



Light-Heigel & Associates, Inc.

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- FARM PRESERVATION
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April 2, 2008

Shamokin Township Supervisors
Shamokin Township, Northumberland County

RE: Sewage Facilities Planning Module for
Irish Valley Road and Adams Park Road
Our Project No. 06-0597

HAND DELIVERED TO ADDRESSES IN CC

Dear Supervisors:

Please find enclosed a set of complete packet for your review and comments associated with the Sewage Facilities Planning for the Irish Valley Road and the Adams Park Road Sewage Management Areas (SMAs).

Please note the following additions and/or changes since our last review:

1. A Table of Contents has been added;
 2. The Attachments to the Planning Module (7 pages) contain a brief, but thorough, historical narrative regarding these two important SMAs; and
 3. The existing 1992 Township Ordinance (16 pages), as well as the proposed Amendment (3 pages) to the Ordinance are included;
- ! 4 X. Blanks need to be completed regarding when the Township desires to make available for public review.

BERKS
Suite 102, Grande Plaza
1103 Rocky Dr.
West Lawn, PA 19609
610-678-7560
Fax: 610-678-7686

BUCKS
16 North Franklin St.
Suite 200B
Doylestown, PA 18901
215-348-1980
Fax: 215-348-1983

DAUPHIN
906 North River Rd.
P.O. Box 602
Hatifax, PA 17032
717-896-8881
Fax: 717-896-9145

**DAUPHIN/
SCHUYLKILL**
730 West Grand Ave.
Tower City, PA 17980
717-647-4755
Fax: 717-647-4681

LANCASTER
845 Silver Spring Plaza
Suite F
Lancaster, PA 17601
717-285-7002
Fax: 717-285-2794

**LEBANON/
DAUPHIN**
430 East Main St.
Palmyra, PA 17078
717-838-1351
1-800-257-2190
Fax: 717-838-3820

MONTGOMERY
1700 Dekalb Pike
Blue Bell, PA 19422
610-279-1830
Fax: 610-279-1824

**NORTHUMBERLAND/
UNION**
142 Main St.
P.O. Box 120
Montandon, PA 17850
570-524-7742
Fax: 570-524-7746

SCHUYLKILL
39 Dock St.
Schuylkill Haven, PA 17972
570-385-3439
Fax: 570-385-5788

NEW JERSEY
327 Greens Ridge Rd.
Stewartsville, NJ 08886
1-800-257-2190

Corporate Office

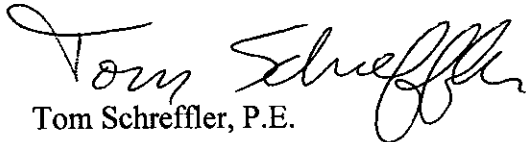
101 WEST CHERRY STREET • PALMYRA, PA 17078 • 717-833-3120 • FAX: 717-833-3122
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Light-Heigel & Associates, Inc. Page 2 of 2
Shamokin TWP, Northumberland County
Irish Valley/ Adams Park Road Sewage
Project No. 06-0597

4/1/2008

Please review and let me know if you have any further comments. Upon receipt of your written comments, I will prepare the final document sufficient for the public review phase.

Very truly yours,



Tom Schreffler, P.E.

Cc: all w/Encl
Supervisor Tom Carl, 445 Linden Rd., Paxinos, PA 17860
Supervisor John Klinger, 165 Miller Rd, Paxinos, PA 17860
Supervisor Greg Rachau, 155 Jefferson Lane, Sunbury, PA 17801
Secretary Stephanie McKinney, 649 Seven Points Rd, Sunbury, PA 17801
Ken Young, PhD, PE, SEO, 156 Siblings Lane, Paxinos, PA 17860
Attorney Jim Bathgate, c/o Wiest, Muolo, Noone & Swinehart, 244 Market St,
Sunbury, PA 17801

**SEWAGE FACILITIES PLANNING
REPORT**

FOR

**IRISH VALLEY ROAD
AND
ADAMS PARK ROAD**

**SHAMOKIN TOWNSHIP
NORTHUMBERLAND COUNTY, PA.**

**PREPARED BY
LIGHT-HEIGEL & ASSOCIATES, INC.
April 2008**

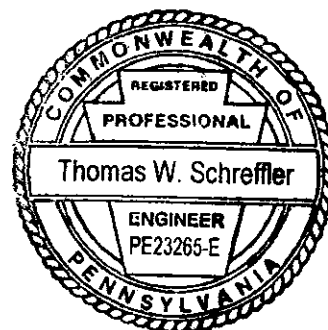


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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER STANDARDS AND FACILITY REGULATION

Code No.

**SEWAGE FACILITIES PLANNING MODULE
FOR
MINOR ACT 537 UPDATE REVISION**

Component 3m. Municipal or Authority Sponsored Minor Sewage Collection Project

(Return completed module package to appropriate municipality)

DEP USE ONLY				
DEP CODE #	CLIENT ID #	SITE ID #	APS ID #	AUTH ID #

This document provides a simplified planning format for municipalities and municipal authorities proposing the construction of a sewer extension primarily serving existing development. Typically, this format would be used for projects involving the extension of sewer service to no more than 100 equivalent dwelling units (EDUs) and where the majority of the project serves existing development. For projects where more than 50 percent of the proposed customers will result from new land development, a Component 3 Sewage Facilities Planning Module would typically be used. For larger projects or if the project would involve the construction or modification of a wastewater treatment facility, then a general Act 537 Update Revision, meeting all of the requirements of Title 25 Pennsylvania Code, Chapter 71 § 72.21, is appropriate.

DEP staff will make a final determination as to the appropriate type of planning for a given project based on the review of a plan of study. Eligibility for a grant to offset the cost of planning will be determined by DEP staff based upon review of a *Task/Activity Report* (3800-FM-WSWM0005). The project sponsor submits both documents. **DO NOT** use this form without coordinating with your local DEP staff. Refer to the instructions.

This planning document, along with any other documents specified in the cover letter, must be completed and submitted to the municipality with jurisdiction over the project site for review and approval. All required documentation must be attached for the Sewage Facilities Planning Module to be complete. Refer to the instructions for help in completing this component.

1. Project Name

Irish Valley Road, and Adams Park Road Sewage Management Areas

2. Brief Project Description

Implement TWP's Sewage Ordinance for Irish Valley Road, and install sewer system at Adams Park Road.

Municipality Name	County	City	Boro	Twp
Shamokin	Northumberland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Municipality Contact - Last Name	First Name	MI	Suffix	Title
Carl, Thomas				
Additional Individual - Last Name	First Name	MI	Suffix	Title
Municipality Mailing Address Line 1	Mailing Address Line 2			
445 Linden Road				
Address Last Line - City	State	ZIP+4		
Paxinos	PA	17860		
Phone + Ext.	FAX (optional)	Email (optional)		
570-648-3508				

SITE INFORMATION (See Section 6 of Instructions)

Site Name

Irish Valley Road, and the Adams Park Road Sewage Management Areas (SMAs)

Site Location Line 1

The Irish Valley Road (T-4026) SMA enters SR 061 approximately 1 mile north of the Shamokin-Coal TWP wastewater treatment facility (WWTF). It then proceeds westerly parallel to Benny's Run Creek for approximately 3.72 miles.

Site Location Line 2

The Adams Park Road SMA is located just south of the Shamokin-Coal TWP WWTF

Site Location Last Line - City	State	ZIP+4	Latitude	Longitude
Shamokin TWP	PA	17801	40.80	76.62

Detailed Written Directions to Site

For the Irish Valley Road/SR 061 intersection, go 1.72 miles south on SR 061 from the intersection of SR 061/SR487. Benny's Run creek proceeds upstream, parallel to Irish Valley Road, for approximately 3.5 miles to the Reigel property. For the Adams Park Road SMA, proceed another 0.95 miles south. The Inn is opposite the Shamokin-Coal TWP WWTF.

Description of Site

The Irish Valley Road SMA has approximately 30 single house residences situated on both sides of the Road. The attached 11" x 17" USGS map illustrates the extent of the SMA, from Sta. 0+00 to Sta. 14+90 (i.e., the Reigel property). The Adams Park Road SMA consists of 9 residences located on the opposite side of the Shamokin Creek, from the Wayside Inn.

Site Contact - Last Name	First Name	MI	Suffix	Phone	Ext.
Carl	Thomas				
Site Contact Title			Site Contact Firm (if none, leave blank)		
Shamokin Township Supervisor					
FAX			Email		

Mailing Address Line 1	Mailing Address Line 2	
445 Linden Road		
Mailing Address Last Line - City	State	ZIP+4
Paxinos	PA	17860

Last Name	First Name	MI	Suffix
Schreffler	Thomas	W	P.E.
Title	Consulting Firm Name		
Project Manager	Light-Heigel & Associates, Inc.		
Mailing Address Line 1	Mailing Address Line 2		
39 Dock Street			
Address Last Line - City	State	ZIP+4	Country
Schuylkill Haven	PA	17972	USA
Email	Phone	Ext.	FAX
tws@light-heigel.com	570-385-3439		570-385-5788

The project will be provided with drinking water from the following source: (Check appropriate box)

- Individual wells or cisterns.
- A proposed public water supply.
- An existing public water supply.

If existing public water supply is to be used, provide the name of the water company and attach documentation from the water company stating that it will serve the project.

Name of water company: _____

PROJECT NARRATIVE (Section E of Instructions)

- A narrative has been prepared as described in Section E of the instructions and is attached.
- The applicant may choose to include additional information beyond that required by Section E of the instructions.

SEWAGE DISPOSAL NEEDS IDENTIFICATION (Section F of Instructions)

Conduct sanitary and water supply surveys per DEP's publication entitled *Sewage Disposal Needs Identification*. This is highly recommended for all projects. It is required if PENNVEST funding is to be sought for the project, or if required by DEP as indicated by the checked box opposite this item.

EXISTING SANITARY FACILITIES (Section G of Instructions)

1. COLLECTION SYSTEM

Provide requested information concerning the existing treatment facility.

- a. Name of existing collection system Not Applicable for Irish Valley Road SMA as the TWP will use their Sewage Management Ordinance, and for Adams Park Road SMA, the new collection system will tie into the Shamokin-Coal TWP sewer lines
- Clean Streams Law Permit Number 0
- b. Name of interceptor _____
- Clean Streams Law Permit Number 0

2. WASTEWATER TREATMENT FACILITY

Provide requested information concerning the existing treatment facility.

Name of existing facility Shamokin-Coal TWP WWTF for the Adams Park Road SMA

NPDES Permit Number for existing facility _____

- 1. Provide an estimate of the immediate and five year projected flow from the proposed sewer extension. Address the capacity for this flow in the existing conveyance and treatment facilities in terms of the most recent wasteload management annual report for these facilities.

2. PLOT PLAN

The following information is to be submitted on a plot plan or map of the proposed project that clearly reflects the relationship between the proposed facilities and the identified features.

- a. Existing and proposed buildings.
- b. Lot lines and lot sizes.
- c. Adjacent lots.
- d. Existing and proposed sewerage facilities.
- e. Show tap-in or sewer extension to the point of connection to existing collection system.
- f. Existing and proposed water supplies and surface water (wells, springs, ponds, streams, etc.)
- g. Existing and proposed rights-of-way.
- h. Existing and proposed streets, roadways, access roads, etc.
- i. Any designated recreational or open space area
- j. Wetlands - from National Wetland Inventory Mapping and USGS Hydric Soils Mapping.
- k. Flood plains or Floodprone area soils, floodways, watercourses, water bodies (from Federal Flood Insurance Mapping)
- l. Prime Agricultural Land.
- m. Any other facilities (pipelines, power lines, etc.)
- n. Orientation to north.

PROPOSED WASTEWATER FACILITIES (continued)

3. WETLAND PROTECTION

YES NO

- a. Are there wetlands in the project area? If yes, indicate these areas on the plot plan as shown in the mapping or through on-site delineation.
- b. Are there any construction activities (encroachments, or obstructions) proposed in, along, or through the wetlands? If yes, identify any proposed encroachments on wetlands and identify whether a General Permit or a full encroachment permit will be required. If a full permit is required, address time and cost impacts on the project. Note that wetland encroachments should be avoided where feasible. Also note that a feasible alternative **MUST BE SELECTED** to an identified encroachment on an exceptional value wetland as defined in Chapter 105. Identify any project impacts on HQ or EV streams and address impacts of the permitting requirements of said encroachments on the project.

4. PRIMARY AGRICULTURAL LAND PROTECTION

- a. Will your project involve the disturbance of any prime agricultural lands? If "yes" indicate any alternatives to this disturbance that were considered and the reasons they were not deemed feasible. Identify any primary or secondary impacts of the project on the Commonwealth's prime agricultural lands. Evaluate alternatives to avoid or mitigate undesirable impacts. The selected sewage facilities plan must be consistent with local measures in place to protect prime agricultural lands.

5. STORMWATER MANAGEMENT IMPACTS:

- a. Will the project impact an area covered by a DEP approved County Stormwater Management Plan? If yes show that the proposed facilities are consistent with that plan.

6. PENNSYLVANIA NATURAL DIVERSITY INDEX (PNDI) CONSISTENCY:

Check one:

- The "Pennsylvania Natural Diversity Inventory (PNDI) Project Environmental Review Receipt" resulting from my search of the PNDI database and all supporting documentation from jurisdictional agencies (when necessary) is/are attached.
- A completed "Pennsylvania Natural Diversity Inventory (PNDI) Project Planning & Environmental Review Form," (PNDI Form) available at www.naturalheritage.state.pa.us, and all required supporting documentation is attached. I request DEP staff to complete the required PNDI search for my project. I realize that my planning module will be considered incomplete upon submission to the Department and that the DEP review will not begin, and that processing of my planning module will be delayed, until a "PNDI Project Environmental Review Receipt" and all supporting documentation from jurisdiction agencies (when necessary) is/are received by DEP.

Applicant or Consultant Initials _____

7. COMPREHENSIVE PLAN CONSISTENCY:

- A narrative and mapping to show that the proposed project is consistent with any comprehensive plan developed under the Pennsylvania Municipalities Planning Code (Act 247) is attached. Document that the proposed project is consistent with land use and all other requirements stated in the comprehensive plan.

8. COOPERATION WITH PA. HISTORICAL AND MUSEUM COMMISSION (PHMC):

- A copy of DEP's "Cultural Resource Notice" and map which were sent to the Commission and a copy of the Commission's response are attached. Note that the Commission may require archeological surveys if federal funds, including PENNVEST, will be used in the project. If PENNVEST funds are to be used, DEP cannot recommend the project to PENNVEST for consideration until any required surveys have been done and the project has been "cleared" by the Commission.

9. ADDITIONAL REQUIREMENTS FOR PENNVEST PROJECTS:

- A copy of the additional information is attached. If PENNVEST funding is to be sought for the project,

address these additional items in terms of any project impacts and measures to avoid or mitigate same.

- Cost Effectiveness
- Air quality
- Floodplains
- Wild and scenic rivers
- Coastal zone management
- Socio-economic impacts
- Water supplies
- Other environmentally sensitive areas

An alternative sewage facilities analysis has been prepared as described in Section J of the instructions and is attached.

The applicant may choose to include additional information beyond that required by Section J of the instructions.

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Chapter 94 of DEP's rules and regulations (relating to Municipal Wasteload Management). If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

1. Project Flows 3600 gpd
2. Total Sewage Flows to Facilities
 - a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
 - b. Enter the present average and peak sewage flows for the critical sections of existing facilities.
 - c. Enter the average and peak sewage flows projected for 5 years through the critical sections of existing facilities which includes existing, proposed, or future projects.

To complete the table, refer to Section K of instructions.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd)	
	Average	Peak	Average	Peak	Average	Peak
Collection	3600				4800	
Conveyance						
Treatment						

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table.

This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system? Yes No

- a. If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved plan and schedule granting an allocation for this project. A letter granting allocations to this project under the plan and schedule must be attached to the module package.
- b. If no, the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with Chapter 94 requirements and that this proposal will not affect this status.
- c. Collection System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

d. Conveyance System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____

Date _____



4. Treatment Facility

The questions below are to be answered by the facility permittee in coordination with the information in the table and the latest Chapter 94 report.

This project proposes the use of an existing wastewater treatment plant for the disposal of sewage. Will this action create a hydraulic or organic overload within 5 years at that facility? Yes No

a. If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this inconsistency with Chapter 94 is resolved or unless there is an approved plan and schedule granting an allocation for this project. A letter granting allocations to this project under the plan and schedule must be attached to the planning module.

b. If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with Chapter 94 requirements and that this proposal will not impact this status

c. Name of Agency, Authority, Municipality for the Adams Park Rd SMA, the Shamokin-Coal TWP WWTF

Name of Responsible Agent _____

Agent Signature _____

Date _____



An institutional evaluation is attached. Identify the entity which will design, obtain necessary permits, construct, own and operate the proposed facilities. If a low pressure vacuum or effluent sewer are proposed, discuss purchase, installation, operation and maintenance responsibilities for the individual pumping, valves, tanks, etc.

M. PROJECT COST AND FUNDING ANALYSIS (See Section M.2 of the criteria)

- A detailed cost estimate and present worth analysis for the project is attached. Provide a financing plan for the project, identifying the funding source(s) and identifying estimated tap fees and user rates. For projects proposing the use of PENNVEST funds, see Section I. 9. **ADDITIONAL REQUIREMENTS FOR PENNVEST PROJECTS.** Complete the following table:

Cost and Funding Information (Estimated)	
COST	
Construction cost	\$ 105200
Administrative, legal, engineering cost	\$ 42080
Total project cost	\$ 147280
Annual O/M cost	\$ 2457
FUNDING	
Tap-in fees (\$ per EDU X no. EDUs)	\$ 13500
Proceeds from primary funding source	\$ 133780
Proceeds from other funding sources	\$ 0
USER COSTS	
Initial user base	9 EDUs
Monthly debt service per EDU	\$ 35
Monthly O/M cost per EDU	\$ 22
Total estimated monthly user cost per EDU	\$ 58

- A project implementation schedule showing milestone dates for submission of DEP permit applications, initiation and completion of construction and any other milestones significant to this particular project is attached to this component

- Attached is a copy of the public notice. All comments received as a result of the notice are attached.
- Municipal response to these comments is attached.
- No comments were received. A copy of the public notice is attached.

ADDITIONAL HEALTH PLANNING ELEMENTS (See Section 9 of Regulation)

a. Additional planning elements are required by DEP.

- _____
- _____
- _____
- _____
- _____

ADDITIONAL ATTACHED COMMENTS

- Local Planning Commission comments or Component 4a are attached.
- County, Area, Or Region Planning Commission comments or Component 4b are attached.
- County or Joint County Health Department comments (if appropriate) or Component 4c are attached.

ADDITIONAL ATTACHED DOCUMENTS

- An original, signed, and sealed Resolution of Adoption is attached.

Attachments to

**Sewage Facilities Planning Module for Minor Act 537 Update Revision for
Shamokin Township, Northumberland County, PA**

Prepared by Light-Heigel & Associates, Inc.

Revised February 1, 2008
Revised March 6, 2008
Revised April 1, 2008

SECTION F: PROJECT NARRATIVE

1. Historical Review

In November 2005 and January 2006 the Pennsylvania Department of Environmental Protection (PADEP) received complaints that “ ‘wildcat’ untreated sewage discharge” exists along Bennys Run. PADEP subsequently notified the Township via letters dated November 15, 2005 and January 5, 2006, requesting that the Township’s Sewage Enforcement Officer (SEO) investigate the matter.

On July 11, 2007 Light-Heigel’s SEO Matt Willard sent the results of his investigation to the Township Supervisors. In that letter Mr. Willard indicated that approximately 20 properties were looked at. Of the twenty properties, five were found to have pipes leading from the house to the stream that did not to be roof drainage; three properties were determined to be functioning properly; the remaining twelve properties’ were not able to be categorized as mal-functioning or functioning properly, as no pipes to the creek were found. Sheets 1 and 2 of 3 illustrate the entire length of the area that was investigated.

As a result, the Township Supervisors requested Light-Heigel & Associates, Inc. to prepare a PADEP required Task Activity Report (TAR) summarizing the engineering necessary to evaluate the sewage issues along Bennys Run, but also to address the sewage issue at Adams Park Road, located across the Shamokin Creek from the Wayside Inn (see Sheet 3 of 3).

Light-Heigel’s TAR was approved by the Supervisors, and then the PADEP on November 5, 2007, which has resulted with this Report.

2. Current Project Strategy

This project consists of two separate Sewage Management Areas (SMAs):

- a. The Irish Valley Road SMA, extends from the intersection of SR 61 westerly to the Reigel property, for a length of approximately 2.82 miles

(i.e., 14,900 feet). There are approximately 29 single residential structures along the road, one church, and some large (apparently abandoned) buildings that at one time served some type of businesses.

Residents along Irish Valley Road, which runs, more or less, parallel to Bennys Run, from the intersection at SR 061 to the vicinity of the Reigel property (Sta 14+90), a distance of approximately 2.82 miles. All the residences are served by on-lot disposal systems (OLDS), several of which have been documented to not function properly.

Sheets 1 and 2, of 3 illustrate this area.

- b. The Adams Park Road SMA consists of nine residential houses (i.e., Equivalent Dwelling Units, EDUs). The proposed solution is to install a sewage collection system along either the front or rear of the houses (to be determined during preliminary design stage), and transport the sewage beneath the Shamokin Creek via the bridge, to an existing manhole in the vicinity of the Wayside Inn. Section M provides cost opinions and funding options for this alternative.

Sheet 3 of 3 illustrates this area.

.SECTION G: SEWAGE DISPOSAL NEEDS IDENTIFICATION

1. The Irish Valley Road SMA

All residences are apparently served by on-lot disposal systems (OLDS); i.e., there does not exist a sewage collection system, although "wildcat" systems may exist but have not been discovered. In a letter dated July 11, 2007 from Light-Heigel's SEO, it was noted that twenty properties were investigated, with five discharging directly into the creek, three confirmed as not having any malfunctions, and twelve properties' OLDS not being able to be categorized as functioning properly, or not functioning properly.

2. The Adams Park Road SMA

The nine residences discharge their sewage directly into the Shamokin Creek as clearly evidenced by pipes and earth channels that are visible from the road.

SECTION I: PROPOSED WASTEWATER FACILITIES

1. The Irish Valley Road SMA

An estimate of the existing sewage flows into the Bennys Run creek is 12,000 gallons per day (gpd), average daily flow based on 400 gpd/EDU for 30 EDUs. The five year

projected growth is unknown, although the area is rural in nature and probably could sustain another 10 to 15 EDUs along the 2 ¾ mile reach, should the demand arise. This would bring the total projected flow to 18,000 gpd, average daily flow. Currently the existing OLDS and future OLDS could sustain this loading given an appropriate Sewage Management Ordinance.

An enlarged copy of a USGS map, at 1"= 1000' illustrates the aforementioned SMA. Due to the proposed alternative (as discussed in Section J) wetlands, flood plains, prime agricultural lands, existing utilities, etc., have not been addressed.

2. The Adams Park Road SMA

An estimate of the existing sewage flows into the Shamokin Creek is 3600 gpd, average daily flow. The 5-year projected flow is 4800 gpd, based on the addition of three more houses.

An attached drawing illustrates the proposed sewage collection system.

SECTION J: ALTERNATIVE ANALYSIS

1. The Irish Valley Road SMA

The chosen disposal method is to implement the 1992 Sewage Management Ordinance, (herein attached), along with a proposed Amendment as prepared by the Township Solicitor, (herein attached), that will address correcting the existing malfunctioning OLDS as soon as practicable, as well as proactively addressing those OLDS that have not been categorized as functioning or not-functioning. Finally, those OLDS that have been identified as "Functioning" will be monitored so as to maintain their status. New OLDS will be properly permitted.

The proposed four Alternatives that were investigated, and as shown on the attached USGS (at 1" = 1000') are as follows:

Alternative 1 consists of a gravity sewer line along Bennys Run from Sta. 14+90 (vicinity of the Reigel property) to SR 061 (Sta. 0+00) to the Shamokin-Coal TWP wastewater treatment facility (WWTF), via along the shoulder of SR 061. The total project cost opinion for serving the 44 equivalent dwelling units (EDUs) is \$2,237,200.

Alternative 2 consists of a gravity sewer line along Bennys Run from Sta. 14+90 to a proposed pump station, vicinity Sta. 2+40, and then proceeding to the top of Badman's Hill, via a force main, then by gravity to a new manhole at Bridge Road, then across Shamokin Creek to tie into the Shamokin-Coal TWP WWTF. The total project cost opinion for serving the 64 EDUs is \$2,688,875.

Alternative 3 consists of Alternative 2 ***plus*** Alternative 4 (the Adams Park Road SMA system). The total project cost opinion for serving the 73 EDUs is \$2,774,555.

Alternative 4 consists of a gravity sewer system for the 9 residences along Adams Park Road. The total project cost opinion is \$147,280.

The chosen sewage disposal method was selected mainly due to economic constraints resulting from the low number of users available to pay for the estimated total project costs. Specifically, Alternative 3 illustrates that the most reasonable scenario (i.e., assessing \$1,500 tap-fees and obtaining a 45% grant) would still require a monthly user fee of \$144.

The following table illustrates the anticipated User Fee per Month (assuming a \$1,500 Tap-Fee), from investigating three possible Alternatives for providing a sewage collection system along the Irish Valley Road (i.e., Alts. 1, 2, and 3), and the one Alternative for servicing Adams Park Road (i.e., Alt. 4):

PROJECTED USER FEE PER MONTH

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Comments
Conventional Bond, No Grant	\$346	\$284	\$256	\$106	Assumed 5.25% interest, for 30 yrs
PENNVEST loan, No Grant	\$298	\$245	\$221	\$91	Assumed 1% interest, for 20 yrs
PENNVEST loan, \$250k Grant	\$272	\$227	\$206	\$(37), i.e., Grant would pay all capital costs	Assumed 1% interest, for 20 yrs
RUS loan, No Grant	\$278	\$229	\$206	\$85	Assumed 4.75% interest, for 40 yrs
RUS loan, 45% Grant	\$195	\$160	\$144	\$58	Assumed 4.75% interest, for 40 yrs
RUS loan, 85% Grant	\$96	\$79	\$64	\$27	Assumed 4.75% interest, for 40 yrs

2. The Adams Park Road SMA

The chosen disposal method is to install a sewage collection line consisting of 8" PVC pipe, approximately 700 feet long and then passing beneath the Shamokin Creek to tie into an existing manhole in the vicinity of the Wayside Inn.

The chosen disposal method was selected mainly due to the fact that installing OLDS for each resident appears infeasible due to the small lots and poor soils, and also due to the fact that the project appears to be affordable if each resident is assessed a \$1,500 tap-fee and the Township acquires a minimum 45% grant from a lending institution such as PENNVEST, the RUS, or a local bank, assuming an interest rate of 4.75% .

SECTION K: CHAPTER 94 CONSISTENCY

1. The Irish Valley Road SMA: Not applicable since no sewage is proposed to go to the Shamokin-Coal Township WWTF.
2. The Adams Park Road SMA: Since the proposed flow is only 3,600 gpd, there should be no adverse affects to the operation of the Shamokin-Coal Township WWTF.

SECTION L: INSTITUTIONAL EVALUATION

1. The Irish Valley Road SMA: The Shamokin Township Supervisors will authorize and monitor the implementation of the 1992 Sewage Management Ordinance, along with the attached proposed Amendment, as enforced by the Township Sewage Enforcement Officer.
2. The Adams Park Road SMA: The Shamokin Township Supervisors have entered into a contract with Mr. Ken Young, P.E., PhD, SEO to obtain the required permits and complete the design necessary to implement the proposed chosen disposal method (i.e., Alternative 4).

SECTION M: PROJECT COST AND FUNDING ANALYSIS

1. The Irish Valley Road SMA

The Shamokin Township Supervisors will implement the Sewage Management Ordinance upon approval by PADEP. Implementation will be by the Township SEO, at an estimated annual cost of \$_____. Funding for this program will be subsidized from permit and repair fees received by the Irish Valley Road residents.

2. The Adams Park Road SMA

The total project cost opinion for the design, construction, contract administration, and construction inspection of the chosen alternative is \$147,280. The project is affordable assuming that there is a \$1,500 tap-fee assessed to each resident and that the Township receives a minimum 45% grant accompanied by a maximum 4.75% loan.

SECTION N: PROJECT IMPLEMENTATION SCHEDULE

1. The Irish Valley Road SMA

Submit Module 3m to PADEP

July 11, 2008

Receive approval from PADEP	_____
Pass the proposed Amendment to the 199 2 Sewage Management Ordinance	Sixty (60) days after PADEP approval;
Start implementation of SMO	Sixty (60) days after PADEP approval;
2. <u>The Adams Park Road SMA</u>	
Submit Module 3m to PADEP	July 11, 2008
Receive approval from PADEP	_____
Complete agreement with Shamokin-Coal TWP Sewer Authority	Sixty (60) days after PADEP approval;
Submit to PENNVEST, RUS for Grant/loan package approval	Ninety (90) days after PADEP approval
	;
Advertise for Bids NLT	Sixty (60) days after receipt of funding;
Award contract NLT	One Hundred Twenty (120) days after receipt of funding; and
Complete project NLT	One Hundred Eighty (180) days after receipt of funding.

SECTION O: PUBLIC NOTIFICATION REQUIREMENT

1. The Irish Valley Road SMA _____ to _____, 2008
2. The Adams Park Road SMA _____ to _____, 2008

SECTION P: ADDITIONAL PROJECT SPECIFIC PLANNING ELEMENTS

1. The Irish Valley Road SMA Later, by PADEP
2. The Adams Park Road SMA Later, by PADEP

SECTION Q: PLANNING AGENCY REVIEW

1. The Irish Valley Road SMA Later, Component 4 to
County Planning Com
2. The Adams Park Road SMA Later, Component 4 to
County Planning Com

SECTION R: RESOLUTION ADOPTION

1. The Irish Valley Road SMA At _____ meeting
2. The Adams Park Road SMA At _____ meeting

SHAMOKIN TOWNSHIP ACT 537 PLAN												
User Rate Estimates												
Light-Heigel & Associates, Inc. 2/1/2008 REVISED 03/06/08 Project No. 06-0597												
Financing Options	EDU's	Estimated Total Project Cost	Tapping Fee	Grants	Interest Rate	Term (Years)	Annual Debt Service	Debt Service per EDU	Annual O&M Cost per EDU	Annual Cost per EDU	Monthly Cost per EDU	
			\$1,500		5.25%	30			Estimated at 2.5% of Constr Costs			
Conventional Bond, No Grants												
Alternative 1: Gravity sewer line along Benny's Run from Sta 14+90 to Rte 61 (Sta 0+00) to Shamokin-Coal TWP WWTF	44	\$2,237,200	\$1,500	\$0	5.25%	30	\$145,290	\$3,302	\$847	\$4,149	\$346	
Alternative 2: Gravity sewer line along Benny's Run from Sta 14+90 to Proposed Pump Station, to Top of Badman's Hill via Force Main, to new MH at Bridge Rd, then via gravity to WWTF	64	\$2,688,875	\$1,500	\$0	5.25%	30	\$173,507	\$2,711	\$700	\$3,411	\$284	
Alternative 3: Gravity sewer line along Benny's Run from Sta 14+90 to Proposed Pump Station, to Top of Badman's Hill via Force Main, to new MH at Bridge Rd, then via gravity to WWTF PLUS Adams Park Road residences	73	\$2,774,555	\$1,500	\$0	5.25%	30	\$178,337	\$2,443	\$633	\$3,076	\$256	
Alternative 4: The Adams Park Road residences on Bridge Road, off Rte 61	9	\$147,280	\$1,500	\$0	5.25%	30	\$8,952	\$995	\$273	\$1,267	\$106	

SHAMOKIN TOWNSHIP ACT 537 PLAN												
User Rate Estimates												
Light-Heigel & Associates, Inc.												
2/1/2008 REVISED 03/06/08												
Project No. 06-0597												
Financing Options		EDU's	Estimated Total Project Cost	Tapping Fee	Grants	Interest Rate	Term (Years)	Annual Debt Service	Debt Service per EDU	Annual O&M Cost per EDU	Annual Cost per EDU	Monthly Cost per EDU
PENNVEST 20-Year, No Grants												
Alternative 1: Gravity sewer line along Benny's Run from Sta 14+90 to Rte 61 (Sta 0+00) to Shamokin-Coal TWP WWTF												
	44	\$2,237,200	\$1,500	\$0	1.00%	20	\$120,318	\$2,734	\$847	\$3,582	\$298	
Alternative 2: Gravity sewer line along Benny's Run from Sta 14+90 to Proposed Pump Station, to Top of Badman's Hill via Force Main, to new MH at Bridge Rd, then via gravity to WWTF												
	64	\$2,688,875	\$1,500	\$0	1.00%	20	\$143,685	\$2,245	\$700	\$2,945	\$245	
Alternative 3: Gravity sewer line along Benny's Run from Sta 14+90 to Proposed Pump Station, to Top of Badman's Hill via Force Main, to new MH at Bridge Rd, then via gravity to WWTF PLUS Adams Park Road residences												
	73	\$2,774,555	\$1,500	\$0	1.00%	20	\$147,685	\$2,023	\$633	\$2,657	\$221	
Alternative 4: The Adams Park Road residences on Bridge Road, off Rte 61												
	9	\$147,280	\$1,500	\$0	1.00%	20	\$7,413	\$824	\$273	\$1,096	\$91	

SHAMOKIN TOWNSHIP ACT 537 PLAN												
User Rate Estimates												
Light-Heigel & Associates, Inc.												
2/1/2008 REVISED 03/06/08												
Project No. 06-0597												
Financing Options	EDU's	Estimated Total Project Cost	Tapping Fee	Grants	Interest Rate	Term (Years)	Annual Debt Service	Debt Service per EDU	Annual O&M Cost per EDU	Annual Cost per EDU	Monthly Cost per EDU	
	<i>PENNVEST 20-Year, \$250,000 Grant</i>											
Alternative 1: Gravity sewer line along Benny's Run from Sta 14+90 to Rte 61 (Sta 0+00) to Shamokin-Coal TWP WWTF	44	\$2,237,200	\$1,500	\$250,000	1.00%	20	\$106,464	\$2,420	\$847	\$3,267	\$272	
Alternative 2: Gravity sewer line along Benny's Run from Sta 14+90 to Proposed Pump Station, to Top of Badman's Hill via Force Main, to new MH at Bridge Rd, then via gravity to WWTF	64	\$2,688,875	\$1,500	\$250,000	1.00%	20	\$129,831	\$2,029	\$700	\$2,729	\$227	
Alternative 3: Gravity sewer line along Benny's Run from Sta 14+90 to Proposed Pump Station, to Top of Badman's Hill via Force Main, to new MH at Bridge Rd, then via gravity to WWTF PLUS Adams Park Road residences	73	\$2,774,555	\$1,500	\$250,000	1.00%	20	\$133,831	\$1,833	\$633	\$2,467	\$206	
Alternative 4: The Adams Park Road residences on Bridge Road, off Rte 61	9	\$147,280	\$1,500	\$250,000	1.00%	20	(\$6,440)	(\$716)	\$273	(\$443)	(\$37)	

SHAMOKIN TOWNSHIP ACT 537 PLAN												
User Rate Estimates												
Light-Helgel & Associates, Inc. 2/1/2008 REVISED 03/06/08 Project No. 06-0597												
Financing Options	EDU's	Estimated	Tapping	Grants	Interest	Term	Annual	Debt	Annual O&M	Annual	Monthly	
		Total Project										Rate
		Cost	Fee		Rate	(Years)	Service	per EDU	EDU	EDU	EDU	
RUS 40-Year, No Grants			\$1,500		4.00%	40						
Alternative 1: Gravity sewer line along Benny's Run from Sta 14+90 to Rte 61 (Sta 0+00) to Shamokin-Coal TWP WWTF	44	\$2,237,200	\$1,500	\$0	4.00%	40	\$109,697	\$2,493	\$847	\$3,341	\$278	
Alternative 2: Gravity sewer line along Benny's Run from Sta 14+90 to Proposed Pump Station, to Top of Badman's Hill via Force Main, to new MH at Bridge Rd, then via gravity to WWTF	64	\$2,688,875	\$1,500	\$0	4.00%	40	\$131,001	\$2,047	\$700	\$2,747	\$229	
Alternative 3: Gravity sewer line along Benny's Run from Sta 14+90 to Proposed Pump Station, to Top of Badman's Hill via Force Main, to new MH at Bridge Rd, then via gravity to WWTF PLUS Adams Park Road residences	73	\$2,774,555	\$1,500	\$0	4.00%	40	\$134,648	\$1,844	\$633	\$2,478	\$206	
Alternative 4: The Adams Park Road residences on Bridge Road, off Rte 61	9	\$147,280	\$1,500	\$0	4.00%	40	\$6,759	\$751	\$273	\$1,024	\$85	

SHAMOKIN TOWNSHIP ACT 537 PLAN											
User Rate Estimates											
Light-Heigel & Associates, Inc.											
Feb-08											
Project No. 06-0597											
Financing Options	EDU's	Estimated Total Project Cost	Tapping Fee	Grants	Interest Rate	Term (Years)	Annual Debt Service	Debt Service per EDU	Annual O&M Cost per EDU	Annual Cost per EDU	Monthly Cost per EDU
RUS 40-Year, 45% Grant											
Alternative 1: Gravity sewer line along Benny's Run from Sta 14+90 to Rte 61 (Sta 0+00) to Shamokin-Coal TWP WWTF	44	\$2,237,200	\$1,500	\$1,006,740	4.75%	40	\$65,555	\$1,490	\$847	\$2,337	\$195
Alternative 2: Gravity sewer line along Benny's Run from Sta 14+90 to Proposed Pump Station, to Top of Badman's Hill via Force Main, to new MH at Bridge Rd, then via gravity to WWTF	64	\$2,688,875	\$1,500	\$1,209,994	4.75%	40	\$77,852	\$1,216	\$700	\$1,917	\$160
Alternative 3: Gravity sewer line along Benny's Run from Sta 14+90 to Proposed Pump Station, to Top of Badman's Hill via Force Main, to new MH at Bridge Rd, then via gravity to WWTF PLUS Adams Park Road residences	73	\$2,774,555	\$1,500	\$1,248,550	4.75%	40	\$79,745	\$1,092	\$633	\$1,726	\$144
Alternative 4: The Adams Park Road residences on Bridge Road, off Rte 61	9	\$147,280	\$1,500	\$66,276	4.75%	40	\$3,800	\$422	\$273	\$695	\$58

SHAMOKIN TOWNSHIP ACT 537 PLAN												
User Rate Estimates												
Light-Heigel & Associates, Inc.												
2/1/2008 REVISED 03/06/08												
Project No. 06-0597												
Financing Options	EDU's	Estimated Total Project Cost	Tapping Fee	Grants	Interest Rate	Term (Years)	Annual Debt Service	Debt Service per EDU	Annual O&M Cost per EDU	Annual Cost per EDU	Monthly Cost per EDU	
RUS 40-Year, 85% Grant												
Alternative 1: Gravity sewer line along Benny's Run from Sta 14+90 to Rte 61 (Sta 0+00) to Shamokin-Coal TWP WWTF	44	\$2,237,200	\$1,500	\$1,901,620	4.00%	40	\$13,620	\$310	\$847	\$1,157	\$96	
Alternative 2: Gravity sewer line along Benny's Run from Sta 14+90 to Proposed Pump Station, to Top of Badman's Hill via Force Main, to new MH at Bridge Rd, then via gravity to WWTF	64	\$2,688,875	\$1,500	\$2,285,544	4.00%	40	\$15,527	\$243	\$700	\$943	\$79	
Alternative 3: Gravity sewer line along Benny's Run from Sta 14+90 to Proposed Pump Station, to Top of Badman's Hill via Force Main, to new MH at Bridge Rd, then via gravity to WWTF PLUS Adams Park Road residences	73	\$2,774,555	\$3,000	\$2,358,372	4.00%	40	\$9,962	\$136	\$633	\$770	\$64	
Alternative 4: The Adams Park Road residences on Bridge Road, off Rte 61	9	\$147,280	\$1,500	\$125,188	4.00%	40	\$434	\$48	\$273	\$321	\$27	

SHAMOKIN TOWNSHIP ACT 537 PLAN					
Revised 03/06/08					
<u>Alternative 1</u>					
Gravity sewer line along Benny's Run					
from Sta 14+90 to					
Rte 61 (Sta 0+00) to Shamokin-Coal TWP					
WWTF					
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	COST
1	8" PVC (Sta14+90 to 0+00)	14900	L.F.	\$ 50	\$ 745,000
2	8" PVC along Rte 61(Sta0+00 to WWTF)	5500	L.F.	\$ 75	\$ 412,500
3	Creek Crossing	1	EA	\$ 25,000	\$ 25,000
4	Stream Crossings	2	EA	\$ 15,000	\$ 30,000
5	Manholes	70	EA	\$ 2,000	\$ 140,000
6	Service Connections(30 Bennys/14 Rte61)	44	EA	\$ 2,000	\$ 88,000
7	Shoulder Restoration	5500	L.F.	\$ 25	\$ 137,500
8	Crossing beneath Railroad	1	EA	\$ 20,000	\$ 20,000
TOTAL ESTIMATED CONSTRUCTION COST					\$ 1,598,000
ASSOCIATED PROJECT COSTS					
	Engineering	15%			\$ 239,700
	Legal	5%			\$ 79,900
	Administrative	5%			\$ 79,900
	Contingency	15%			\$ 239,700
TOTAL PROJECT COST					\$ 2,237,200

SHAMOKIN TOWNSHIP ACT 537 PLAN					
Revised 03/06/08					
Alternative 2					
Gravity sewer line along Benny's Run					
from Sta 14+90 to					
to Proposed Pump Station at Sta 2+40, to					
Top of Badman's Hill, via Force Main, to					
new MH at Bridge Road then via gravity,					
to WWTF					
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	COST
1	8" PVC (Sta14+90 to 2+40)	12500	L.F.	\$ 50	\$ 625,000
2	New Pump Station, w/three 5 HP motors	1	EA	\$ 200,000	\$ 200,000
3	4" Force Main	3700	L.F.	\$ 40	\$ 148,000
4	Stream Crossings	4	EA	\$ 15,000	\$ 60,000
5	8"PVC (serves Badman Hill back to Creek)	3700	L.F.	\$ 60	\$ 222,000
6	8"PVC (top of Badman Hill to Bridge Rd MH	4100	L.F.	\$ 60	\$ 246,000
7	8"PVC to MH#1 across Creek	75	L.F.	\$ 75	\$ 5,625
8	Manholes	70	EA	\$ 2,000	\$ 140,000
9	Service Connections(30 Bennys/34 Badman)	64	EA	\$ 2,000	\$ 128,000
10	Road Restoration	6400	L.F.	\$ 15	\$ 96,000
11	Creek Crossing at Bridge Rd	1	EA	\$ 30,000	\$ 30,000
12	Crossing beneath Railroad	1	EA	\$ 20,000	\$ 20,000
TOTAL ESTIMATED CONSTRUCTION COST					\$ 1,920,625
ASSOCIATED PROJECT COSTS					
	Engineering	15%			\$ 288,094
	Legal	5%			\$ 96,031
	Administrative	5%			\$ 96,031
	Contingency	15%			\$ 288,094
TOTAL PROJECT COST					\$ 2,688,875

SHAMOKIN TOWNSHIP ACT 537 PLAN					
Revised 03/06/08					
Alternative 3					
Gravity sewer line along Benny's Run					
from Sta 14+90 to					
Proposed Pump Station, (Sta 2+40) to					
Top of Badman's Hill, via Force Main, to					
new MH at Bridge Road then via gravity,					
to WWTF					
PLUS					
the Adams Park Road residences					
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	COST
1	8" PVC (Sta14+90 to 2+40)	12500	L.F.	\$ 50	\$ 625,000
2	New Pump Station, w/three 5 HP motors	1	EA	\$ 200,000	\$ 200,000
3	4" Force Main	3700	L.F.	\$ 40	\$ 148,000
4	Stream Crossings	4	EA	\$ 15,000	\$ 60,000
5	8"PVC (serves Badman Hill back to Creek)	3700	L.F.	\$ 60	\$ 222,000
6	8"PVC (top of Badman Hill to Bridge Rd MH)	4100	L.F.	\$ 60	\$ 246,000
7	8"PVC(Adams Road residences)	720	L.F.	\$ 60	\$ 43,200
8	8"PVC to MH#1 across Creek	75	L.F.	\$ 75	\$ 5,625
9	Manholes	70	EA	\$ 2,000	\$ 140,000
10	ServConn:(30 Bennys/34 Badman/9 AdamsRd)	73	EA	\$ 2,000	\$ 146,000
11	Road Restoration	6400	L.F.	\$ 15	\$ 96,000
12	Creek Crossing at Bridge Rd	1	EA	\$ 30,000	\$ 30,000
13	Crossing beneath Railroad	1	EA	\$ 20,000	\$ 20,000
TOTAL ESTIMATED CONSTRUCTION COST					\$ 1,981,825
ASSOCIATED PROJECT COSTS					
	Engineering	15%			\$ 297,274
	Legal	5%			\$ 99,091
	Administrative	5%			\$ 99,091
	Contingency	15%			\$ 297,274
TOTAL PROJECT COST					\$ 2,774,555

SHAMOKIN TOWNSHIP ACT 537 PLAN					
Alternative 4					
the Adams Park Road residences on Bridge Road, off Rte 61, vicinity Wayside Inn					
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	COST
1	8" PVC behind Adams Park Rd	720	L.F.	\$ 60	\$ 43,200
2	Creek Crossing at Bridge Rd	1	EA	\$ 30,000	\$ 30,000
3	Manholes	4	EA	\$ 2,000	\$ 8,000
4	ServConn:(9 AdamsRd)	9	EA	\$ 2,000	\$ 18,000
5	8" PVC to MH #1 across Creek	75	L.F.	\$ 75	\$ 5,625
6	Road Restoration	25	L.F.	\$ 15	\$ 375
TOTAL ESTIMATED CONSTRUCTION COST					\$ 105,200
ASSOCIATED PROJECT COSTS					
	Engineering	15%			\$ 15,780
	Legal	5%			\$ 5,260
	Administrative	5%			\$ 5,260
	Contingency	15%			\$ 15,780
TOTAL PROJECT COST					\$ 147,280

(H) Malfunction: A condition which occurs when an on-lot sewage disposal system discharges sewage onto the surface of the ground, into ground waters of this Commonwealth, into surface waters of this Commonwealth, backs up into a building connected to the system or in any manner causes a nuisance or hazard to the public health or pollution of ground or surface water or contamination of public or private drinking water wells. Systems shall be considered to be malfunctioning if any condition noted above occurs for any length of time during any period of the year.

(I) Official Sewage Facilities Plan: A comprehensive plan for the provision of adequate sewage disposal systems, adopted by the Board and approved by the Pennsylvania Department of Environmental Resources, pursuant to the Pennsylvania Sewage Facilities Act.

(J) On-lot Sewage Disposal System: Any system for disposal of domestic sewage involving pre-treatment and subsequent disposal of the clarified sewage into a subsurface soil absorption area or retaining tank; this term includes both individual sewage systems and community sewage systems.

(K) Person: Any individual, associate, public or private corporation for profit or not for profit, partnership, firm, trust, estate, department, board, bureau or agency of the Commonwealth, political subdivision, municipality, district authority, or any other legal entity whatsoever which is recognized by law as the subject of rights and duties. Whenever used in any clause prescribing and imposing a penalty or imposing a fine or imprisonment, the term person shall include the members of an associate, partnership or firm and the officers of any local agency or municipal, public or private corporation for profit or not for profit.

(L) Rehabilitation: Work done to modify, alter, repair, enlarge or replace an existing on-lot sewage disposal system.

(M) Sewage: Any substance that contains any of the waste products or excrement or other discharge from the bodies of human beings or household domestic animals, and any noxious or deleterious substances being harmful or inimical to the public health, or to animal or aquatic life, or to the use of water for domestic water supply or for recreation or which constitutes pollution under the Act of June 22, 1937 (P.L. 1987, No. 994), known as "The Clean Streams Law", as amended.

(N) Sewage Enforcement Officer (SEO): A person certified by DER who is employed by the Township of Shamokin. Such person is authorized to conduct investigations and inspections, review permit applications, issue or deny permits and do all other activities as may be provided for such person in the Sewage Facilities Act, the rules and regulations promulgated thereunder and this or any other ordinance adopted by the Township of Shamokin.

(O) Sewage Management District: any area or areas of the Township designated in the Official Sewage Facilities Plan adopted by the Board as an area for which a Sewage Management Program is to be implemented, not to exceed the Route 61 corridor which has been identified previously by the Township as the study area in said Plan.

(P) Sewage Management Program: A comprehensive set of legal and administrative requirements encompassing the requirements of this ordinance, the Sewage Facilities Act, the Clean Streams Law, the regulations promulgated thereunder and such other requirements adopted by the Board to effectively enforce and administer this ordinance.

(Q) Subdivision: The division or re-division of a lot, tract or other parcel of land into two or more lots, tracts, parcels or other divisions of land, including changes in existing lot lines. The enumerating of lots shall include as a lot that portion of the original tract or tracts remaining after other lots have been subdivided therefrom.

(R) For the purpose of this ordinance, any term which is not defined herein shall have that meaning attributed to it under the Sewage Facilities Act and the Regulations promulgated thereto.

Section III. - Applicability.

From the effective date of this ordinance, its provisions shall apply in any portion of the Township identified in the Official Sewage Facilities Plan as a sewage management district. Within such an area or areas, the provisions of this ordinance shall apply to all persons owning any property serviced by an on-lot sewage disposal system and to all persons installing or rehabilitating on-lot sewage disposal system.

Section IV. - Permit Requirements.

A. No person shall install, construct or request bid proposals for construction, or alter an individual sewage system or community sewage system or construct or request bid proposals for construction or install or occupy any building or structure for which an individual sewage system or community sewage is to be installed without first obtaining a permit from the Sewage Enforcement Officer which permit shall indicate that the site and the plans and specifications of such system are in compliance with the provisions of the Clean

Streams Law and the Pennsylvania Sewage Facilities Act and the regulations adopted pursuant to those Acts.

(B) No system or structure designed to provide individual or community sewage disposal shall be covered from view until approval to cover the same has been given by a sewage enforcement officer. If seventy-two (72) hours have elapsed, excepting Sundays and holidays, since the sewage enforcement officer issuing the permit received notification of completion of construction, the applicant may cover said system or structure unless permission has been specifically refused by the sewage enforcement officer.

C. Applicants for sewage permits may be required to notify the sewage enforcement officer of the schedule for construction of the permitted on-lot sewage disposal system so that inspection(s) in addition to the final inspection required by the Sewage Facilities Act may be scheduled and performed by a sewage enforcement officer.

D. No building permit shall be issued for a new building which will contain sewage generating facilities until a valid sewage permit has been obtained from a sewage enforcement officer. No occupancy permit shall be issued until the permitted sewage disposal system installation has been inspected and approved by the sewage enforcement officer and properly covered.

E. No building or occupancy permit shall be issued and no work shall begin on any alteration or conversion of any existing structure, if said alteration or conversion will result in the increase or potential increase in sewage flows from the structure, until either the structure's owner receives a permit for alteration or replacement of the existing sewage disposal system or until the structure's owner and the appropriate officials of the Township

receive written notification from a sewage enforcement officer that such a permit will not be required. Where a sewage permit is required, no occupancy permit shall be issued until the permitted sewage disposal system installation has been inspected and approved by the sewage enforcement officer and properly covered. The sewage enforcement officer shall determine whether the proposed alteration or conversion of the structure will result in increased sewage flows based on the requirements of Chapter 73 of DER's Rules and Regulations.

F. Sewage permits may be issued only by a sewage enforcement officer employed by the Township. DER shall be notified as to the identity of each sewage enforcement officer employed by the Township.

Section V. - Inspections.

A. Any on-lot sewage disposal system may be inspected by an authorized agent at any reasonable time as of the effective date of this ordinance.

B. Such inspection may include a physical tour of the property, the taking of samples from surface water, wells, other ground water sources, the sampling of the contents of the sewage disposal system itself and/or the introduction of a traceable substance into the interior plumbing of the structure served to ascertain the path and ultimate destination of waste water generated in the structure.

C. An authorized agent shall have the right to enter upon land for the purpose of inspections described in this section.

D. An initial inspection shall be conducted by an authorized agent within one year of the effective day of this ordinance for the purpose of determining the type and functional status of each sewage disposal system in the sewage

management district. A written report shall be furnished to the owner of each property inspected and a copy of said report shall be maintained in the Township records.

E. A schedule of routine inspections may be established to assure the proper functioning of the sewage systems in the sewage management district.

F. An authorized agent shall inspect systems known to be, or alleged to be, malfunctioning. Should said inspections reveal that the system is indeed malfunctioning, the authorized agent shall order action to be taken to correct the malfunction. If total correction cannot be done in accordance with the regulations of DER including, but not limited to, those outlined in Chapter 73 of Title 25 of the Pennsylvania Code or is not technically or financially feasible in the opinion of the authorized agent and a representative of DER, then action by the property owner to mitigate the malfunction shall be required.

G. There may arise geographic areas where numerous on-lot sewage disposal systems are malfunctioning. A resolution of these area wide problems may necessitate detailed planning and a revision to the portion of the Sewage Facilities Plan pertaining to areas affected by such malfunctions. When a DER authorized Official Sewage Facilities Plan Revision has been undertaken, mandatory repair or replacement of individual malfunctioning sewage disposal systems within the area affected by the revision may be delayed, pending the outcome of the plan revision process. However, immediate corrective action may be compelled whenever a malfunction, as determined by Township officials and/or the Department, represents a serious public health or environmental threat.

Section VI. - Operation.

A. Only normal domestic wastes shall be discharged into any on-lot sewage disposal system. The following shall not be discharged into the system.

- (1) Industrial waste.
- (2) Automobile oil and other non-domestic oil.
- (3) Toxic or hazardous substances or chemicals, including but not limited to, pesticides, disinfectants, acids, paints, paint thinners, herbicides, gasoline and other solvents.
- (4) Clean surface or ground water, including water from roof or cellar drains, springs, basement sump pumps and french drains.

Section VII. - Maintenance.

A. Each person owning a building served by an on-lot sewage disposal system which contains a septic tank shall have the septic tank pumped by a qualified pumper/hauler whenever an inspection reveals that the septic tank is filled with solids or scum in excess of one-third (1/3) of the liquid depth of the tank, or at such other time as the inspection shows, or would show, a malfunction or improper operation of said on-lot sewage disposal system. Receipts from the pumper/hauler shall be submitted to the Township.

B. The required pumping frequency may be increased at the discretion of an authorized agent if the septic tank is undersized, if solids buildup in the tank is above average, if the hydraulic load on the system increases significantly above average, if a garbage grinder is used in the building, if the system malfunctions or for other good cause shown.

C. Any person owning a property served by a septic tank shall submit, with each required pumping receipt, a written statement, from the pumper/hauler

or from any other qualified individual acceptable to the Township, that the baffles in the septic tank have been inspected and found to be in good working order. Any person whose septic tank baffles are determined to require repair or replacement shall first contact a sewage enforcement officer for approval of the necessary repair.

D. Any person owning a building served by an on-lot sewage disposal system which contains an aerobic treatment tank shall follow the operation and maintenance recommendations of the equipment manufacturer. A copy of the manufacturer's recommendations and a copy of the service agreement shall be submitted to the Township within six (6) months of the effective date of this ordinance. Thereafter, service receipts shall be submitted to the Township at the intervals specified by the manufacturer's recommendations. In no case may the service or pumping intervals for aerobic treatment tanks exceed those required for septic tanks.

E. Any person owning a building served by a cesspool or dry well shall have that system pumped according to the schedule prescribed for septic tanks. As an alternative to this scheduled pumping of the cesspool or dry well, the owner may apply for a sewage permit from a sewage enforcement officer for a septic tank to be installed preceding the cesspool or dry well. For a system consisting of a cesspool or dry well preceded by an approved septic tank, only the septic tank must be pumped at the prescribed interval.

F. Additional maintenance activity may be required as needed including, but not necessarily limited to, cleaning and unclogging of piping, servicing and the repair of mechanical equipment, leveling of distribution boxes, tanks and liens, removal of obstructing roots or trees, the diversion of surface water

away from the disposal area, etc.

Section VIII. - System Rehabilitation.

A. No person shall operate or maintain an on-lot sewage disposal system in such a manner that it malfunctions. All liquid wastes, including kitchen and laundry wastes and water softener backwash, shall be discharged to a treatment tank. No sewage system shall discharge untreated or partially treated sewage to the surface of the ground or into the waters of the Commonwealth unless a permit for such discharge has been obtained from DER.

B. A written notice of violation shall be issued to any person who is the owner of any property which is found to be served by a malfunctioning on-lot sewage disposal system or which is discharging raw or partially treated sewage without a permit.

C. Within seven (7) days of notification by the Township that a malfunction has been identified, the property owner shall make application to the sewage enforcement officer for a permit to repair or replace the malfunctioning system. Within thirty (30) days of initial notification by the Township, construction of the permitted repair or replacement shall commence. Within sixty (60) days of the original notification by the Township, the construction shall be completed unless reasonable or unique conditions mandate a longer period, in which case the Township shall set an extended completion date.

D. A sewage enforcement officer shall have the authority to require the repair of any malfunction by the following methods: cleaning, repair or replacement of components of the existing system, adding capacity or otherwise

altering or replacing the system's treatment tank, expanding the existing disposal area, replacing the existing disposal area, replacing a gravity distribution system with a pressurized system, replacing the system with a holding tank, or any other alternative appropriate for the specific site.

E. In lieu of, or in combination with, the remedies described in Subsection D above, a sewage enforcement officer may require the installation of water conservation equipment and the institution of water conservation practices in structures served. Water using devices and appliances in the structure may be required to be retrofitted with water saving appurtenances or they may be required to be replaced by water conserving devices.

F. In the event that the rehabilitation measures in Subsections A through E are not feasible or effective, the owner may be required to apply to DER for a permit to install an individual spray irrigation treatment system or a single residence treatment and discharge system. Upon receipt of said permit the owner shall complete construction of the system within thirty (30) days.

G. Should none of the remedies described in this Section be totally effective in eliminating the malfunction of an existing on-lot sewage disposal system, the property owner is not absolved of responsibility for that malfunction. The Township may require whatever action is necessary to lessen or mitigate the malfunction to the extent necessary.

Section IX. - Liens.

The Township, upon written notice from a sewage enforcement officer that an imminent health hazard exists due to failure of a property owner to maintain, repair or replace an on-lot sewage disposal system as provided under the terms

of this ordinance, shall have the authority to perform, or contract to have performed, the work required by the sewage enforcement officer. The owner shall be charged for the work performed and, if necessary, a lien shall be entered therefore in accordance with law.

Section X. Disposal of Septage.

A. All septage originating within the sewage management district shall be disposed of in accordance with the requirements of the Solid Waste Management Act (Act 97 of 1980, 35 P.S. §§6018.101 et. seq.) and all other applicable laws and at sites or facilities approved by DER. Approved sites or facilities shall include the following: septage treatment facilities, waste water treatment plants, composting sites, and approved farm lands.

B. Pumper/haulers of septage operating within the sewage management district shall operate in a manner consistent with the provisions of the Pennsylvania Solid Waste Management Act (Act 97 of 1980, 35 P.S. §§6018.101-6018.1003) and all other applicable laws.

Section XI. - Administration.

A. The Township shall fully utilize those powers it possesses through enabling statutes and ordinances to effectuate the purposes of this ordinance.

B. The Township shall employ qualified individuals to carry out the provisions of this ordinance. Those employees shall include a sewage enforcement officer and may include an administrator and such other persons as may be necessary. The Township may also contract with private qualified persons or firms as necessary to carry out the provisions of this ordinance.

C. All permits, records, reports, files and other written material relating to the installation, operation and maintenance and malfunction of on-lot sewage disposal systems in the sewage management district shall become the property of, and be maintained by, the Township. Existing and future records shall be available for public inspection during regular business hours at the official office of the Township. All records pertaining to sewage permits, building permits, occupancy permits and all other aspects of the sewage management program shall be made available, upon request, for inspection by representatives of the Pennsylvania Department of Environmental Resources.

D. The Board shall establish all administrative procedures necessary to properly carry out the provisions of this ordinance.

E. The Board may establish a fee schedule, and authorize the collection of fees, to cover the cost to the Township of administering this program.

Section XII. - Appeals.

A. Appeals from final decisions of the Township or any of its authorized agents under this ordinance shall be made to the Board of Supervisors in writing within thirty (30) days from the date of written notification of the decision in question.

B. The appellant shall be entitled to a hearing before the Board of Supervisors at its next regularly scheduled meeting, if a written appeal is received at least fourteen (14) days prior to that meeting. If the appeal is received within fourteen (14) days of the next regularly scheduled meeting, the appeal shall be heard at the next regularly scheduled meeting. The municipality shall thereafter affirm, modify, or reverse the aforesaid decision. The hearing

may be postponed for a good cause shown by the appellant or the Township. Additional evidence may be introduced at the hearing provided that it is submitted with the written notice of appeal.

C. A decision shall be rendered in writing within thirty (30) days of the date of the hearing.

Section XIII. - Penalties.

Any person failing to comply with any provision of this ordinance shall be subject to a fine of not less than One Hundred (\$100.00) Dollars and costs, and not more than Three Hundred (\$300.00) Dollars and costs, or in default thereof shall be confined in the county jail for a period of not more than thirty (30) days. Each day of noncompliance shall constitute a separate offense.

Section XIV. - Repealer.

All ordinances or parts of ordinances inconsistent with the provisions of this ordinance are hereby repealed to the extent of such inconsistency.

Section XV. - Severability.

If any section or clause of this ordinance shall be adjudged invalid, such adjudication shall not affect the validity of the remaining provisions which shall be deemed severable therefrom.

DULY ENACTED and ORDAINED this 12th day of August, 1992.

by the Board of Supervisors of the Township of Shamokin, Northumberland County,
Pennsylvania, in lawful session duly assembled.

ATTEST:

BOARD OF SUPERVISORS OF
SHAMOKIN TOWNSHIP

 S/GH
Secretary

BY: S/RA
Chairman

TOWNSHIP OF SHAMOKIN
NORTHUMBERLAND COUNTY, PENNSYLVANIA

ORDINANCE NO. 2008-_____

AN ORDINANCE AMENDING ORDINANCE NO. 1992-3 WHICH GOVERNS MUNICIPAL MANAGEMENT OF ON-LOT SUBSURFACE SEWAGE DISPOSAL FACILITIES IN THE TOWNSHIP OF SHAMOKIN, NORTHUMBERLAND COUNTY, PENNSYLVANIA.

BE IT ORDAINED by the Supervisors of the Township of Shamokin, and it is hereby ENACTED AND ORDAINED that Shamokin Township Ordinance No. 1992-3, be amended to read as follows:

Section II – Definitions.

Section II (O) of Ordinance No. 1992-3 is hereby amended to read as follows:

- (O) Sewage Management District: Any area or areas of the Township designated in the Official Sewage Facilities Plan adopted by the Board as an area for which a Sewage Management Program is to be implemented.

Section IV. – Permit Requirements.

Section IV of Ordinance No. 1992-3 of the Township of Shamokin, Northumberland County, Pennsylvania, shall be amended to include the following provision which shall be identified as Section IV (G):

- (G) Ground Markers: Any person who shall install a new system shall provide a marker or markers at ground level locating the subsurface waste disposal tank and other important components of the system requiring periodic inspection and maintenance. Requirements for marker types and locations will be determined by the Township's Sewage Enforcement Officer. As an alternative, the property owner shall provide

a site plan identifying the location of the on lot sewage system and other important components of the system requiring periodic inspection and maintenance. In addition, a riser or access hatch shall be constructed so as to enable easy access to the waste disposal tank, and prevent odors from escaping and to prevent children from removing the hatch.

Section X – Disposal of Septage.

Section X (B) of Ordinance No. 1992-3 of the Township of Shamokin shall be amended to read as follows:

- (B) The septage pumper/haulers operating within the Township shall operate in a manner consistent with the provisions of the Pennsylvania Solid Waste Management Act (Act 97 of 1980, et P.S. §§6018.101 – 6018.1003), and regulations adopted pursuant to such Act.
- (i) Any septage pumper/haulers who violates any of the provisions of this part shall be guilty of a summary offense and, upon conviction thereof, shall be sentenced to pay a fine not exceeding One Thousand (\$1,000.00) Dollars, plus costs, and in default of payment thereof, shall be subject to imprisonment for a term not to exceed thirty (30) days. Each day the violation continues shall constitute a separate offense.
- (ii) If any pumper/hauler shall have been convicted on two (2) occasions of any violation of this part, or for violating the conditions of its state permit, or of any state or local law governing its operation, the Board shall have the power to suspend said pumper/hauler from operating within the Township for a period of not less than six (6) months or more than two (2) years for each violation, as

determined by the Township. Each day the violation continues shall constitute a separate offense.

Section XIII. – Penalties.

Section XIII of Ordinance No. 1992-3 of the Township of Shamokin, Northumberland County, Pennsylvania, shall be amended to read as follows:

Any person failing to comply with any provisions of this Ordinance shall be subject to a fine of not less than Five Hundred (\$500.00) Dollars and costs, and not more than Five Thousand (\$5,000.00) Dollars and costs, or in default thereof shall be confined in the county jail for a period of not more than ninety (90) days. Each day of noncompliance shall constitute a separate offense.

Other than as amended hereby, Ordinance No. 1992-3 is hereby ratified in its entirety.

DULY ENACTED AND ORDAINED this _____ day of _____, 2008, by the Board of Supervisors of Shamokin Township, Northumberland County, Pennsylvania, in public session duly assembled.

ATTEST:

BOARD OF SUPERVISORS OF SHAMOKIN
TOWNSHIP

Stephanie McKinney, Secretary
Treasurer

Thomas Carl – Chairman

Gregory Rachau – Vice-Chairman

John Klinger - Supervisor