements for bonding, escrow accounts, management agencies or associations to assure operation and maintenance for non-municipal facilities. (Reference-Title 25, §71.71).

With the expansion of facilities into new areas of this study, the Township will be drafting and executing agreements with property owners and developers to secure the operation and maintenance for non-municipal facilities, whereas the Township would have the right, but not obligation to assure the functioning of the system.

- G. Non-structural comprehensive planning alternatives that can be undertaken to assist in meeting existing and future sewage disposal needs including: (Reference-Title 25, §71.21.a.4).
 1. Modification of existing comprehensive plans involving:
 - a. Land use designations. (Reference-Title 25, §71.21.a.4).
 - b. Densities. (Reference-Title 25, §71.21.a.4).
 - c. Municipal ordinances and regulations. (Reference-Title 25, §71.21.a.4).

- d. Improved enforcement. (Reference-Title 25, §71.21.a.4).
- e. Protection of drinking water sources. (Reference-Title 25, §71.21.a.4).

No revision to the Township Comprehensive Plan is proposed with this Act 537 Plan Update.

- 2. Consideration of a local comprehensive plan to assist in producing sound economic and consistent land development. (Reference-Title 25, §71.21.a.4).

No revision to the Township Comprehensive Plan is proposed with this Act 537 Plan Update.

- 3. Alternatives for creating or changing municipal subdivision regulations to assure long-term use of on-site sewage disposal that consider lot sizes and protection of replacement areas. (Reference-Title 25, §71.21.a.4).

No revision to the Township Subdivision or Land Development Ordinance is proposed with this Act 537 Plan Update.

- 4. Evaluation of existing local agency programs and the need for technical or administrative training. (Reference-Title 25, §71.21.a.4).

The Township currently retains a Sewage Enforcement Officer who is required to participate in continuing technical education to maintain his / her license. Currently, all SEO's maintain their required continuing education.

- H. A no-action alternative which includes discussion of both short-term and long-term impacts on: (Reference-Title 25, §71.21.a.4).

- 1. Water Quality/Public Health. (Reference-Title 25, §71.21.a.4).

Based on the Pennoni Study, a significant portion of the developed study area is located on lots utilizing individual on-lot sewage disposal systems which are not properly functioning and/or approaching the end of their "life". The largest potential areas of concerns are undeveloped, or currently in the process of land development review. The majority of these systems are aging. In the majority of the study area, the lots are fairly small and located on soils which will not support the installation of a new on-lot septic system. The continued use of the on-lot septic systems could cause public health hazards and/or contamination of the existing water resources.

- 2. Growth potential (residential, commercial, industrial). (Reference-Title 25, §71.21.a.4).

Based on the growth potential for the area, a no-action alternative could not support the Township needs. There is not sufficient area with suitable soils to support the installation of on-lot sewage disposal systems.

3. Community economic conditions. (Reference-Title 25, §71.21.a.4).

A no-action alternative would result negatively on Community economic conditions.

4. Recreational opportunities. (Reference-Title 25, §71.21.a.4).

A no-action alternative would result negatively on recreational opportunities.

5. Drinking water sources. (Reference-Title 25, §71.21.a.4).

A no-action alternative would result negatively on drinking water conditions.

6. Other environmental concerns. (Reference-Title 25, §71.21.a.4).

A no-action alternative would result negatively on environmental concerns.