# **MARION TOWNSHIP**

# ACT 537 PLAN UPDATE VOLUME I

# PREPARED FOR:

**MARION TOWNSHIP** 

BERKS COUNTY, PENNSYLVANIA

Adopted October 30, 2014

Plan Recalled December 22, 2016

Plan Advertised for Public Comment Sept. 8, 2017

Adopted February 28, 2019

# PREPARED BY:

McCARTHY ENGINEERING ASSOCIATES, INC. 555 Van Reed Road, Wyomissing, PA 19610

# Marion Township Act 537 Plan Update Proposed Plan of Study and Table of Contents

### Volume I

Section	Title and Description	Page
1.0	Executive Summary	1
2.0	Introduction	. 4
3.0	Physical and Demographic Analysis	6
3.1	Surface Water Resources	6
3.1.1	Streams and Reservoirs	6
3.1.2	Floodplains	7
3.1.3	Wetlands	7
3.2	Geology	8
3.2.1	Groundwater	8
3.2.2	Groundwater Management	9
3.3	Soils	10
3.3.1	Prime Agricultural Soils	10
3.3.2	Hydric Soils	11
3.3.3	Soil Suitable for On-Lot Sewage Disposal	11
3.4	Potable Water Supplies	12 .
4.0	Existing Sewage Facilities and Related Considerations	13
4.1	General	13
4.2	Municipal Sewage Facilities – Phase 1A	13
4.3	Municipal Sewage Facilities – Phase 1B	14
4.4	Individual On-Lot Sewage Disposal Systems	16
4.5	Zoning District Uses	17
4.6	Zoning District Minimum Lot Size Considerations	17
4.7	Existing Needs Conditions in the Phase 1B Planning Area	19
4.7.1	Sewage Needs Assessment	19
4.7.1.1	Public Health Need	19
4.7.1.2	Determination of Public Health Needs	21
4.7.1.3	File Review Public Health Needs	22
4.7.1.4	Door to Door Sanitary Sewage Needs Survey	22
4.7.2	Stouchsburg Village	24
4.7.3	Shady Cabins	24
4.7.4	US 422	24
4.7.5	Total EDU's and Per Capita	. 25
4.7.6	Groundwater Water Sampling	25
4.7.7	Surface Water	27

4.7.8	Sewage Needs Survey: Extra & Community Development Considerations	27
4.8	Effluent Limits	28
4.9	Future Environment Without a Project	28
5.0	Future Growth and Development	29
5.1	Subdivision Activity	29
5.2	Population Projections	29
5.3	Future Growth Areas	30
6.0	Development and Description of Alternatives	31
6.1	General	31
6.2	Alternative Considerations	32
6.2.1	No Action Alternative	32
6.2.2	Continued Use of Existing On-Lot Facilities	32
6.2.3	Public Wastewater Collection, Conveyance, and Treatment Alternatives	33
6.2.3.1	Conventional Gravity	33
6.2.3.2	Grinder Pump Systems	34
6.2.3.3	Small Diameter Gravity Sewers	35
6.2.3.4	Vacuum Sewers	35
6.2.3.5	Septic Tank Effluent Pump System	36
6.3	Alternatives for Repair and/or Replacement of Existing Wastewater Collection Facilities	36
6.4	Regional Wastewater Treatment Alternatives	37
6.4.1	Alternatives for Repair and/or Upgrade of Existing Wastewater Treatment Plant	38
6.4.1.1	Full Expansion and Upgrade	38
6.4.1.2	Limited Upgrade of the WSA Treatment Plant	39
6.4.5	Alternatives for New Wastewater Treatment Facilities	40
6.4.6	Packaged Extended Aeration System	41
6.4.7	Lagoon Treatment Systems	42
6.4.8	Sequencing Batch Reactor (SBR)	42
6.4.9	Wastewater Treatment Plant Sites	43
6.4.9.1	Site 1 – Sewer Treatment Plant on the Feeg Tract	44
6.4.9.2	Site 2 – Connection to a Marion Township STP – Martin Tract	44
6.4.9.3	Site 3 – Connection to a Marion Township STP Brubaker	46
7.0	Evaluation of Alternatives	47
7.1	Consistency Evaluation	47
7.1.1	Plans Approved Under the Clean Streams Law or Clean Water Act	47
7.1.2	Consistency with Applicable Water Quality Standards, Effluent Limitations, or Other Legal or Technical Requirements	47

7.1.4 7.1.5 7.1.6 7.2 7.3 7.4 7.4.1	or Archaeological Resources Prime Agricultural Land Local Planning, Zoning, and Subdivision Anti-degradation Requirements Selected Alternative Cost Evaluation Funding Alternatives Community Development Block Grant Program Public Bond Issue Pennsylvania Infrastructure Investment Authority (PENNVEST) Rural Utilities service (RUS) – U.S. Department of Agricultural Ability to Implement Present Worth Analysis of Recommended Alternative	50 50 50 51 51 52 52 52 53 53 54 55
7.1.5 7.1.6 7.2 7.3 7.4 7.4.1	Local Planning, Zoning, and Subdivision Anti-degradation Requirements Selected Alternative Cost Evaluation Funding Alternatives Community Development Block Grant Program Public Bond Issue Pennsylvania Infrastructure Investment Authority (PENNVEST) Rural Utilities service (RUS) – U.S. Department of Agricultural Ability to Implement	50 50 51 51 52 52 53 53 54 55
7.1.6 7.2 7.3 7.4 7.4.1	Anti-degradation Requirements Selected Alternative Cost Evaluation Funding Alternatives Community Development Block Grant Program Public Bond Issue Pennsylvania Infrastructure Investment Authority (PENNVEST) Rural Utilities service (RUS) – U.S. Department of Agricultural Ability to Implement	50 51 51 52 52 53 53 54 55
7.2 7.3 7.4 7.4.1	Selected Alternative Cost Evaluation Funding Alternatives Community Development Block Grant Program Public Bond Issue Pennsylvania Infrastructure Investment Authority (PENNVEST) Rural Utilities service (RUS) – U.S. Department of Agricultural Ability to Implement	51 51 52 52 53 53 54 55
7.3 7.4 7.4.1	Cost Evaluation Funding Alternatives Community Development Block Grant Program Public Bond Issue Pennsylvania Infrastructure Investment Authority (PENNVEST) Rural Utilities service (RUS) – U.S. Department of Agricultural Ability to Implement	51 52 52 53 53 54 55
7.4 7.4.1	Funding Alternatives Community Development Block Grant Program Public Bond Issue Pennsylvania Infrastructure Investment Authority (PENNVEST) Rural Utilities service (RUS) – U.S. Department of Agricultural Ability to Implement	52 52 53 53 54 55
7.4.1	Community Development Block Grant Program Public Bond Issue Pennsylvania Infrastructure Investment Authority (PENNVEST) Rural Utilities service (RUS) – U.S. Department of Agricultural Ability to Implement	52 53 53 54 55
	Public Bond Issue Pennsylvania Infrastructure Investment Authority (PENNVEST) Rural Utilities service (RUS) – U.S. Department of Agricultural Ability to Implement	53 53 54 55
7.4.2	Pennsylvania Infrastructure Investment Authority (PENNVEST) Rural Utilities service (RUS) – U.S. Department of Agricultural Ability to Implement	53 54 55
7.4.3	Rural Utilities service (RUS) – U.S. Department of Agricultural Ability to Implement	54 55
7.4.4	Ability to Implement	55
7.5		
7.6		
8.0	Institutional Evaluation	56
8.1	Evaluation of Institutional Alternatives and Required Administrative and Legal Activities	56
8.1.1	Existing Authorities	56
8.1.2	Institutional Alternatives	56
8.1.3	Staff and Administrative Resources	56
8.2	Implementation of Institutional Alternative	57
8.2.1	Legal Authorities of Incorporation	57
8.2.2	Required Ordinances, Regulations, Standards, and Inter-Municipal Agreements	57
8.2.3	Required Right of Way, Easements, and Land Transfers	58
8.3	Selected Institutional Alternative	58
8.4	Environmental Soundness of Selected Alternative	58
9.0	Selected Alternatives	62
9.1	Selected Structural Alternative	62
9.2	Capital Financing Plan for the Selected Alternative	62
9.3	User Rate and Funding Options for the Selected Alternative 1	
9.4	Project Implementation Schedule (Preliminary)	62
Appendix A:	Act 537 Plan Content and Environmental Assessment Checklist Environmental Report Map 1 – General survey Map 2 – General Survey – Stouchsburg Village Map 3 – Door to Door Survey Map 4 – Zoning	
	Map 5 – Floodplain and 305b Steams Map 6 – Geology	

Map 7 – General Soils

Map 8 – Hydric Soils

Map 9 – Prime Agricultural Soils

Map 10 – Proposed Public Sewer with MS-4 Areas & Agricultural Easement/Security Areas

Map 11A – Proposed Public Sewer-Conventional Alignment (Canal Road)-Phase 1B & 2 (Collection and Conveyance)

Map 11B – Proposed Public Sewer-Phase 1B & 2 (Connection to Womelsdorf Authority Facilities)

Map 11C - Proposed Public Sewer-Phase 1B & 2 (Connection to WWTP 1, 2, or 3)

Tables - Construction Costs

Appendix B: Sewage Needs

Appendix C: OLDS Management

Appendix D: Task Activity Plan Approval

Community Notifications Inter-municipal Agreements

Appendix E: An Ordinance of the Board of Supervisors of Marion Township

Governing Municipal Management of Sewage Disposal

Appendix F: Municipal Resolution Adopting this Act 537 Plan

#### **Volume II**

Appendix G: Marion Township Approved Meeting Minutes December 2016 Through Plan

**Update Adoption** 

Appendix H: Public Comments Received and Marion Township Responses

# Marion Township, Berks County, Pennsylvania Act 537 Plan Update

#### 1.0 EXECUTIVE SUMMARY

The sewage needs study focused on parts of the Township, the Planning Area, which have historically been considered by the Township as areas that should have public sewerage facilities. These are shown on Map 1 as Phases 1A, 1B, and 2. The implementation of improved sewage facilities in these three areas is important to the residents of the Township. The study was conducted in accordance with the Plan of Study approved by PA DEP. It included interaction with Tulpehocken Township for Phase 1A and Womelsdorf Sewer Authority – Heidelberg Township for Phases 1B and 2.

In addition to the proposed public sewer improvements, this update to the Marion Township official Act 537 Plan proposes improved management of on-lot sewage facilities within the Township by requiring regular pumping of septage contents from the on-lot septic tanks and periodic inspection of the systems.

The preparation of this update included a review of the comprehensive land use plan for the area, acquisition of preliminary effluent limitations for the proposed treatment plant alternatives, review of Township regulations and a review of a previously completed door to door survey, all of which were used to develop a characterization of the existing sewage disposal facilities in the Planning Area. Also, the preparation of the update considered the protection of natural resources, future growth, and existing protected land uses such as Agricultural Conservation Easements and Agricultural Security Areas. This process allowed for selecting a preferred alternative that shall serve the Township's sewage needs and minimize potential adverse impact on the Township's natural and agricultural resources.

The Plan evaluates different public sewage alternatives for the Planning Area in order to select a preferred alternative that is the cost-effective solution and will become the Township's Official Plan. The adoption of the Official Plan Update will require the Township to implement the selected alternative methods and facilities and construct, administer, and operate the improved sewage disposal facilities. In the event that

adequate financing and/or grant funding is not able to be obtained for design and/or construction of the collection system, the Township may re-evaluate design and construction of the system.

The evaluation of the various alternatives includes a listing of the advantages and disadvantages of each alternative followed by an estimate of construction and other project costs. The cost and technical feasibility of the alternatives were further studied regarding their affordability given the typical funding opportunities available and the effect of various tapping, connection and other fees as they relate to a projection of probable projected sewer rental charges.

The update to the Marion Township Official Plan will be reviewed by Womelsdorf Sewer Authority, Berks County Planning Commission, participating municipalities in the Plan, the participating municipalities in the Western Berks Joint Comprehensive Plan, PA DEP and funding agencies. Also, the Plan will be presented to the public. Though, the Township understands and acknowledges that not all citizens will be in favor of the Plan.

The selected alternative will require various activities to be implemented in accordance with the schedule in Section 9.0. The selected alternatives are based upon the evaluation of costs and projection of costs within a reasonable period after the Plan is developed. Funding alternatives and technical feasibility to implement the "Selected Plans" may require adjustment as the project schedule is implemented.

The Plan Update includes an improved On-Lot Disposal System (OLDS) management program. The program is intended to describe the requirements allowing the continued use of the existing OLDS systems throughout the Township and requirements for new OLDS systems within the Township.

The required public notification prior to adoption of the Update Plan is summarized in the Plan. The required consistency planning elements, such as addressing the historical and environmental clearances are identified in the Plan.

After the Plan has been reviewed and accepted by the participating municipalities, the public, the review agencies, and finalized, a resolution will be prepared for adoption by the Township.

The funding alternative evaluation includes a consideration that all Township authorized sewer systems will contribute revenues to the sewage needs of the Township. Administration of the improved sewer facilities such as collection of user charges, payment of salaries, payment for materials and utilities will

be by the Township or its designated agent and proportionately shared by all users of the improved system. The user charges for the Township's improved system should be collected by a central administration agency on a monthly or quarterly basis.

The existing inter-municipal agreement between Marion Township and Tulpehocken Township for public sewer service to Dutch Valley Food Distributors Inc. includes a provision for the implementation of the Marion Township central administration agency for all public sewage services in the Township. Dutch Valley Food Distributors is the only improved property in Phase 1A. They are connected to the Tulpehocken Township pubic sewer and presently sewer service to Dutch Valley Food Distributors, Inc. is administered by Tulpehocken Township. Likewise, the existing inter-municipal agreement between Marion Township and the Womelsdorf Sewer Authority that authorizes service to the Stonecroft Village development includes a provision for the implementation of the Marion Township central administration which at this time consists of the existing 52 EDU's in the development and the potential for an additional 163 EDU's as development approaches "build-out" status. Presently, sewer service to the residents, land owners, and utilities in Stonecroft Village is administered directly by Womelsdorf Sewer Authority.

After the Update Plan is adopted by the Townhsip, a mandatory connection ordinance consistent with the selected alternative will be adopted for all properties in the Planning Area. If the selected alternative for Phases 1B and 2 is the connection to the Womelsdorf Sewer Authority system, Marion Township will fund and participate in the administration of the required improvements to the Womelsdorf Sewer Authority facilities. The Township will request that the Womelsdorf Sewer Authority implement the necessary modifications to the Womelsdorf Sewer Authority Sewage Treatment Plant as described in the adopted Update Plan. The Authority has indicated that it may be possible for Marion Township to proceed with the installation of the public sewer facilities for the Phase 1B area prior to the completion of the improvements to the Womelsdorf Sewer Authority Treatment Plant.



#### 2.0 INTRODUCTION

Marion Township is in western Berks County and is bordered on north and east by the Berks County municipalities of Womelsdorf Borough, Heidelberg, North Heidelberg, Jefferson, and Tulpehocken Townships. Heidelberg, North Heidelberg, and Marion Townships, Womelsdorf and Robesonia Borough are the municipalities within the Western Berks Joint Comprehensive Plan that has established the guidelines for the public sewer improvements describe in this Plan Update.

Marion Township extends west to the Lebanon County line where it adjoins the Lebanon County municipalities of Jackson and Mill Creek Townships.

Generally Route 422, a principal arterial highway extends west to east between the major metropolitan areas of Reading and Lebanon. PA Route 419 extends north to south 419 and is an arterial road connecting the area to the I-78 corridor.

Over the years most development in the Township has occurred along the existing west to east roads. These are US 422, Main Street, Canal Road, William Penn Blvd. Improved lots in the Township are served by on-lot sewage systems and on-lot wells. Along the west to east traveled ways are the existing developed areas of Shady Cabins and Village of Stouchsburg. Both of these areas are mostly single family and multifamily residential properties. These two areas of Marion Township are suspected of requiring improved public sewer services.

The Borough of Womelsdorf is served by a public sewer and a public water system operated by the Womelsdorf Sewer Authority and the Womelsdorf-Robesonia Joint Authority respectively.

The joint multi-municipal Western Berks Comprehensive Plan proposes the extension of public sewer and public water to the developed areas of Marion Township by extending the systems from Womelsdorf Borough. Act 537 as amended, Chapter 71, subchapter B, the COWAMP Plan, the State Water Plan, the Berks County Comprehensive Plan,

and the Township's Zoning Ordinance Plan all address the same theme which is to improve water quality by eliminating malfunctioning sewage systems and to provide sewage collection and treatment in accordance with Federal and State environmental regulations in order to eliminate the health threat caused by malfunctioning on-lot sewage systems. Concurrent with this goal, all the above referenced resources require that sewerage planning not only be accomplished for existing service areas but also provide adequate facilities for the planning area's future needs.

#### 3.0 PHYSICAL AND DEMOGRAPHIC ANALYSIS

#### 3.1 Surface Water Resources

#### 3,1,1 Streams and Reservoirs

The surface runoff from the Township drains to two major drainage sheds of Pennsylvania. The land in the extreme northwestern section of the Township, consisting of approximately 1.5 % of the Township's 15.3 sq. ml. area is within the Little Swatara Creek subbasin of the Susquehanna River/Chesapeake Bay drainage shed. This is Phase 1A of the Planning Area in this Update. The remainder of the Township drains towards the southeast into the Tulpehocken Creek/Schuylkill River subbasin of the Delaware River drainage shed.

Many small unnamed tributary streams start in the fields and small woodland sections of the Township flowing into the Tulpehocken Creek. The Tulpehocken Creek travels approximately 4.5 miles through the Township generally flowing from west to east and forms the boundary with N. Heidelberg Township.

The Little Swatara Creek is a cold water fishes use. The Tulpehocken Creek is trout stocking water use. Approximately 4 miles downstream on the Tulpehocken Creek is Blue Marsh Lake-Reservoir a multi purpose Army Corps of Engineers facility. Below the spillway of Blue Marsh Lake, the Western Berks Water Authority has a surface water intake.

Information on the streams through Marion Township is shown on Map 5 in the Appendix.

#### 3.1.2 Floodplains

In accordance with the policies and procedures of the National Flood Insurance Program, The Federal Emergency Management Agency (FEMA) has prepared mapping that shows the extent of the 100 year floodplains for the Little Swatara Creek, Tulpehocken Creek, Mill Creek and the smaller tributaries thereto all in Berks County. The Township has an Ordinance for the implementation and enforcement of the Flood Plain Management Act of Pennsylvania.

Floodplain information is shown on Map 5 in the Appendix.

#### 3.1.3 Wetlands

Wetlands are those areas which are inundated or saturated by surface or groundwater at a frequency and duration to support a prevalence of vegetation and wildlife typically adapted for life in saturated soils. Wetlands generally include swamps, marshes, bogs, and other areas which exhibit the criteria for defining wetland area (1) hydrophytic vegetation, (2) hydric soils, (3) wetland hydrology.

The national Wetlands Inventory (NWI) Maps compiled and published by the U.S. Fish and Wildlife Service, are useful as a background source of information regarding wetland locations. The wetlands within Marion Township are mapped on the National Wetlands Inventory Maps. Wetlands are protected by local, state and federal laws and require extensive study, plan preparation, and possible replacement constructed wetlands whenever disturbance can not be avoided and it exceeds the allowed thresholds. Some of the wetlands in Marion Township can be located at

http://www.fws.gov/wetlands/Data/Mapper.html

Wetland information is shown on Map 8 in the Appendix.

#### 3.2 Geology

Marion Township is located in the Great Valley geologic section which extends from south central Pennsylvania to the northeast through Berks, Lehigh and Northhampton Counties. Limestone formations are the predominant rock type in the Great Valley Section. Over 80% of Marion Township is underlain by limestone formations consisting of:

- Hershey and Myerstown
- Rickenbach
- Stonehenge
- Annville
- Richland
- Epler
- Ontelaunee

The extreme northern and eastern sections of the Township are underlain by the geologic shales of the Hamburg sequence.

Information on geologic formations is shown on Map 6 in the Appendix.

#### 3.2.1 Groundwater

Most of the limestone formations in Marion Township will yield adequate supplies of groundwater for domestic use with the proper implementation of sewage disposal facilities that effectively manages nitrates in the groundwater. In some cases wells yields in the limestone formations will be as high as 200 gal. / min. Water quality from the limestone formations is almost always "hard water" (greater than 200 mg/l as CaCO<sub>3</sub>).

Groundwater supplies in the northern and eastern sections of the Township, within the Hamburg shale are adequate for domestic water supplies and will also be moderately hard.

Nitrates in groundwater are not natural to the groundwater in the region. Man's activities have caused elevated levels of nitrates in the groundwater. High concentrations of nitrates in drinking water may be harmful to infants and livestock if consumed on a regular basis. A maximum concentration of Nitrates as N allowed for drinking water as established by PA regulations is 10 mg/l.

#### 3.2.2 Groundwater Management

In addition to the prime farm soils in the Township, the Township's groundwater resources are probably the most valuable resource available to both domestic and agricultural users within the Township. Proper management of the quantity and quality of the groundwater is important to Marion Township land owners. Use and allocation must be carefully and selectively applied to ensure the productive and conservative use of the groundwater resources.

PA Act 220 requires registering and reporting groundwater withdrawals from the Township's for any user withdrawing more than 10,000 gallons more per day based on the average over a 30-day period. DEP on the prescribed PA DEP forms. Information on this regulatory measure is available at <a href="https://www.dep.state.pa.us/keyword">www.dep.state.pa.us/keyword</a>: "Water Management")

#### 3.3 Soils

The following soils are found in Marion Township:

- Berks; Bk, Bf,
- Brinkerton; Bt
- Calvin-Klinesville; Ca
- Clarksburg; Cm
- Duffield; Db, Df,
- Hagerstown, Ha
- Holly; Ho
- Penlaw; Pa
- · Thorndale, Th
- Weikert; We

The limits and extents of soils through the Township are shown on Maps 7, 8 and 9 attached in the Appendix.

#### 3.3.1 Prime Agricultural Soils

Prime farmland, as defined by the United States Department of Agricultural (USDA), is the land that is best suited for producing food, feed, forage, fiber, and oilseed crops. It has the soll quality, growing season, and water supply needed to economically produce a sustained high yield of crops when it is managed using acceptable farming methods. Prime farmland produces the highest yield with minimal inputs of energy and economic resources, and farming it results in the least damage to the environment.

The following soils have characteristics that are associated with prime farmland soils or farmland of statewide importance.

- Berks
- Clarksburg
- Duffield
- Penlaw
- Weikert

Prime farmland soils are shown in the exhibits.

3.3.2 Hydric Soils

Hydric soils are poorly drained soils that develop an anaerobic (limited oxygen) surface layer because of long periods of saturation or inundation by water. These soils display following soils have major hydric components:

- Holly
- Thorndale
  - 3.3.3 Soil Suitability for On-Lot Sewage Disposal

The following are the characteristics of soils within the Township regarding their suitability for use as absorption areas for on-lot sewage disposal systems (OLDS).

- Depth to Limiting Zone
- Percent slope
- Hydric soils (soils with hydric components or inclusions of hydric components)

TABLE 3.3						
OLDS System	Hydric Soils	Depth to Bedrock	Depth to Seasonal High Water Table	Slope		
Unsultable for any System	Yes	< 16"	< 10"	> 12% meadow > 25% wooded		
Individual Spray Irrigation	No	≥ 16"	≥ 10"	≤ 12% meadow ≥ 25% wooded		
Elevated Sand Mound	No	<u>&gt;</u> 20"	≥ 20*	≤12%		
Drip Irrigation	No	≥ 20"	≥ 20"	≤ 25%		
In-Ground	No	<u>&gt;</u> 60"	≥ 60"	≤ 25%		

Notes: < - Less Than; ≤ - Less Than or Equal To

In addition to limitations relating to soils, subsurface conditions, and slope, absorption areas cannot be located within 100-year floodways.

Soil Maps in the Appendix summarizes the soils determined to be unsuitable for any system and the soils included in each "system category," along with the soil characteristics provided in the USDA's Soil Survey of Berks County as published on the Penn State Soil Map Service.

# 3.4 Potable Water Supplies

The only improved properties with potable water supply in Marion Township are the lots in Stonecroft Village. The Exhibits in the Appendix identify where public water supply exists within the Township and the nearby communities.

<sup>&</sup>gt; - Greater Than; ≥ - Greater Than or Equal To



#### 4.0 EXISTING SEWAGE FACILITIES & RELATED CONSIDERATIONS

#### 4.1 General

The current 537 Plan in Marion Township is the Berks County Plan adopted many years ago. Marion Township has adequately enforced the current 537 Plan as required by the PA DER-DEP regulations and has implemented the required changes as the state regulations have changed. The current Official Plan has provided adequate regulation of OLDS facilities in the rural sections that have been along the existing roads crossing the Township.

#### 4.2 Municipal Sewage Facilities - Phase 1A

The Dutch Valley Food Distributors, Inc is in the western section of Marion Township. It is served by the Tulpehocken Township system in Mt. Aetna. The Tulpehocken Township sewer extends to the Marion Township line. The sewer connects to the Dutch Valley Food Distributors facilities via a private sewer lateral across the existing Dutch Valley Food Distributors property. The sanitary sewer was developed in accordance with the approved inter-municipal between Tulpehocken Township and Marion Township. Dutch Valley Food Distributors is the only user on this system. There are no anticipated the extensions of a public sewer across Marion Township into Lebanon County. This public sewer connection is Phase 1A of the Townships Update Plan and was completed in 2007-2008. It is only intended to serve the future expansions of Dutch Valley Food Distributors, Inc.

#### 4.3 Municipal Sewage Facilities - Phase 1B

The Womelsdorf Borough Sewer Authority (WSA) sewer system presently serves Stonecroft Village a residential development in Marion Township. The Authority's sewer line to Stonecroft Village and other sections of Womelsdorf Borough is within Marion Township. The approximate location of this sewer is shown on Maps 10 – 11c in the Appendix.

The Womelsdorf Authority's treatment plant discharges into the Tulpehocken Creek. The plant is located on a parcel land in Heidelberg Township along Water Street on the north side of US 422. This is shown on Map 1 in the Appendix. The parcel WSA parcel in Heidelberg Township is partially within the floodplain in Heidelberg Township. The Authority's NPDES permit is PA 0028975.

Past Chapter 94 Annual Wasteload Reports to the Department recorded <u>peak</u> monthly average flows through the WSA facility ranging from 680,000 gallons per day in 1993 and 550,000 gallons per day for two months in 1994. These <u>peak</u> monthly average flows are more than twice the average monthly daily flow and exceed the 5 year projections for maximum 3 consecutive month average flow by a factor of 1.5.<sup>1</sup>

Previous 537 Plan studies by Womelsdorf Borough, Womelsdorf Authority and other multi-municipal planning efforts considered connecting Stouchsburg and Shady Cabins to the Womelsdorf Sewer system. These previous studies from the 1960's, 1970's and 1980's are on file with PA DEP.

The latest study for Marion Township prior to this effort was by Marion Township. It was in response to Womelsdorf Authority's planning activity for the recent upgrade to their treatment plant. Womelsdorf requested that Marion participate in the project to upgrade

<sup>&</sup>lt;sup>11</sup> The Authority reported that during 1996 and 1997 the entire WSA system was televised and problem areas were grouted eliminating the causes of the excessive I & I indicated in the 1993 & 1994 Chapter 94 reports.

and expand the Womelsdorf STP with the understanding that the project would include sewer capacity for the Stouchsburg and Shady Cabins. Marion Township retained a consultant to perform a special limited study of proposed extension of the sewers to the developed areas in Marion Township. In the 1994 study the projected costs to extend the sewers and participate in the expansion and upgrade of Womelsdorf plant was not feasible for Marion Township. WSA proceeded with their project without providing capacity for additional sewerage services other than the Borough's own requirements.

There exists a litany of correspondence and memoranda extending back to the middle 1970's in the Department's and Township files documenting the efforts by both the Township, the Borough, the Authority and Department to find an environmentally sound, cost effective, affordable sewer solution for Stouchsburg – Shady Cabins areas. The interconnection with the Womelsdorf system is somewhat complicated by the fact that the existing system owned and operated by the WSA is influenced by Infiltration/Inflow (I/I). Negotiations between the Authority and the Township will be necessary regarding the Township's financial responsibility for the Borough's continued efforts to correct the inflow/infiltration (I/I) problems. The Borough's success to reduce I & I may effect the cost of connection and user charges to the Township and its citizens as sewer service from WSA is implemented.

Marion Township should not become responsible for a disproportionate share of expenditures to repair public sewer facilities of WSA that may contribute excessive I & I to the treatment plant. Existing WSA sewers within the Marion Township boundaries may become Marion Township property, but the transfer of ownership must establish a limit of responsibility for the repair and upgrade of the existing sanitary sewer infrastructure within the Township. The operation and maintenance considerations in Table 7-0 apply prorated factors the existing sewers as proposed by the WSA Engineer. The existing sewers in Stonecroft Village are applied at a 100%. The sewer between

<sup>&</sup>lt;sup>2</sup> The Authority reported that during 1996 and 1997 the entire WSA system was televised and problem areas were grouted eliminating the causes of the excessive I & I indicated in the 1993 & 1994 Chapter 94 reports.

Wm. Penn Blvd. and the proposed connection has been applied as 20% as the Township's responsibility and the sewer from the connection to the plant has been applied at 30% as the Township's responsibility.

The funding to extend new public sewer facilities from the WSA system to Stouchsburg and Shady Cabins should not engaged in any rehabilitation efforts to alleviate I/I in the existing sections of the WSA public sewers, otherwise the projected user rates to Township residents may be substantially higher. To the best of our knowledge the WSA is not under any Department orders to correct any the I/I to its facilities.

#### 4.4 Individual On-Lot Sewage Disposal Systems

All improved properties beyond the Phase 1A, 1B and 2 sewer areas will remain on the existing OLDS for the planned future. Improved properties within the Phase 2 area that adjoin the extended sewer will be connected to the extended sewer as required by the mandatory connection Ordinance, as required to maintain reasonable rates for sewer service in the Township and as required to support sustainable growth within the Township.

Other than employing the services of a sewage enforcement officer (SEO) to issue deny and revoke permits for on-lot sewage systems, and to take all other actions necessary to administer and enforce Section 7 of the Pennsylvania Sewage Facilities Act, no other sewage management program exists in Marion Township.

Certain improved properties along SR 422, Shady Cabins area and Stouchsburg Village are proposed as Phase 1B area for the public sewer improvements. Lots within the Phase 1B are characterized by lot sizes and shapes that severely restrict the repair and continued use of OLDS and in some cases the shape and size of the lot prohibits the repair of existing OLDS.

#### 4.5 Zoning District Uses

Shady Cabins are typical single family detached and two family dwellings. A variety of residential uses and a few in-home occupations and commercial uses exist within Stouchsburg Village and US 422 areas. The residential uses in each area serve a range of household sizes and incomes.

Zoning and land development will continue to encourage design that enhances the compatibility of the different types residential uses especially within Stouchsburg Village

with its three (3) zoning districts CC, R1 and HC. The permitted land uses within each district will better implemented when a public sewer serves the areas as compared to the feasibility of the existing on-lot sewage facilities serving the range of permitted uses. There are and could be family day care homes, town houses, boarding and rooming houses, small daycare centers, and multiple family dwellings, small professional offices, and public facilities all within the Stouchsburg Village area.

Nonresidential uses and development in the Phase 1B area of Stouchsburg Village should be limited to the types permitted by right and special exception within the Zoning Ordinance where those uses are supportive and in harmony with the residential character of the neighborhood as it presently exists. All nonresidential change of uses and development shall be and subject to the authorization by the Township's Zoning Officer.

#### 4.6 Zoning District Minimum Lot Size Considerations

The minimum lot sizes for the various districts are shown on Map 4 in the Appendix. The Zoning Ordinance must be enforced consistently with PA DEP Title 25. Chapter 71, 72, & 73 regulations

that require a 1 acre minimum lot size for on-lot sewage facility planning approval. DEP's regulations supersede the Township's regulation with regard to minimum lot size.

The Township regulations require the following minimum lot areas and widths for lots with <u>public sewer and individual on-lot water (well) supply</u>. The Community Core (CC) =District regulations do not specify differing lot areas for sites with public water supply versus on-lot water supply.

- the R1 District requires.
  - 1 acre non residential
    - Minimum 150' lot width
  - o 20,000 sq. ft. single family detached
    - Minimum 75' lot width
  - o 40,000 sq. ft. semi detached
    - Minimum 100' lot width
- the R2 District requires
  - o 1 acre non residential
    - Minimum 150' lot width
  - o 20,000 sq. ft. single family residential
    - Minimum 75' lot width
  - o 40,000 sq. ft. semi detached
    - Minimum 100' lot width
- the CC District requires
  - o 6,000 sq. ft. non residential
    - Minimum 40' lot width
  - o 6,000 sq. ft. single family detached
    - Minimum 40' lot width
  - o 8,000 sq. ft. semi detached
    - Minimum 50' lot width

- The HC District
  - o 1 acre minimum lot
    - Minimum 150' lot width
- The AR District
  - o 1 acre minimum lot
    - Minimum 100' lot width

Many of the existing lots in the R1, R2, and CC Districts could be subdivided into two or more lots with improved public sewer.

- 4.7 Existing Needs Conditions In the Phase 1B Planning Area
  - 4.7.1 Sewage Needs Assessment

All existing improved lots in the Phase 1B and Phase 2 are served by on-lot sewage systems (OLDS). The only improved lot within Phase 1A area is Dutch Valley Food Distributors. They decommissioned their two on-lot systems that served the commercial development along PA DOT Route 501 when the public sewer was connected to Tulpehocken Township in 2008.

In accordance with the methods for identifying and documenting sewage disposal needs presented in the Sewage Needs Identification Guidance, which was published by DEP in March 1996, a sewage needs assessment was completed for the Phase 1A, Phase 1B, and a limited evaluation was completed for Phase 2 and Phase 3 areas. The Department has designated three general needs categories relating to sewage disposal that must be considered:

- Public Health Needs;
- Water Pollution Needs;
- Community Development Needs

#### 4.7.1.1 Public Health Needs

Public health needs are those that are considered to be those health hazards and water pollution problems that involve discharging untreated or inadequately treated sewage to the surface of the ground or the waters of the Commonwealth of Pennsylvania. The

Department has designated eight conditions that could lead to health hazards and water pollution. Descriptions of the eight conditions follow:

#### Confirmed Malfunction

Confirmed malfunctions documented by dye testing, laboratory test results, observations by a Sewage Management Office (SEO) or a professional with OLDS experience, repair permits, seasonally wet absorption areas, piped discharges with direct evidence of sewage, reported system backups, malfunctions with photographic documentation or other similar evidence.

#### Suspected Malfunction

Suspected malfunctions are systems exhibiting some malfunction characteristics such as abnormally green grass in the vicinity of an absorption area, piped discharges from a dwelling without direct evidence of sewage, absorption areas located in known unsuitable soils (observed wetlands, rock outcropping, etc.), cesspools in high density development areas, and pit privies.

#### Potential Malfunction

Potential malfunctions are systems that appear to be operating satisfactorily but were constructed prior to system permitting requirements, systems located in areas extremely unlikely to receive permitting by current standards, systems constructed in areas having soils mapped as unsuitable for OLDS and system location on slopes greater than 25%, and permits issued for OLDS repairs that meet Chapter 73 standards. Potential malfunctions, without the presence of any of the other seven conditions, do not

represent existing needs. Clusters potential malfunctions, however, may indicate areas requiring closer evaluation.

#### Wildcat Sewers

Wildcat sewers are collection systems serving more than one (1) equivalent dwelling unit (EDU) and discharging untreated or partially treated sewage to the surface of the ground, storm sewers, or other Waters of the Commonwealth.

#### Borehole Disposal

Borehole is a borehole, abandoned water well, drywell, or other underground, structure into which an individual or community system discharges.

#### Holding Tanks

Hold tanks installed as repairs, excluding holding tanks installed to serve new land development or a low flow commercial facility.

- Frequent Chronic Complaint Area
- Sanitation Related Illness

A sanitation illness report is any illness, either resulting from or suspected to be resulting from improper sewage disposal.

#### 4.7.1.2 Determination of Public Health Needs

In order to determine the extent of the eight conditions described above as a public health need that could lead to health hazards and water pollution in within the sewer

management areas, the Township SEO files were reviewed and known problems with OLDS facilities were evaluated. Also, a door to door survey was conducted and water quality sampling was conducted for the Township's Planning Area.

#### 4.7.1.3 File Review Public Health Needs

A review of the Marion Township sewage enforcement file was conducted. Recent complaints and known repairs were reviewed and evaluated as part of the door to door survey.

#### 4.7.1.4 Door to Door Sanitary Sewage Needs Survey

A door to door survey was completed in the Township Planning Area. The survey was conducted using the following steps.

- Prepare Sanitary Sewage Survey Forms A copy of the Marion Township sanitary sewage survey form is included in the Appendix.
- Determine the number of dwellings in the Township.
- USGS Quad maps, Berks County GIS mapping, windshield surveys were conducted to canvas the planning area.
- Minimum Property Survey Requirements for a Door to Door Survey

TABLE 4.7- A				
OLDS In Planning Area	Min. Percentage of OLDS to Survey			
Up to 50	50%			
51 to 100	35%			
101 to 500	25%			
501 to 1,000	20%			
Greater than 1,000	15%			

#### Number and Percentage of Properties Surveyed

TABLE 4.7- B						
Planning Area	Properties <sup>3</sup>	Properties Surveyed	Percent			
Phase 1A (N-W)⁴	44	10	23%			
Phase 1B - 2 <sup>5</sup>	225	64	28%			
Total	295	74	25%			

#### Malfunctions Summary

TABLE 4.7 – C										
Description	Existing /	Confirmed	Suspected	Potential	Wildcat	Bore Hole	Holding Tank	Complaint	Illness	Remarks
Ph. 1B	148 / 58	1	1	51	0	0	0	0	0	
Ph. 2	45 / 22	0	0	0	0	0	0	0	0	
Total	193 / 80	1	1	51	0	0	0	0	0	

<sup>&</sup>lt;sup>3</sup> Agricultural farms not include as a part of the to be considered in the Door to Door Survey
<sup>4</sup> West of Smaltz Road south of School Road

<sup>&</sup>lt;sup>5</sup> H-C Zone District, C-C Zoned District and R-1 Zoned Distirct along US 422, Main St., Canal St., Sheridan Road, Edris Road. Hunsicker Drive, Shady Cabin Circle See Appendix Map (Village, East & South)

#### 4.7.2 Stouchsburg Village

Based on the information from the sewage needs survey and water supply sampling activity, there are an existing 104 dwellings (EDU's) along Main Street that are considered in the Phase 1B planning area for improved sewer facilities. With the exception of the Community Core District, all other Districts in Stouchsburg Village border on the Township's important Agricultural Rural (A-R) District. Planned sewer extensions and sewer service to the village and the perimeter areas should be provided with a transition zone between agricultural and development uses even with the established Agricultural Conservation Easements and Security Areas.

#### 4.7.3 Shady Cabins

Based on the information from the sewage needs survey and water supply sampling activity there are 24 existing dwellings (EDU's) along Canal Road and Shady Cabin Circle that are considered in the Phase 1B Shady Cabins planning area and require improved sewer facilities. The Shady Cabins properties have small lots with individual water supply.

#### 4.7,4 US 422

Based on the information from the sewage needs survey and water supply sampling activity, there are an existing 20 dwellings (EDU's) along US 422, Edris Road and Sheridan Road considered in the Phase 1B planning area for improved sewer facilities. The area contains a few commercial type properties and includes a small strip type mall. One of the commercial properties is a confirmed malfunction and has experienced problems with the existing system.

#### 4.7.5 Total EDU's and Per Capita

The total EDU's and an analysis of the Township's per capita data for the Phase 1B planning area will generate a total of 185 EDU's with a net per capita count of 396 for connection to a public sewer system.

#### 4.7.6 Groundwater Water Sampling

During March 2003, a groundwater pollution event occurred that adversely affected some of the private wells in the Village of Stouchsburg. The cause of the groundwater pollution was never officially determined. An investigation was conducted which included water samples from some of the private wells. Numerous complaints were filed at the Township Office. Interviews with the landowners and locations of well water samples concluded that the source of the pollution was likely due to animal manure being was spread on a farm field that was snow covered. The field was north of the US 422 and Stouchsburg Village.

After the manure was applied onto the field, a rainfall event caused the manure to runoff with the storm water into a limestone solution channel. Within 6 - 12 hours after the rainfall, the contamination was detected in private wells in the Village of Stouchsburg.

# March 2003 Incident Water Samples:

TABLE 4.7 - D (Four Units Sampled)					
North of SR 422	South of SR 422				
Stouchsburg Nursery	Steve Sweigert				
Michael Allgyer	Ed Frazer				

• 537 Plan Sewage Needs Study Water Well Quality:

TABLE 4.7 – E WATER QUALITY TABLE (TIER 1)							
Planning Area	Properties Tested	% of TC/FC	TC <sup>6</sup>	FC <sup>7</sup>	EC <sup>8</sup>	Nitrates <sup>9</sup>	
Phase 1A (N-W) <sup>10</sup>	10	60% / 0%	6	0	0	2	
Phase 1B-2 <sup>11</sup>	64	59% / 25%	38	16	20	40	
Total	74	59% / 22%	44	16	20	42	

According to the guidelines for water well survey as described in the Sewage Disposal Needs Identification Guidance, water well surveys may be completed in two tiers. For the first tier a minimum of 15% of the wells in each area must be sampled. Each well sample shall be analyzed for total coliform bacteria, fecal coliform bacteria, and nitrate-nitrogen. The tier samples were analyzed by Pure Test Water Laboratory. Pure Test included tests for the e-coli bacteria in addition to the above parameters. The well water samples were taken from raw water locations prior to the treatment devices. Most of the survey locations had point-of-entry and/or point-of-use treatment devices providing potable water to the occupants of the dwellings.

<sup>&</sup>lt;sup>6</sup> Concentrations greater than 0 col/100mL

<sup>&</sup>lt;sup>7</sup> Concentrations greater than 0 col/100mL

<sup>&</sup>lt;sup>8</sup> Concentrations greater than 0 col/100mL

<sup>&</sup>lt;sup>9</sup> Concentrations greater than 5 mg/L

<sup>&</sup>lt;sup>10</sup> West of Smaltz Road; South of School Road

<sup>&</sup>lt;sup>11</sup> H-C Zone district, C-C Zoned District, and R-1 Zoned District along US 422, Main St., Canal St., Sheridan Road, Edris Road, Hunsicker Drive, Shady Cabin Circle, See Appendix Map (Village, East, and South)

The DEP guidance for the preparation of Sewage Needs surveys recommends a Tier 2 sample event and analyses be conducted when 10 % or more of the total coliform samples are above the established limit and when 20% or more of the fecal coliform samples are above the established limit. Tier 2 samples should be performed.

#### 4.7.7 Surface Water

Surface water was not included in the sampling program. "Non attaining" sections of streams shown on Exhibits are not caused from sewage systems. The water quality conditions are associated with the other land uses. Surface water samples were not taken, with the exception of one spring that is used as the water supply for a private dwelling.

#### 4.7.8 Sewage Needs Survey: Extra & Community Development Considerations

The groundwater water quality in the planning area will improve with the implementation of improved sewage facilities because the improved facilities will eliminated the current practice of the disposal of sewage effluent into the groundwater table. Water quantity and water use is not expected to significantly change with the current level of development. No public water service is planned for the area. Individual wells are proposed as Planning Areas primary water supply. There has been no reported yield deficiency for groundwater resources and with the Department's requirement for recording and registering groundwater use per the Act 220, the water supply should remain relatively constant for the existing uses in the Planning Area.

No developers have committed to future plans that will require EDU's in a public sewer constructed by the Township to meet the existing sewage needs listed above. Also, the lack of commitments by developers suggest, that any alternatives that consider a Marion Township STP must carefully evaluated in order to substantiate the additional capital expenditure required for an additional wastewater treatment facility in the region.

At present time, there is no reserve capacity within the WSA system that may available for community development in Marion Township. Unless Heidelberg Township participates in the upgrade and expansion of the WSA STP as originally undertaken with this update plan and the voluntary participation of Heidelberg Township in a joint study, it is unlikely that a Marion Township connection to the WSA system will provide additional reserve capacity at a later date for community development purposes.

#### 4.8 Effluent Limitations

The effluent limitations were acquired for the Tulpehocken Creek near the proposed locations for Marion Township. It appears that treatment requirements would be advance secondary in this area since the stream is trout stocking water quality and moderate size and somewhat related to the existing Womelsdorf STP further downstream. Depending on the activity of upstream water uses in the volume of the stream is substantially; therefore, it may be possible to obtain straight secondary effluent requirements from PA DEP.

#### 4.9 Future Environment Without a Project

The environmental conditions for the study area if the existing sewage facilities are abated may have adverse effect to the residents of the Phase 1B study area and the Marion Township public at large who frequent the area. Exposure to health hazards will remain if the existing on-lot facilities on the lots deemed potential malfunctions continue to be used.

# 5.0 FUTURE GROWTH AND DEVELOPMENT

# 5.1 Subdivision Activity

As part of this Act 537 Plan Update, a file review was conducted of the Township files and DEP files for Planning Module activity. The review determined that there has been limited amount of new development has occurred or is occurring with the exception of Stonecroft Village with its existing WSA service and Dutch Valley Food Distributors, Inc (Phase 1A). A recent development Plan in Phase 2 area known as River Bend Estates has proposed 21 lots in the R-1 Zoned District along William Penn Blvd, with on-lot sewer and water facilities.

It is important to closely monitor growth and development, particularly as it relates to sewage disposal. If on-lot sewage disposal is proposed as a means to conserve consumptive water and reuse treated effluent from domestic facilities, each lot must be properly sized and have proper siting conditions to accommodate the initial on-lot system and a replacement system. DEP requires municipalities, authorities, and developers to demonstrate that adequate sewage facilities are available prior to approval of subdivision or land development plans. With few exceptions, a Planning Module for Land Development must be submitted and approved by the municipality and the DEP.

#### 5.2 Population Projections

As part of this Act 537 Plan Update, it is necessary to make population projections for future populations to be served by the proposed wastewater facilities. The population growth is influenced by several factors, including local and regional economics, availability of infrastructure, and availability of suitable land for development.

The 1990 and 2000 census do not provide a specific population for the Planning Area. Population projections must be extrapolated from the Township wide data and recent housing counts within the Township. Population statistics and projections are shown in the attached table. The projection of population changes will be relatively insignificant in terms of impact on the proposed public sewer facilities because population changes will be the result of single family residential development. Projected growth is shown for a 10 year period because the areas water resources are adequate for this usage.

TABLE 5.2					
	1990	2000	2010	Projected 10 yr.	
Township	1415 .	1573	1688	1772	
Planning Area (PA) Phase 1B	Estimated 350	Estimated 380	396 per capita	416	
Growth (Twp/ PA)		11 % / 8 %	7% / 4%	5%/5%	

A 1999 study of Marion Township revealed a median household income of \$47,396. Similarly, a 2012 study of Marion Township showed a median household income of \$63,625. Income data is not available for the Planning Area.

Future Growth Areas - Future

5.3

# 6.0 DEVELOPMENT AND DESCRIPTION OF ALTERNATIVES

6.1 General

The alternatives that have been considered are as follows:

- 1. No Action Alternative
- 2. Continued Use if Existing On-Lot Disposal Systems
- One STP- Collection of sewer within Stouchsburg, US 422 area with Edris Road,
   Upper Canal Road, Lower Canal Road and Shady Cabins.
  - a. Connection to Womelsdorf Sewer Authority's STP
  - b. Connection to a Marion Township STP Feeg
  - c. Connection to a Marion Township STP Martin
  - d. Connection to a Marion Township STP Brubaker

Each Alternative is presented in greater detail in the following sections.

#### 6.2 Alternative Considerations

#### 6.2.1 No Action Alternative

The No Action Alternative is acceptable in circumstances where there is no threat to public health or pollutions of the groundwater and/or surface waters. A No Action Alternative may be viable to the outlying areas beyond Phase 1B because adequate land area exists for on-lot and community disposal solutions. Within the Phase 1B area as documented by the water quality sampling results and lot area records, the continued use of the on-lot disposal systems is a potential health threat because of the potential malfunction classification in Table 47-C. Also the continued use of the on-lot water with point of entry point / point of use water treatment facilities returns the bacteria into the groundwater systems via backwash water discharging into the on-lot systems adding to the concentration of the bacteria in the groundwater aquifer.

# 6.2.2 Continued Use of Existing On-Lot Facilities

Currently no municipal or private sewage collection or treatment facilities exist within the Phase 1B area. Based upon the potential for malfunctions in the Phase 1B areas as described in the Sewage Needs Assessment Table 4-7C, it appears evident that public sewage facilities area needed, particularly in the more densely developed areas in Stouchsburg Village and Shady Cabins areas.

Another method of preventing OLDS pollution is the creation of a well ordinance. This will regulate the construction and placement of domestic water wells. OLDS contamination of drinking water can occur when a new well is drilled too close to an existing OLDS. Since no State regulations are in place for the placement of new wells, on-site inspections for a well permits can prevent OLDS encroachment and can easily be handled by a Municipal Codes Enforcement Officer or the SEO.

#### 6.2.3 Public Wastewater Collection, Conveyance and Treatment Alternatives

Historically, gravity collection or pressure sewers represent the majority of systems in use at the present time. As the need for public sewers expands to areas where conventional systems are technically or economically unfeasible, engineers have developed other types of technology to convey sewage from an individual structure to a centralized treatment facility. These systems such as vacuum sewers, small diameter sewers, and septic tank effluent pump systems have also been installed with varying results.

#### 6.2.3.1 Conventional Gravity

Conventional gravity sewers convey wastewater by using the differential in elevation between upstream and downstream points in the system. Sewer lines must be deep enough to receive flows from the individual buildings and homes. The building sewer, typically called a lateral is usually a 4 or 6 inch pipe laid at a minimum slope of 1%. The building sewer collects directly into the collecting sewer or main. Where it is financially feasible, collecting sewers should be designed to provide service to basement elevation plumbing. Conventional sewers are designed to meet minimum state and local standards. Generally mains are a minimum of 8 inch diameter with concrete manholes spaced at a maximum of 400 feet to provide access and directional changes. In certain circumstances, deviations from these standards may be acceptable.

Conventional gravity sewers are connected to existing or new conveyance and treatment facilities. The factors which affect the feasibility of conventional gravity sewers include topography, subsurface conditions (rock), high groundwater tables, and density of buildings. The costs of gravity sewer service can increase dramatically based upon the presence of any or all of these factors. Topography determines the need for pumping facilities. Additionally, manholes are a source of infiltration and inflow, which can increase the volume of wastewater and the cost. Conventional gravity sewers are reliable, can handle grit and solids, and they can maintain a minimum velocity. A

properly installed gravity collection system composed of PVC pipe and concrete manholes can be expected to be relatively maintenance free.

# 6.2.3.2 Grinder Pump Systems

As a result of increasing cost of constructing conventional gravity sewers in recent years. The use of alternative types of collection and conveyance systems has become more frequent. The most common type of alternative system in use today is the ginder pump system. GP systems consist of two main elements. The on-lot components consist of the building sewer and the grinder pump. The grinder station is typically a fiberglass tank with a minimum capacity of 50 to 100 gallons. The pumps are either centrifugal or semi-positive displacement type pumps with 1 to 2 HP motors. The GP station includes valves for isolating the pump, pump controls, and other associated equipment.

The individual property owner is typically responsible for the operation and maintenance of the grinder pump, including the electric power supply and costs associated with the operation of the system. However this service may be provided by an authority or a municipality. A program for replacement of the grinder pumps may be established as part of an annual operation and maintenance budget if the service is provided by the governmental organization. The typical life expectancy of individual grinder pumps is 8 to 10 years.

The second component of the GP system is the collection system. The low pressure sewer system consists of small diameter, PVC pressure pipe. All piping downstream from the grinder pump is under low pressure, typically 60 psi or less. The low pressure collection system is arranged as a branching pipe network, with no loops in the system. In-line and terminal cleanouts are installed at 400 to 600 feet intervals and at changes in direction or pipe diameter. Air release valves are installed at high points in the system. Isolation valves are installed strategically throughout the system for maintenance

purposes. Discharge from the GP systems may be directly to a treatment facility, or to a conventional collection and conveyance system. GP systems have been found to be applicable to situations where the topography is generally flat, significant rock is present, high groundwater conditions exist, or the treatment facility discharge is at a higher elevation that the service area.

#### 6.2.3.3 Small Diameter Gravity Sewers

Small diameter gravity sewers collect effluent from septic tanks at individual service connections and transport it by gravity to a treatment plant or conventional gravity system. The septic tank removes the grit, settable solids and grease from the wastewater flow. Minimum pipe diameters of 4 inches are common. The system can actually be installed in uphill sections provided there is enough difference in elevation upstream and there is no backflow into the service connection. Clean outs are installed for flushing and maintenance. Manholes are only required at major line junction points. Because of small diameter and flexible alignment, the cost of excavation is much less than a conventional gravity system. These systems are likely to be cost effective in areas with low housing density, undulating terrain with relatively low relief, and a discharge elevation below the service area. SDG sewers provide very little excess capacity. Corrosion, odor and the difficulty of treating septic waste are common problems with SDG systems.

#### 6.2.3.4 Vacuum Sewers

A vacuum sewer system consists of three major components including a centralized collection station, a collection network, and onsite facilities. Vacuum pressure is generated at the central collection station and is transmitted through the collection network to the individual service connections. When a pre-set volume of wastewater

reaches the on-site holding tank, an interface valve opens automatically to allow wastewater and a volume of air to be introduced into the system. The collection network is constructed in a constant downgrade, but is lifted by a short length of pipe when depth becomes excessive. Vacuum sewers are cost effective in circumstances where excavation costs may be higher due to rock and the topography is relatively flat or rolling. Vacuum sewers are mechanically sophisticated when compared to other collection systems and therefore require a fast response by a skilled O & M team. Vacuum sewers require a relatively large umber of homes to be cost effective.

#### 6.2.3.5 Septic Tank Effluent Pump System

Septic tank effluent pump systems are similar to grinder pump systems with the exception that settable solids are removed from the wastewater flow prior to pumping. Because solids are removed, smaller pumps may be used with the STEP system. The STEP systems are often subject to odor and corrosion problems. Another problem encountered with the STEP system is that the pumping system can become clogged with solids when routine pumping and the disposal of the tank contents is not performed by the Owner. In some circumstances grinder pumps are installed as the septic tank effluent pumps. In general, the STEP systems present the same advantages and more disadvantages in terms of cost effectiveness and O & M as grinder pump systems.

# 6.3 Alternatives for Repair and/or Replacement of Existing Wastewater Collection Facilities

There are no existing public wastewater collection or conveyance facilities within the Manon Township Phase 1B Planning Area. The sewer facilities of the Womelsdorf Authority may be extended from one of the manholes near the US 422 bridge over Tulpehocken Creek. The system was evaluated by the Womelsdorf Authority Engineer and is adequate for the connection of the Marion sewer system.

# 6.4 Regional Wastewater Treatment Alternatives

The geographic area and topographic characteristics of the Stouchsburg Village, Shady Cabins and US 422 Planning Area, Phases 1B & 2, limit regionalized wastewater treatment alternatives to WSA system. The nearest existing municipal treatment plant is the Womelsdorf Sewer Authority in Heidelberg Township.

The extension from the existing Womelsdorf sanitary sewer system into Marion Township to the Phase 1B facilities will require capacity in the Womelsdorf Authority System for 396 per capita at 100 gallons per capita per day or 39,600 gallons per day. The Authority has indicated that 60,000 gallons per day will be available to Marion Township per the attached agreement.

The advantage of this alternative is it reduces the capital expenditures for new infrastructure such as a Marion Township STP to be owned and operated by Marion Township and it can be an extension of the existing working inter-municipal agreement between Marion Township and Womelsdorf Sewer Authority recently adopted by both for the sanitary sewer service to Stonecroft Village development. This alternative may be an extension of the Womelsdorf Sewer Authority system into Marion Township or it may be extended as a Marion Township system.

The planned interconnection with the WSA was initiated by a request from Marlon Township. The Authority's Engineer with the authorization of the Authority evaluated and reported on the existing plant and system facilities capability to support the connection of 185 - 300 EDU's from Marion Township. The 185 EDUS' were projected as the number of total number of EDU's for all existing improved properties in the Phase 1B. After the WSA Engineer started the study, it was expanded at the request of Heidelberg Township to include sections of Heidelberg Township tributary to the WSA

system but not presently connected to the WSA system. There are some facilities in Heidelberg Township that are connected to the WSA system.

The extended system is proposed as a conventional gravity sewer system through most of Marion Township with a pump station and force main connection to the existing WSA interceptor sewer at near US 422 crossing over the Tulpehocken Creek. See Maps 11a - 11c in the Appendix for proposed location of the connection. The WSA Engineer developed the costs for the upgrade and expansion of the WSA facilities for a Heidelberg-Marion connection. The scope of the Heidelberg – Marion combined project to upgrade and expand the WSA facilities was not feasible to Heidelberg Township. Heidelberg Township withdrew from the study in 2008.

After Heidelberg withdrew from the sewer planning project, Marion then proposed the connection of limited EDU's from Phase 1B into the WSA. This alternative consists of the extension of public sanitary sewer service to the existing dwellings is consistent with the current WSA, which can be described as limited service to areas with special sewage needs such as Stonecroft Village in Marion Township. The Phase 1B district will remain a single sewer district consisting of 161 residential users and 24 commercial users.

6.4.1 Alternatives for Repair and/or Upgrade of Existing Wastewater
Treatment Plant

The regional alternatives of connecting to the Womelsdorf Authority sewer system and treatment plant have been presented as two alternatives.

#### 6.4.1.1 Full Expansion and Upgrade

With the assistance of the WSA Engineer, the scope of service and cost estimates were developed for the full expansion and upgrade of the existing WSA treatment plant as a joint response to the a request input from Heidelberg Township and Marion Township. Heidelberg Township withdrew from the joint effort.

# 6,4.1.2 Limited Upgrade of the WSA treatment Plant

With the assistance of the WSA Engineer, the scope of services and cost estimates will be prepared for the limited upgrade of the WSA treatment plant to serve Marion Phase 1B Planning Area. The costs for this alternative—is described in the Tables 6-0 and 6-1. The costs required to upgrade and operate the WSA facility for the Phase 1B area is significantly less than amount the WSA Engineer's estimated costs for the full expansion and upgrade.

Part of the sewer improvements for limited Phase 1B areas will include a Marion Township Tulpehocken Creek sanitary pump station that will discharge the Marion Township flows into the Authority facilities.

After the Marion Township 537 Plan has been deemed acceptable, approved and adopted by the participating municipalities, a modification to the existing inter-municipal agreement will be prepared by the Township's Solicitor, if required. It will be submitted for review and forwarded to the Womelsdorf Authority for review and approval. Ultimately the Township will adopt a connection ordinance, a resolution establishing tapping fees, sewer rental charges, and Rules and Regulations for Operation of the Sewer System mutually acceptable to all parties.

to the existing Phase 1B needs area with the understanding that there is very limited potential for growth in the areas contiguous to the existing Phase 1B needs area.

A significant factor in determining whether the Township adopts the regional alternative of conveying the Phase 1B to the Womelsdorf STP or to construct its own STP will be somewhat dependent on the cost and availability land suitable for a treatment plant with a discharge into the Tulpehocken Creek.

#### 6.4.5 Alternatives for New Wastewater Treatment Facilities

There are generally two types of wastewater treatment processes: physical-chemical and biological. Physical-chemical processes are most commonly utilized for the treatment of industrial wastewater or domestic wastewater with high industrial contribution. Since there will be little if any industrial contribution into the Marion Township system with its own wastewater treatment facility for the 5 – 10 year planning period physical-chemical processes are not considered applicable to a Marion Township wastewater treatment plant and will not be evaluated within this update Plan.

Biological treatment processes are very effective in the removal of pollutants from domestic wastewater. Biological processes use microorganisms to consume organic materials within the waste stream. The biological reactions that take place are controlled by wastewater characteristics such as pH, alkalinity, dissolved oxygen, microbial populations, and substrate concentrations. There are two basic types of biological processes. Fixed film systems, which include trickling filters and rotating biological contactors (RBCs), utilize a population of microorganisms attached to a media such as plastic or rock to degrade the organic material contained in the wastewater. Suspended growth systems, which are the most common type of system in use today, maintain a population of microorganisms in suspension within a reactor tank.

The suspended growth system relies upon oxygen introduced into the wastewater to facilitate biological activity. Diffused aeration systems or mechanical aerators are installed to promote the break down of organic matter. The treatment processes will operate under one of two flow regime, either continuous or intermittent (batch). There are several variations on the continuous flow regime, including tank configuration and process differences. The most common form of continuous flow regime in use today include conventional activated sludge plants and derivations of that process, including extended aeration and contact stabilization; oxidation ditches; and aerated lagoons. The selection of a particular type of process is dependent upon many factors including influent wastewater characteristics, discharge permit requirements, and reliability. The options are as follows:

- 1. Packaged Extended Aeration Treatment
- 2. Lagoon Treatment System
- 3. SBR (Sequencing Batch Reactor)

# 6.4.6 Packaged Extended Aeration System

Packaged treatments plants are prefabricated and pre-engineered systems that have been used primarily to treat sewage generated by mobile home parks, institutions, commercial facilities, and small communities. The plants which are on the market today are capable of meeting stringent discharge requirements, including suspended solids, biochemical the oxygen demand (BOD), and nitrate-nitrogen limits. The package system generally arrives at the plant construction site as one or more modular units, which can be readily assembled by the contractor. The system usually includes flow equalization tank, screen or comminutor, aeration tank, aeration system, final clarifier, chlorine contact tank, and aerobic digester.

There are many advantages and disadvantages associates with packagen treatment systems. The advantages which should be considered include:

- Minimal size requirements and site preparation
- Relatively easy to install/short construction times
- Low capital cost than most mechanical systems
- Capability to achieve high effluent quality
- Low sludge production compared to other similar activated sludge processes

Some disadvantages of the package system which also need to be evaluated include:

- Requires more highly trained operator
- Higher O & M costs than other mechanical systems
- Limited operational flexibility

- Susceptible to poor settling characteristics due to nitrification for formation of pin floc in the final clarifier
- May require an additional components to meet special effluent limits such as phosphorus removal
- Generates a sludge stream

# 6.4.7 Lagoon Treatment Systems

An aerated lagoon is typically a lined earthen basin in which wastewater is treated. Mechanical or diffused aerators are utilized to maintain the solids in suspension. Lagoons are typically used in conjunction with settling facilities to meet secondary treatment standards. The following lists some advantages of aerated lagoon type wastewater treatment systems:

- Low O & M cost
- Limited operator interaction required
- Sludge disposal costs may be postponed for many years of operation

There are several disadvantages of lagoon type system which must also be considered including the following:

- Large land area required
- Large surface areas cause more significant temperature affects
- Limited operational flexibility
- Higher site construction costs
- Limited ability to meet increased effluent standards
- Seasonal effluent solids problems due to algal growth
- Seasonal odor problems

#### 6.4.8 Sequencing Batch Reactors (SBR)

SBRs are a variation of the activated sludge process and are capable of achieving high levels of BOD and suspended solids removal. SBRs are capable of nltrification, denitrification and phosphorous removal with modification to the operating scheme. The key to the process is the ability to achieve flow equalization, aeration, clarification, and sludge wasting within a single basin. The typical SBR flow train includes preliminary treatment such as screening, dual SBR tanks, chlorine contact tanks and disinfection system, aerobic, sludge digesters, and sludge handling equipment. The SBR system includes a diffused aerations system, sludge wasting equipment, decanters, and an automated control system with automated valves and other appurtenances.

The SBR system also has several advantages and disadvantages. Some of the advantages include:

- Operation made simple by automated controls, thereby requiring less operator attention than most mechanical systems
- Flexible operation which can accommodate increased effluent limitations
- Ability to treat wide variations in flow
- Reliable operation with the ability to provide consistently high quality effluent
- Small land area required

#### The disadvantages of the SBR system include:

- Higher capital cost compared to equivalent sized package plant
- Skilled operator required due to complex mechanical systems
- Intermittent discharge complicates sampling procedures
- Removal of scum from treatment tanks
- Generates a sludge stream

There are several possible site locations for a wastewater treatment paint within the Planning Area. Based upon the response to the preliminary effluent limits, DEP would permit a discharge into the Tulpehocken Creek. There selected sites are as follows:

#### 6.4.9.1 SITE 1 - Sewer Treatment Plant on the Feeg Tract

At a minimum a total of 193 EDU's must be initially treated in this Marion Township STP on the Feeg tract. Consideration must be made for Marion Township's future growth with this alternative. This alternative requires an additional 3400 linear feet of 8" diameter force main, the acquisition of 7 - 10 acres of cultivated field from a farm in the Agricultural Conservation Easement program. Also, the complete cost for the development and necessary utility extensions and access road extensions into the Feeg tract must be included. This alternative requires the same collection system and alignment as the WSA connection except that the capital Improvements to the WSA or the flow equalization tank are not required with the Feeg alternative. All revenue associated with the properties on the new system are applied to the Marion Township facility costs and a part of the Stonecroft Village property rentals may be applied to the Marion Township improved sewer facilities. The tie from the eastern end of the Marion collection sewer will still be Tulpehocken Creek Station US 422 and Canal Road. The approximately 3400 linear feet of force main extends along Canal Road north of US 422 and crosses under PA 419. The development of part of the Feeg tract into the Marion STP will require a hearing and condemnation proceeding in order to use the property that is presently within the Feeg Agricultural Conservation Easement.

6.4.9.2 SITE 2 - Connection to a Marion Township STP - Martin Tract

At a minimum a total 193 EDU's must be applied into this Marion Township STP alternative. Consideration must be made for Marion Township's future growth with this

alternative for the Martin tract. This alternative requires an additional 1600 linear feet of 8" diameter force main, the acquisition of 7 – 10 acres of cultivated field from a farm not in the Agricultural Conservation Easement program. Also, the complete cost for the development and necessary utility extensions and access road extensions into the Martin tract must be included. This alternative requires the same collection system and alignment as the WSA connection except that improvements to the WSA or the flow equalization tank are not required with the Martin alternative. All revenue associated with the properties on the new system are applied to the Marion Township facility costs and a part of the Stonecroft Village property rentals may be applied to the Marion Township improved sewer facilities. The tie from the eastern end of the Marion collection sewer will still be Tulpehocken Creek Station US 422 and Canal Road. The approximately1600 linear feet of force main extends along Canal Road north of US 422 and to Martin tract immediately north of US 422. The development of part of the Martin tract to the Marion STP will not require a hearing and condemnation proceeding in order to use the property as required with the alternative for Site 1 the Feeg tract.

Public sewerage service connected to the Marion STP Martin alternative will be the same as the Feeg alternative. Construction and capital cost of sewer extensions, manholes, and laterals within Township Road right of way will be the same facilities owned and operated by the Township as proposed for the Feeg and WSA alternative.

The treatment facility on the Martin tract will require additional capital improvement to provide a plant with the ability to control odor and aesthetics considering the Martin tract's close proximity to nearby commercial facilities in Womelsdorf. The added capita cost for the Martin land without the ACE procedures is offset by the capital and O & M costs for the odor control system and aesthetics improvements. The additional

annual operation costs to run and maintain the odor control system are included cost estimate Tables in the Appendix. .

# 6.4 9.3 SITE 3 - Connection to a Marion Township STP Brubaker

At a minimum a total of 193 EDU's must be initially treated in this Marion Township STP alternative. Consideration must be made for Marion Township's future growth with this alternative. This alternative requires an additional 600 linear feet of 8" diameter force main, the acquisition of 7 – 10 acres of cultivated field from a farm not in the Agricultural Conservation Easement program. Also, the complete cost for the development and necessary utility extensions and access road extensions into the Brubaker tract must be included. This alternative requires the same basic collection system and alignment. Flow equalization tank is not required with the Brubaker alternative. All revenue associated with the properties on the new system are tied to the Marion Township facility costs and a part of the Stonecroft Village property rentals may be applied to the Marion Township improved sewer facilities. The tie from the eastern end of the Marion collection sewer will still be Tulpehocken Creek Station US 422 but west of the site for the WSA, Feeg, and Martin sites. The development of Brubaker tract STP will require a hearing and condemnation proceeding in order to use the property. The Brubaker tract is in an Agricultural Conservation Easement.

Public sewerage service connected to the Marion STP Brubaker alternative will be the same as the Feeq alternative. Construction and capital cost of sewer extensions, manholes, and laterals within Township Road right of way will be the same facilities owned and operated by the Township.

The treatment facility on the Brubaker tract will require additional capital improvement to provide a plant with the ability to control odor and aesthetics considering the tract's close proximity to nearby commercial facilities in Womelsdorf and residential properties along Canal Road. The added capital cost for the Brubaker land with the ACE procedures and the additional capital and O & M costs for the odor control system and aesthetics will be significant for the Brubaker site. These additional costs are included in the annual operation costs used to evaluate the Present Worth of the Alternative.

# 7.0 EVALUATION OF ALTERNATIVES

# 7.1. Consistency Evaluation

As part of the Act 537 Planning process, alternatives must be reviewed for consistency with county, State, and Federal objectives, planning, and stature. Therefore, the Act 537 Plan for the Phase 1B was reviewed for consistency with the following policies and plans:

7.1.1 Plans Approved Under the Clean Streams Law or Clean Water Act

In the 1960's Berks County completed an Act 537 Plan. The Plan was general in nature and provided a brief overview of numerous municipalities in the County. It identified Stouchsburg area as one if the areas in the western part of the county that needed public sewer service. The most recent inter-municipal Joint Comprehensive Plan between Womelsdorf Borough, Robesonia Borough, Heidelberg Township, North Heidelberg Township and Marion Township identified the sewerage solution for Stouchsburg as connection to the Womelsdorf STP. Marion Township has not participated in the Joint Zoning Council with Womelsdorf, Robesonia, Heidelberg, and North Heidelberg.

7.1.2 Consistency with Applicable Water Quality Standards, Effluent Limitations, or Other Legal or Technical Requirements

As part of the planning effort, preliminary effluent limits were requested from DEP for a potential 0.10 MGD discharge into the Tulpehocken Creek. The wastewater treatment

alternatives were developed to achieve the effluents limits developed by the PA DEP. The following preliminary effluent limitations are based upon monthly averages, for a discharge to Tulpehocken Creek include the following:

- CBOD<sub>5</sub> of 25 mg/l,
- total suspended solids (TSS) of 30 mg/l,
- Ammonia Nitrogen (as N) of 20 mg/l,
- total phosphorous of 1.0 mg/l,
- total residual chlorine of 0.5 mg/l,
- dissolved oxygen of 5.0 mg/l,
- pH within a range of 6.0 to 9.0 standard units,
- fecal coliform of 200/100ml as a geometric mean from Amy 1 to September 30, and 10,000/100ml as a geometric mean the remainder of the year.

Package extended aeration and SBR systems with extra components for phosphorous removal are capable of treating wastewater to achieve the relatively high quality effluent limits. The implementation of the alternatives evaluated will not result in conflicts with Chapter 93 (water quality criteria), Chapter 95 (wastewater treatment requirements), or Chapter 102 (erosion and sedimentation control). A copy of the preliminary determination of effluent limits is attached in the Appendix.

Also, based on the data in the 2007 Womelsdorf sewer Authority Chapter 94 Municipal Wasteload Management Report page 10, the WSA STP still has an additional 0.1 MGD of capacity available. The Marion Township Phase 1B connection with the 185 EDU's would add 46,250 GPD with 1 EDU = 250 GPD per the WSA Ch 94 rate, or if the connection is based on per capita of 1B, the flow at 100 GPD per capita will be 39,600 GPD for the 396 per capita in the Phase 1B Planning Area. The Authority has reported that the 0.1 MGD may be utilized in the interim for the Township's project until the upgrades to the WSA plant are completed as long as other development in the Borough does not acquire the available capacity.

# 7.1.3 Protection of Wetland, Endangered Species and Historical or Archaeological Resources

The Pennsylvania Natural Diversity Inventory (PNDI) will be evaluated for adverse affects resulting from the implementation of alternatives presented by this Plan. A request will be submitted to the Pennsylvania Department of Conservation and Natural Resources (DCNR), Bureau of Forestry. The response that any conflicts will be resolved will be provided including the requirements to avoid impacts. A copy of the response will be included in the Appendix.

A Cultural Resources Notice will be forwarded to the Pennsylvania Historical and Museum Commission (PHMC). The purpose of the submission is to indentify the potential for the plan alternatives and their potential impact on both historic and archaeological resources. By letter dated May 29, 2009 the PHMC indicate that they cannot assess the effects on specific historic and made resources eligible or listed on the archaeological resources at time, due to the preliminary nature of the inquiry. Prior to project design stage, provisions should be made to identify resources eligible or listed on the National Historic Register of Historic Places within the project Planning Area.

Based upon Maps 5 and 8 in the Exhibits in the Appendix, the Plan may have an impact upon mapped and unmapped wetlands. The sanitary sewer alignments are preliminary in nature at this time. An investigation of wetlands will be made at the time of sanitary sewer design. Wetland impacts will be minimized to the extent necessary to implement the construction of the improved sewer facilities, but should encroachment be necessary, a General Permit for these crossings will be necessary to complete construction.

#### 7.1.4 Prime Agricultural Land

Areas of Prime Agricultural Soils are shown on the Map 9 included in the Exhibits in the Appendix. The impact of the alternatives presented by this plan would have minimal if any impact upon mapped Prime Agricultural soil units.

#### 7.1.5 Local Planning, Zoning & Sub-division

The alternatives considered are consistent with the Zoning and Subdivision and Land Development Ordinances of Marion Township except that STP Sites 1 and 3 impact agricultural property in Agricultural Conservation Easement.

#### 7.1.6 Anti-degradation Requirements

The alternatives considered the anti-degradation of the water quality in Marion Township. The no action alternative proposes no action to improve the water quality, and therefore is not recommended. The proposed alternative, a gravity collection and conveyance system connected to the Womelsdorf STP, will allow the sewage to be treated and discharged to the Tulpehocken Creek.

#### 7.2 Selected Alternative

Alternative descriptions, conceptual plans, and cost estimates are included for providing sewer services to the Phase 1B areas of Stouchsburg Village, US 422 area with Edris Road, Upper Canal Road, Lower Canal Road, and Shady Cabins. The selected alternative has been identified as the gravity sewer system with a connection to the Womesldorf Sewage Treatment Plant. Phase 2 will remain with the on-lot treatment systems until a later date, when the gravity system will be expanded to include the Phase 2 areas. The connection of the Phase 2 areas will be contingent upon the availability of sewer capacity from the Womelsdorf Sewer Authority plant. This update to the Marion Township Act 537 Plan proposes improved management of on-lot sewage facilities within the Township. Additionally, the Phase 3 area selected alternative is continued use of the existing on-lot facilities, which will include the creation of a well ordinance to prevent pollution from the on-lot systems.

#### 7.3 Cost Evaluation

Estimates of constructions costs, total project costs and present worth of annual operating costs are presented in Tables 6-0 through 6-8 for the collection, conveyance and treatment alternatives described in Chapter 6. Construction costs are based upon the conceptual layouts shown by the Maps. Wastewater treatment costs are based upon generalized site work quantities and manufactures equipment costs for the treatment technology. Total project costs include costs associated with design and implementation of the proposed alternative. The costs include engineering, legal, administration, inspection, site and right of way acquisition, and 15% contingency. The collection and conveyance system costs only show the construction costs for the systems. The gravity sewer and low pressure sewer options have similar initial costs, with the low pressure system being slightly less than the gravity system. However, low pressure systems require significant O & M costs due to the replacement of the grinder pumps at each property approximately every 5 years. Therefore, the gravity sewer collection and conveyance system was chosen as the best alternative. Annual operation and maintenance (O & M) costs are presented for each treatment alternative. A present worth analysis was performed to provide an equal basis for evaluating the various alternatives. A normal design life of 20 years and an interest rate of 6% was used to calculate the present worth of O & M costs for each alternative. A brief description of each alternative follows.

#### 7.4 FUNDING ALTERNATIVES

With the exception of the no-action alternative, the implementation of any of the structural alternatives will require a financing plan which may include any of the following funding sources. After the selected alternative has been identified, the most advantageous financing plan will be addressed.

# 7.4.1 Community Development Block Grant Program

The program is administered by the Pennsylvania Department of Community Affairs and County Community and Economic Development Department for the U.S Department of Housing and Urban Development. Both financial and technical assistance is provided through the Federal Community Development Block Grant Program to aid community economic development efforts such improved sewage facilities. Among others, eligible projects activities include the construction of water and wastewater facilities.

In terms of funds available, approximately 50 % of the money allocated to Pennsylvania is in turn reallocated to various entitlement communities. The remaining funds are allocated though a competitive program. Requests for funding for county entitlement funds are made through the Berks County Community Development Office which acts as a screening agency for the Berks County Commissioners. Similarly requests for grants form Pennsylvania state agency is administered through the PA Department of Community and Economic Development.

Depending on the purpose of the grant and the amount of the grant, the basic eligibility criteria established by the Department requires that 51% of the project benefit low and moderate income households in the project area.

Applicability: This source of funding may be applicable to alternatives evaluated in this Plan in a income survey is completed and the 51% low to moderate income level is met. The ability to demonstrate a health threat resulting from improper disposal of sewage is an important consideration in the award of funding.

# 7.4.2 Public Bond Issue

Bonds are a traditional method of log-term financing of municipal utility projects in Pennsylvania. This method of financing projects involves selecting an underwriter or financial advisor to structure and sell bonds and a bank or trust company to serve as the trustee. Common characteristics of bonds include long-term fixed rates, rated or non-rated, all rates and charges deposited in a trust account under trust indenture and debt service established upon issuance. Debt service may have up to a 30 – 35 year term.

Applicability: A public bond issue may be an appropriate method of financing a portion of the selective alternative, provided that significant grant or other financial assistance is available for the majority of the remaining costs, otherwise the connection fees and user rates would be excessive.

7.4.3 Pennsylvania Infrastructure Investment Authority (PENNVEST)

The Pennsylvania Infrastructure Investment Authority program is administered by PENNVEST staff in conjunction with the Pennsylvania Department of Environmental Protection. This program provides low interest loans and limited grant assistance to communities for wastewater, drinking water and storm water projects. Historically, the best financial package afforded by PENNVEST has been typically a 1% interest rate for

20 years with a maximum grant of \$ 250,000.

Applicability: Any of the selected alternatives for the construction of public wastewater facilities would be eligible for PENNVEST funding. PENNVEST looks to fund projects where an acceptable, or target user fee is achieved. The project would require additional grant funds to achieve typical target user rates.

7.4.4 Rural Utilities Service (RUS) – U.S. Department of Agricultural

The program was formerly known as the Farmers Home Administration. This program provides the longest term (40-year) fixed rate financing for qualified municipal utility projects. Such loans are typically at a lower interest rate than can be secured through other methods. Project eligibility is based on median household income of residents in the municipality. After conducting a median household income, the Planning Area may be eligible for a 45% grant and a low interest 40-year loan. Fund should be available under the RUS program. The RUS also establishes a target rate which includes an applicant contribution and monthly user fee.

Applicability: The primary purpose of the RUS is to facilitate the provision of wastewater facilities to rural residences. The planning area is primarily residential and would be eligible for this type of funding. Additional grant sources would be required to meet target user fees presently seen on RUS funded projects.

#### 7.5 Ability to Implement

The implementation of alternatives evaluated by this Plan would typically be accomplished by the formation of a sewer authority or authorities. The authority would be responsible for the financing, contstruction, administration, insurance, operation and maintenance of the wastewater facilities. If the alternative to connect to the WSA system is selected, the intermunicipal agreement may have an impact on the method of financing the improvements to be made to the WSA facilities.

# 7.6 Present Worth Analysis of Recommended Alternative

The cost analysis presented in Tables 6-0 through 6-3 consider the estimated constructed costs of the conveyance systems. Tables 6-5 through 6-8 show the Present Worth Analysis of the Marion Township Treatment Plant Alternatives. These tables demonstrate that the best value is sewer service to the Phase 1B improvements connected to the WSA facilities. Tables 7-1 through 7-3 present user rates and funding options for the preferred alternative.



#### 8.0 INSTITUTIONAL EVALUATION

8.1. Evaluation of Institutional Alternatives and Required Administrative, and Legal Activities

#### 8.1.1 Existing Authorities

There are no existing sanitary sewer authorities within the Phase 18 Planning Area in Marion Township. The Womelsdorf Sewer Authority operates the system that serves Stonecroft Village and Penn Hills Park residential developments along William Penn Blvd. The sanitary sewer service to Phase 1A is a Tulpehocken Township public sewer to the Marion-Tulpehocken Township line. There are is no Authority in Tulpehocken Township,

#### 8.1.2 Institutional Alternatives

- Proceed with the Township Supervisors as the lead local agency
- Form a Township Sewer Authority
- Enter into a municipal agreement with the WSA for the extension of sanitary sewer service to the Planning Area (WSA has not commented on serving additional area other than the Stonecroft Village)

#### 8.1.3 Staff and Administrative Resources

If a public structural alternative is implemented, a minimum of three part time staff would be required. The State requires all wastewater treatment facilities be operated by a suitably Licensed Operator with a back-up operator available. The proposed wastewater treatment facility would require approximately 20 to 30 hours of operator

time per week. A part time secretary will be required to complete customer billing, accounting, general record keeping, and other administration duties. Depending upon billing procedures, the time requirement may vary from month to month, but a minimum of 20 hours per month of secretarial time should be budgeted.

Depending on the selected alternative and the application of a Township wide administration of public sewer services administrative service by WSA may not be feasible.

- 8.2 Implementation of Institutional Alternative
  - 8.2.1 Legal Authorities of Incorporation

The Township Supervisors are empowered to form authorities or enter into intermunicipal agreements as necessary.

8.2.2 Required Ordinances, Regulations, Standards, and Inter-Municipal Agreements

Whether the project is implemented by the Township or a Township Sewer Authority, it would be necessary to develop Rules & Regulations for the use of the proposed sanitary sewer system. Some funding programs may require the adoption of a mandatory connection ordinance for those properties located within the service area to receive public sewers.

If adequate funding is available to implement the recommended structural alternative, there would not be an immediate need for non-structural alternatives within the Planning Area. Areas which are not proposed for public sewers would benefit from an OLDS education program. If funding is not immediately available, some form of on-lot

management program is justifiable within the Planning Area to address the known malfunctions. Other municipal ordinances or planning is not considered to be necessary at this time.

8.2.3 Required Right of Way, Easements, and Land Transfers

The Township or Authority would be required to obtain necessary rights-of-way, easements, or properties to implement the recommended alternative. The Township or Authority would have the legal ability to negotiate for or condemn private property for purposes of developing public sewage facilities.

#### 8.3 Selected Institutional Alternative

Based upon cost information presented in the Tables 6-0 and 6-8, the most economical feasible alternative is for Marion Township to proceed with a in lieu of the inter-municipal agreement which delegates the administration to the WSA. The administration of Marion Township sewer facilities by the Township and its staff will be the most economical institutional alternative but it will assign the responsibility and implementation of the recommended structural alternative including sewer design, financing, construction, operation and maintenance of the facilities recommended by the Plan to the Township staff and its agents.

#### 8.4 Environmental Soundness of Selected Alternative

The alternatives selected within this Plan must be evaluated during design and should be considered to environmentally sound and in compliance with existing natural resources planning and preservation programs. The protections of floodplains and

wetlands will be addressed during the permitting process for construction of the wastewater treatment facility.

Since the Plan considers the use of PENNVEST funds, the following social, recreational, and environmental issues must be considered in addition to the issues previously indentified in this report.

# RECREATION AND OPEN SPACE

The alternative recommended in this Plan is not intended to not create any new recreational or open space opportunities since the vast majority of the proposed sewer lines are within existing road rights-of-way. Additionally, the amount of land that may be acquired for the wastewater treatment facility may be of sufficient size to provide additional park land for Township residents.

#### AIR QUALITY

Depending on the site selected for a treatment plant and the necessary implementation of odor control technology in the design of a Marion Township STP, and with the exception of the minimal impacts of dust an exhaust during construction, the project will not create any significant negative impacts on air quality.

# FISH AND WILDLIFE

The implementation of a Marion Township STP or the connection to the WSA system will not adversely affect the designated water use classification of the receiving water Tulpehocken Creek which is Trout Stocking, TSF.

Marion Township, Berks County Act 537 Sewage Plan Update Page 60

#### WILD AND SCENIC RIVERS

A significant part of the project's sewer is along Canal Road and the Tulpehocken Creek. The sewer is within the right-of- way of Canal Road and not an impact on the creek. The proposed Marion Township STP sites 1, 2, & 3 are east of the Scenic River-State and not associated with the section of the Tulpehocken Creek that is a Wild and Scenic River in the Township. STP Site 4 is along the section of the Tulpehocken Creek that is within the section classified as a Wild and Scenic River.

COASTAL ZONE MANAGEMENT

There are no costal areas within the Planning Area.

SOCIO-ECONOMIC IMPACTS

The availability of public sewer service to the Planning Area is considered necessary to maintain community viability, protect public health, and secondarily to preserve property investments.

WATER SUPPLIES

The provisions of public sewer service to areas which have marginal on-lot systems will provide for the protection of water supplies in the areas being served as well as the communities down stream.

# OTHER ENVIRONMENTAL SENSITIVE AREAS

The proposed sewage facilities will not have an adverse impact on any other environmentally sensitive areas.

#### 9.0 SELECTED ALTERNATIVES

#### 9.1 Selected Structural Alternative

Connection to Phase 1B Planning Area to Womelsdorf Sewer Authority facility utilizing gravity collection and conveyance

# 9.2 Capital Financing Plan for the Selected Alternative

The funding and capital improvements have been described in detail in Section 7.0 of this Act 537 Plan. The municipality plans to apply for grants to fund the project.

# 9.3 User Rate and Funding Options for the Selected Alternative

The user rates will be finalized upon completion of the final project costs.

# 9.4 Project Implementation Schedule (Preliminary)

Activity	Estimated Completion Date
Public Notice	Month 1
Act 537 Approved by Marion Township	Month 4
Final Submission to DEP	Month 5
Act 537 Plan Approved by DEP	Month 11
Identify and Apply to Funding Sources for Project	Month 12
Prepare Design	Month 13
Apply for Permits	Month 19
Advertise for Bids for Construction	Month 21
Begin Construction	Month 23
Complete Construction	Month 30



# **Appendix A:**

Act 537 Plan Content and Environmental Assessment Checklist
Environmental Report
Maps 1-11C
Tables – Construction Costs

## Act 537 Plan Content and Environmental Assessment Checklist





# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

# Instructions for Completing Act 537 Plan Content and Environmental Assessment Checklist

Remove and recycle these instructions prior to submission

#### **CHECKLIST INSTRUCTIONS**

These instructions are designed to assist the applicant in completing the Act 537 Plan Content and Environmental Assessment Checklist.

This checklist is composed of three parts: one for "General Information," one for "Administrative Completeness," and one for "General Plan Content". A plan must be "administratively complete" in order to be formally reviewed by DEP. The General Plan Content portion of the checklist identifies each of the issues that must be addressed in your Act 537 Plan Update based on the pre-planning meeting between you and/or your consultant and DEP.

Use the right-hand column blanks in the checklist to identify the page in the plan on which each planning issue is found or to reference a previously approved update or special study (title and page number).

If you determine a planning issue is not applicable even though it was previously thought to be needed, please explain your decision within the text of the plan (or as a footnote) and indicate the page number where this documentation is found.

When information required as part of an official plan update revision has been developed separately or in a previous update revision, incorporate the information by reference to the planning document and page.

For specific details covering the Act 537 planning requirements, refer to Chapters 71 and 73 of DEP's regulations.

Wastewater projects proposing funding through the following sources must prepare an "Environmental Report" as described in the Uniform Environmental Review Process (UER) and include it with the plan submission designated as "Plan-Appendix A". The following funding programs use the UER process.

- The Clean Water State Revolving Loan Fund (PENNVEST, DEP, EPA)
- The RUS Water and Waste Disposal Grant and Loan Program (USDA-RD)
- The Community Development Block Grant Program (DCED, HUG)
- Other Federal Funding Efforts (EPA)

The checklist items or portions of checklist items required in the Act 537 Plan Update revision and that are also included in the UER process are indicated by shading. Most of the "Environmental Report" document may be constructed from the Act 537 Official Plan Update revision by using "copy & paste" techniques. The technical guidance document *Uniform Environmental Review Process* (UER) (DEP ID. 381-5511-111) is available electronically on DEP's website at <a href="https://www.dep.state.pa.us">www.dep.state.pa.us</a>.

After Municipal Adoption by Resolution, submit three copies of the plan, any attachments or addenda and this checklist to DEP.

A copy of this completed checklist must be included with your Act 537 plan. DEP will use the "DEP USE ONLY" column during the completeness evaluation of the plan. This column may also be used by DEP during the pre-planning meeting with the municipality to identify planning elements that are not required to be included in the plan.



# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

## Act 537 Plan Content and Environmental Assessment Checklist

PART 1 GENERAL INFORMAT	TON							
A. Project Information			,					
Project Name Marion Township - Berks County Act 537 Plan Update								
2. Brief Project Description Revis Stouchsburg Village, commercal lot 501.								
B. Client (Municipality) Infor	mation							
Municipality Name	County	City	Boro	Twp				
Marion	Berks			$\boxtimes$				
Municipality Contact Individual - Las	t Name First Name	MI	Suffix Title					
Zern	Janis		Şecre	tary				
Additional Individual Last Name	First Name	MI	Suffix Title					
Municipality Mailing Address Line 1		Mailing Address Line 2						
420 Water Street								
Address Last Line City		State	ZIP+4	. —				
Stouchsburg		PA	19567					
Phone + Ext.	FAX (optional)	Email	(optional)					
610-589-2860	610-589-5312	mario	ntownship@comca	st.net				
C. Site Information								
Site (or Project) Name								
Marion Township		(Municipa	l Name) Act 537 Pla	an 				
Site Location Line 1 Womelsdorf, PA		Site Location Line 2						
D. Project Consultant Inform	nation							
Last Name	First Na	ame	MI	Suffix				
Walsh	EJ							
Title		ting Firm Name						
Project Manager		hy Engineering Associate	s, Inc.					
Mailing Address Line 1		Mailing Address Line 2						
555 Van Reed Road Address Last Line – City	State	ZIP+4	Country					
•	PA	19610	USA					
Wyomissing Pho	ne + Ext.	FAX						
	-373-8001		373-8077					

PART 2	ADMINISTRAT	IVE COMPLETENESS CHECKLIST	
DEP Use Only	Indicate Page #(s) in Plan	In addition to the main body of the plan, the plan must include items one through eight li below to be accepted for formal review by the department. Incomplete Plans will returned unless the municipality is clearly requesting an advisory review.	
	TOC	1. Table of Contents	
		2. Plan Summary	
	<u>1-5</u>	A. Identify the proposed service areas and major problems evaluated in the proposed (Reference - Title 25, §71.21.a.7.i).	olan.
	<u>47-55</u>	B. Identify the alternative(s) chosen to solve the problems and serve the area need identified in the plan. Also, include any institutional arrangements neces to implement the chosen alternative(s). (Reference Title 25 §71.21.a.7.ii).	
	<u>47-55</u>	C. Present the estimated cost of implementing the proposed alternative (including user fees) and the proposed funding method to be used. (Reference Title §71.21.a.7.ii).	
	<u>56-58</u>	<ul> <li>D. Identify the municipal commitments necessary to implement the Plan. (Reference Title 25, §71.21.a.7.iii).</li> </ul>	∍nce
***************************************	<u>62</u>	E. Provide a schedule of implementation for the project that identifies the MA milestones with dates necessary to accomplish the project to the poin operational status. (Reference Title 25, §71.21.a.7.iv).	
	App F	<ol> <li>Municipal Adoption: Original, signed and sealed Resolution of Adoption by municipality which contains, at a minimum, alternatives chosen and a commitmer implement the Plan in accordance with the implementation schedule. (Reference 25, §71.31.f) Section V.F. of the Planning Guide.</li> </ol>	nt to
	<u>App D</u>	4. Planning Commission / County Health Department Comments: Evidence that municipality has requested, reviewed and considered comments by appropriate off planning agencies of the municipality, planning agencies of the county, planning agencies with area wide jurisdiction (where applicable), and any existing county or county departments of health. (Reference-Title 25, §71.31.b) Section V.E.1 of Planning Guide.	ficial ning joint
	App D	<ol> <li>Publication: Proof of Public Notice which documents the proposed plan adopt plan summary, and the establishment and conduct of a 30 day comment per (Reference-Title 25, §71.31.c) Section V.E.2 of the Planning Guide.</li> </ol>	
	App D	<ol> <li>Comments and Responses: Copies of ALL written comments received and munic response to EACH comment in relation to the proposed plan. (Reference-Title §71.31.c) Section V.E.2 of the Planning Guide.</li> </ol>	
	<u>62</u>	7. Implementation Schedule: A complete project implementation schedule milestone dates specific for each existing and future area of need. Other activities the project implementation schedule should be indicated as occurring a finite number days from a major milestone. (Reference-Title 25, §71.31.d) Section V.F. of Planning Guide. Include dates for the future initiation of feasibility evaluations in project's implementation schedule for areas proposing completion of sewage facilifor planning periods in excess of five years. (Reference Title 25, §71.21.c).	es in er of the the
	App D	8. Consistency Documentation: Documentation indicating that the appropriagencies have received, reviewed and concurred with the method proposed to residentified inconsistencies within the proposed alternative and consistency requirement in 71.21.(a)(5)(i-iii). (Reference-Title 25, §71.31.e). Appendix B of the Planning Gui	olve ents

PART 3 GENERAL PLAN CONTENT CHECKLIST							
DEP Use Only	Indicate Page #(s) in Plan		Item Required				
	Maps &	I.	Previous Wastewater Planning				
	<u>Narrative</u>		<ul> <li>A. Identify, describe and briefly analyze all past wastewater planning for its impact on the current planning effort:</li> </ul>				
	<u>13-16</u>		<ol> <li>Previously undertaken under the Sewage Facilities Act (Act 537). (Reference-Act 537, Section 5 §d.1).</li> </ol>				
<del></del>	<u>N/A</u>		<ol> <li>Has not been carried out according to an approved implementation schedule contained in the plans. (Reference-Title 25, §71.21.a.5.i.A-D). Section V.F of the Planning Guide.</li> </ol>				
	<u>13-16</u>		<ol> <li>Is anticipated or planned by applicable sewer authorities or approved under a Chapter 94 Corrective Action Plan. (Reference-Title 25, §71.21.a.5.i.A&amp;B). Section V.D. of the Planning Guide.</li> </ol>				
	<u>13-16</u>		<ol> <li>Through planning modules for new land development, planning "exemptions" and addenda. (Reference-Title 25, §71.21.a.5.i.A).</li> </ol>				
	<u>Maps &amp;</u> <u>Narrative</u>	II.	Physical and Demographic Analysis utilizing written description and mapping (All items listed below require maps, and all maps should show all current lots and structures and be of appropriate scale to clearly show significant information).				
*****	<u>Maps</u> <u>11A-C</u>		<ul> <li>A. Identification of planning area(s), municipal boundaries, Sewer Authority/Management Agency service area boundaries. (Reference-Title 25, §71.21.a.1.i).</li> </ul>				
•	<u>6-7</u>		B. Identification of physical characteristics (streams, lakes, impoundments, natural conveyance, channels, drainage basins in the planning area). (Reference-Title 25, §71.21.a.1.ii).				
	<u>10-11</u>		C. Soils - Analysis with description by soil type and soils mapping for areas not presently served by sanitary sewer service. Show areas suitable for in-ground onlot systems, elevated sand mounds, individual residential spray irrigation systems, and areas unsuitable for soil dependent systems. (Reference-Title 25 §71.21.a.1.iii). Show Prime Agricultural Soils and any locally protected agricultural soils. (Reference-Title 25, §71.21.a.1.iii).				
	<u>8-9</u>		D. Geologic Features - (1) Identification through analysis, (2) mapping and (3) their relation to existing or potential nitrate-nitrogen pollution and drinking water sources. Include areas where existing nitrate-nitrogen levels are in excess of 5 mg/L. (Reference-Title 25, §71.21.a.1.iii).				
	<u>11</u>		E. Topography - Depict areas with slopes that are suitable for conventional systems slopes that are suitable for elevated sand mounds and slopes that are unsuitable for onlot systems. (Reference-Title 25, §71.21.a.1.ii).				
	<u>12</u>		F. Potable Water Supplies - Identification through mapping, description and analysis. Include public water supply service areas and available public water supply capacity and aquifer yield for groundwater supplies. (Reference-Title 25 §71.21.a.1.vi). Section V.C. of the Planning Guide.				
<del></del>	<u>7</u>		G. Wetlands-Identify wetlands as defined in Title 25, Chapter 105 by description analysis and mapping. Include National Wetland Inventory mapping and potential wetland areas per USDA, SCS mapped hydric soils. Proposed collection, conveyance and treatment facilities and lines must be located and labeled, along with the identified wetlands, on the map. (Reference-Title 25 §71.21.a.1.v). Appendix B, Section II.I of the Planning Guide.				

 <u>Maps &amp;</u> <u>Narrative</u>		sting Sewage Facilities in the Planning Area - Identifying the Existing Need Identify, map and describe municipal and non-municipal, individual accommunity sewerage systems in the planning area including:	
 <u>13-16</u>		<ol> <li>Location, size and ownership of treatment facilities, main intercepting line pumping stations and force mains including their size, capacity, point discharge. Also include the name of the receiving stream, drainage bas and the facility's effluent discharge requirements. (Reference-Title 2 §71.21a.2.i.A).</li> </ol>	of in,
 <u>N/A</u>		<ol> <li>A narrative and schematic diagram of the facility's basic treatment process including the facility's NPDES permitted capacity, and the Clean Stream Law permit number. (Reference-Title 25, §71.21.a.2.i.A).</li> </ol>	
 <u>37-39</u>		<ol> <li>A description of problems with existing facilities (collection, conveyand and/or treatment), including existing or projected overload under Title 2 Chapter 94 (relating to municipal wasteload management) or violations of the NPDES permit, Clean Streams Law permit, or other permit, rule or regulation of DEP. (Reference-Title 25, §71.21.a.2.i.B).</li> </ol>	25, he
<u>37-39</u>		4. Details of scheduled or in-progress upgrading or expansion of treatme facilities and the anticipated completion date of the improvements. Discurany remaining reserve capacity and the policy concerning the allocation reserve capacity. Also discuss the compatibility of the rate of growth existing and proposed wastewater treatment facilities. (Reference-Title 2 §71.21.a.4.i & ii).	ss of to
 <u>N/A</u>		<ol> <li>A detailed description of the municipality's operation and maintenant requirements for small flow treatment facility systems, including the status past and present compliance with these requirements and any oth requirements relating to sewage management programs. (Reference-Title 2 §71.21.a.2.i.C).</li> </ol>	of er
 <u>N/A</u>		<ol><li>Disposal areas, if other than stream discharge, and any applicable groundwater limitations. (Reference-Title 25, §71.21.a.4.i &amp; ii).</li></ol>	ile
 <u>Maps &amp;</u> <u>Narrative</u>	B.	Using DEP's publication titled Sewage Disposal Needs Identification, identification and describe areas that utilize individual and community onlot sewage disposal and, unpermitted collection and disposal systems ("wildcat" sewer borehole disposal, etc.) and retaining tank systems in the planning area including	ge rs,
 App B		1. The types of onlot systems in use. (Reference-Title 25, §71.21.a.2.ii.A).	
 App B		<ol> <li>A sanitary survey complete with description, map and tabulation documented and potential public health, pollution, and operational problen (including malfunctioning systems) with the systems, including violations local ordinances, the Sewage Facilities Act, the Clean Stream Law regulations promulgated thereunder. (Reference-Title 25, §71.21.a.2.ii.B).</li> </ol>	ns of
 <u>19-24</u>		<ol> <li>A comparison of the types of onlot sewage systems installed in an area with types of systems which are appropriate for the area according to so geologic conditions, topographic limitations sewage flows, and Title 2 Chapter 73 (relating to standards for sewage disposal facilities). (Reference Title 25, §71.21.a.2.ii.C).</li> </ol>	oil, 25
 <u>25-27</u>		<ol> <li>An individual water supply survey to identify possible contamination malfunctioning onlot sewage disposal systems consistent with DEP's Sewage Disposal Needs Identification publication. (Reference-Title §71.21.a.2.ii.B).</li> </ol>	ge
 App C		<ol> <li>Detailed description of operation and maintenance requirements of the municipality for individual and small volume community onlot system including the status of past and present compliance with these requirement and any other requirements relating to sewage management program (Reference-Title 25, §71.21.a.2.i.C).</li> </ol>	ns, nts

(Reference-Title 25, §71.21.a.3.v).

	Maps &	V.	lder	tify Alternatives to Provide New or Improved Wastewater Disposal Facilities
	<u>Narrative</u>			Conventional collection, conveyance, treatment and discharge alternatives including:
	<u>13-14</u>			<ol> <li>The potential for regional wastewater treatment. (Reference-Title 25, §71.21.a.4).</li> </ol>
************	<u>13-14</u>			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).
	<u>N/A</u>		-	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).
	<u>N/A</u>			a. Repair. (Reference-Title 25, §71.21.a.4.ii.A).
	<u>N/A</u>			b. Upgrading, (Reference-Title 25, §71.21.a.4.ii.B).
	<u>N/A</u>			c. Reduction of hydraulic or organic loading to existing facilities. (Reference-Title 25, §71.71).
	<u>N/A</u>		-	d. Improved operation and maintenance. Reference-Title 25, §71.21.a.4.ii.C).
	<u>N/A</u>			e. Other applicable actions that will resolve or abate the identified problems. (Reference-Title 25, §71.21.a.4.ii.D).
	<u>N/A</u>		•	<ol> <li>Repair or replacement of existing collection and conveyance system components. (Reference-Title 25, §71.21.a.4.ii.A).</li> </ol>
E-100-100-100-100-2	<u>19-25</u>		!	<ol> <li>The need for construction of new community sewage systems including sewer systems and/or treatment facilities. (Reference-Title 25, §71.21.a.4.iii).</li> </ol>
	<u>33-36</u>		ı	3. 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).
Landania de Tamanes	App C			The use of individual sewage disposal systems including individual residential spray irrigation systems based on:
	App C			1. Soil and slope suitability. (Reference-Title 25, §71.21.a.2.ii.C).
	App C		:	2. Preliminary hydrogeologic evaluation. (Reference-Title 25, §71.21.a.2.ii.C).
<del></del>	App C		;	3. The establishment of a sewage management program. (Reference-Title 25, §71.21.a.4.iv). See also Part "F" below.
	App C		•	<ol> <li>The repair, replacement or upgrading of existing malfunctioning systems in areas suitable for onlot disposal considering: (Reference-Title 25, §71.21.a.4).</li> </ol>
	App C			<ul> <li>a. Existing technology and sizing requirements of Title 25 Chapter 73. (Reference-Title 25, §73.31-73.72).</li> </ul>
	App C			<ul> <li>b. Use of expanded absorption areas or alternating absorption areas. (Reference-Title 25, §73.16).</li> </ul>
	App C			c. Use of water conservation devices. (Reference-Title 25, §71.73.b.2.iii).
<del></del>	App 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).
	App C			1. Treatment and discharge requirements. (Reference-Title 25, §71.64.d).
<del></del>	App C			2. Soil suitability. (Reference-Title 25, §71.64.c.l).

facilities. (Reference-Title 25, §71.71).

Title 25, §71.73.b.8).

App C

App C

App C

b. Public education programs to encourage proper operation and

Requirements for bonding, escrow accounts, management agencies or

associations to assure operation and maintenance for non-municipal

5. Establishment of joint municipal sewage management programs. (Reference-

maintenance and repair of sewage disposal systems.

<del></del>	App C	G.	ass	n-structural comprehensive planning alternatives that can be undertaken to sist in meeting existing and future sewage disposal needs including: eference-Title 25, §71.21.a.4).
			1.	Modification of existing comprehensive plans involving:
	App C			a. Land use designations. (Reference-Title 25, §71.21.a.4).
	App C			b. Densities. (Reference-Title 25, §71.21.a.4).
	App C			c. Municipal ordinances and regulations. (Reference-Title 25, §71.21.a.4).
***************************************	App C			d. Improved enforcement. (Reference-Title 25, §71.21.a.4).
<u></u>	App C			e. Protection of drinking water sources. (Reference-Title 25, §71.21.a.4).
	<u>50</u>		2.	Consideration of a local comprehensive plan to assist in producing sound economic and consistent land development. (Reference-Title 25, §71.21.a.4).
<del></del>	<u>17-19</u>	·	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).
	<u>N/A</u>		4.	Evaluation of existing local agency programs and the need for technical or administrative training. (Reference-Title 25, §71.21.a.4).
	<u>21-28</u>	H.		no-action alternative which includes discussion of both short-term and longmimpacts on: (Reference-Title 25, §71.21.a.4).
	<u>21-28</u>		1.	Water Quality/Public Health. (Reference-Title 25, §71.21.a.4).
	<u>21-28</u>		2.	Growth potential (residential, commercial, industrial). (Reference-Title 25, §71.21.a.4).
	<u>21-28</u>		3.	Community economic conditions. (Reference-Title 25, §71.21.a.4).
	<u>21-28</u>		4.	Recreational opportunities. (Reference-Title 25, §71.21.a.4).
	<u>21-28</u>		5.	Drinking water sources. (Reference-Title 25, §71.21.a.4).
	<u>21-28</u>		6.	Other environmental concerns. (Reference-Title 25, §71.21.a.4).
	<u>Maps &amp;</u> <u>Narrative</u>		Ted	tion of Alternatives chnically feasible alternatives identified in Section V of this check-list must be aluated for consistency with respect to the following: (Reference-Title 25, 1.21.a.5.i.).
	<u>47</u>		1.	Applicable plans developed and approved under Sections 4 and 5 of the Clean Streams Law or Section 208 of the Clean Water Act (33 U.S.C.A. 1288). (Reference-Title 25, §71.21.a.5.i.A). Appendix B, Section II.A of the Planning Guide.
	<u>47</u>		2.	Municipal wasteload management Corrective Action Plans or Annual Reports developed under PA Code, Title 25, Chapter 94. (Reference-Title 25, §71.21.a.5.i.B). The municipality's recent Wasteload Management (Chapter 94) Reports should be examined to determine if the proposed alternative is consistent with the recommendations and findings of the report. Appendix B, Section II.B of the Planning Guide.
	<u>47</u>		3.	Plans developed under Title II of the Clean Water Act (33 U.S.C.A. 1281-1299) or Titles II and VI of the Water Quality Act of 1987 (33 U.S.C.A 1251-1376). (Reference-Title 25, §71.21.a.5.i.C). Appendix B, Section II.E of the Planning Guide.

	<u>Арр А</u>	D. Provide cost estimates using present worth analysis for construction, financing, on going administration, operation and maintenance and user fees for alternatives identified in Section V of this checklist. Estimates shall be limited to areas identified in the plan as needing improved sewage facilities within five years from the date of plan submission. (Reference-Title 25, §71.21.a.5.iv).	operation and maintenance and user fe ection V of this checklist. Estimates shall be li in as needing improved sewage facilities wit	for ed to
	<u>52-55</u>	E. Provide an analysis of the funding methods available to finance the proposed alternatives evaluated in Section V of this checklist. Also provide documentation to demonstrate which alternative and financing scheme combination is the most cost-effective; and a contingency financial plan to be used if the preferred method of financing cannot be implemented. The funding analysis shall be limited to areas identified in the plan as needing improved sewage facilities within five years from the date of the plan submission. (Reference-Title 25, §71.21.a.5.v).	ection V of this checklist. Also provide docum- native and financing scheme combination is the gency financial plan to be used if the preferred plemented. The funding analysis shall be ling as needing improved sewage facilities within five	ation nost thod d to
<u> </u>	<u>1-5</u>	F. Analyze the need for immediate or phased implementation of each alternative proposed in Section V of this checklist including: (Reference-Title 25, §71.21.a.5.vi).		
	<u>1-5</u>	<ol> <li>A description of any activities necessary to abate critical public health hazards pending completion of sewage facilities or implementation of sewage management programs. (Reference-Title 25, §71.21.a.5.vi.A).</li> </ol>	letion of sewage facilities or implementation of	
***************************************	<u>1-5</u>	<ol> <li>A description of the advantages, if any, in phasing construction of the facilities or implementation of a sewage management program justifying time schedules for each phase. (Reference-Title 25, §71.21.a.5.vi.B).</li> </ol>	ition of a sewage management program justify	
	<u>56-61</u>	G. Evaluate administrative organizations and legal authority necessary for plan implementation. (Reference - Title 25, §71.21.a.5.vi.D.).		plan
	Maps & N Narrative	<ul> <li>Institutional Evaluation</li> <li>A. Provide an analysis of all existing wastewater treatment authorities, their past actions and present performance including:</li> </ul>		past
	<u>56-61</u>	1. Financial and debt status. (Reference-Title 25, §71.61.d.2).	us. (Reference-Title 25, §71.61.d.2).	
	<u>56-61</u>	2. Available staff and administrative resources. (Reference-Title 25, §71.61.d.2)	inistrative resources. (Reference-Title 25, §71.	1.2)
	<u>56-61</u>	3. Existing legal authority to:	to:	
<del></del>	<u>56-61</u>	<ul> <li>a. Implement wastewater planning recommendations. (Reference-Title 25, §71.61.d.2).</li> </ul>	ater planning recommendations. (Reference-	25,
· ·	<u>56-61</u>	<ul> <li>b. Implement system-wide operation and maintenance activities. (Reference-Title 25, §71.61.d.2).</li> </ul>	, §71.61.d.2).	
· · · · · · · · · · · · · · · · · · ·	<u>56-61</u>	c. Set user fees and take purchasing actions. (Reference-Title 25, §71.61.d.2).	nd take purchasing actions. (Reference-T	25,
	<u>56-61</u>	d. Take enforcement actions against ordinance violators. (Reference-Title 25, §71.61.d.2).	actions against ordinance violators. (Referen	Title
	<u>56-61</u>	e. Negotiate agreements with other parties. (Reference-Title 25, §71.61.d.2).	nents with other parties. (Reference-Til	25,
	<u>56-61</u>	f. Raise capital for construction and operation and maintenance of facilities. (Reference-Title 25,§71.61.d.2).		ties.
	<u>56-61</u>	B. Provide an analysis and description of the various institutional alternatives necessary to implement the proposed technical alternatives including:		ives
**************************************	<u>56-61</u>	<ol> <li>Need for new municipal departments or municipal authorities. (Reference- Title 25, §71.61.d.2).</li> </ol>	al departments or municipal authorities. (Ref	nce-
<del> </del>	<u>56-61</u>	<ol><li>Functions of existing and proposed organizations (sewer authorities, onlot maintenance agencies, etc.). (Reference-Title 25, §71.61.d.2).</li></ol>		onlot
	<u>56-61</u>	<ol> <li>Cost of administration, implementability, and the capability of the authority/agency to react to future needs. (Reference-Title 25, §71.61.d.2).</li> </ol>		
		. 11		

3800-FM-BPNP	SM0003 10/20	12		
•	<u>56-61</u>		C.	Describe all necessary administrative and legal activities to be completed and adopted to ensure the implementation of the recommended alternative including:
	<u>56-61</u>			1. Incorporation of authorities or agencies. (Reference-Title 25, §71.61.d.2).
	<u>56-61</u>			<ol> <li>Development of all required ordinances, regulations, standards and inter- municipal agreements. (Reference-Title 25, §71.61.d.2).</li> </ol>
	<u>56-61</u>			3. Description of activities to provide rights-of-way, easements and land transfers. (Reference-Title 25, §71.61.d.2).
	<u>56-61</u>			<ol> <li>Adoption of other municipal sewage facilities plans. (Reference-Title 25, §71.61.d.2).</li> </ol>
	<u>56-61</u>			5. Any other legal documents. (Reference-Title 25, §71.61.d.2).
******	<u>56-61</u>			<ol><li>Dates or timeframes for items 1-5 above on the project's implementation schedule.</li></ol>
	<u>56-61</u>		D.	Identify the proposed institutional alternative for implementing the chosen technical wastewater disposal alternative. Provide justification for choosing the specific institutional alternative considering administrative issues, organizational needs and enabling legal authority. (Reference-Title 25, §71.61.d.2).
	<u>Maps &amp;</u> <u>Narrative</u>	VIII.		olementation Schedule and Justification for Selected Technical & titutional Alternatives
			A.	Identify the technical wastewater disposal alternative which best meets the wastewater treatment needs of each study area of the municipality. Justify the choice by providing documentation which shows that it is the best alternative based on:
	<u>62</u>			1. Existing wastewater disposal needs. (Reference-Title 25, §71.21.a.6).
	<u>29-30</u>			2. Future wastewater disposal needs. (five and ten years growth areas). (Reference-Title 25, §71.21.a.6).
	<u>50</u>			3. Operation and maintenance considerations. (Reference-Title 25, §71.21.a.6).
	<u>62</u>			4. Cost-effectiveness. (Reference-Title 25, §71.21.a.6).
	<u>56-57</u>			<ol> <li>Available management and administrative systems. (Reference-Title 25, §71.21.a.6).</li> </ol>
	<u>52-55</u>			6. Available financing methods. (Reference-Title 25, §71.21.a.6).
<del></del>	<u>58-61</u>			<ol> <li>Environmental soundness and compliance with natural resource planning and preservation programs. (Reference-Title 25, §71.21.a.6).</li> </ol>
	<u>62</u>		B.	Designate and describe the capital financing plan chosen to implement the selected alternative(s). Designate and describe the chosen back-up financing plan. (Reference-Title 25, §71.21.a.6)
·	<u>62</u>		C.	Designate and describe the implementation schedule for the recommended alternative, including justification for any proposed phasing of construction or implementation of a Sewage Management Program. (Reference – Title 25 §71.31d)
	App A	IX.		ironmental Report (ER) generated from the Uniform Environmental Review cess (UER)
	App A		Α.	Complete an ER as required by the UER process and as described in the DEP Technical Guidance 381-5511-111. Include this document as "Appendix A" to the Act 537 Plan Update Revision. Note: An ER is required only for Wastewater projects proposing funding through any of the funding sources identified in the UER.

PENNVEST I.D. No.	

## ADDITIONAL REQUIREMENTS FOR PENNVEST PROJECTS

Municipalities that propose to implement their official sewage facilities plan updates with PENNVEST funds must meet six additional requirements to be eligible for such funds. See A Guide for Preparing Act 537 Update Revisions (362-0300-003), Appendix N for greater detail or contact the DEP regional office serving your county listed in Appendix J of the same publication.

DEP Use Only	Indicate Page #(s) in Plan		ltem Required
	App A	1.	, ,
			The Uniform Environment Review (UER) replaces the Environmental Impact Assessment that was a previous requirement for PENNVEST projects.
	App A	2.	Cost Effectiveness (Planning Phase)
			The cost-effectiveness analysis should be a present-worth (or equivalent uniform annual) cost evaluation of the principle alternatives using the interest rate that is published annually by the Water Resources Council. Normally, for PENNVEST projects the applicant should select the most cost-effective alternative based upon the above analysis. Once the alternative has been selected the user fee estimates should be developed based upon interest rates and loan terms of the selected funding method.
		3.	Second Opinion Project Review. (Design Phase)
		4.	Minority Business Enterprise/Women's Business Enterprise (Construction Phase)
		5.	Civil Rights. (Construction Phase)
		6.	Initiation of Operation/Performance Certification. (Post-construction Phase)

## I/A TECHNOLOGIES

## PARTIAL LISTING OF INNOVATIVE AND ALTERNATIVE TECHNOLOGIES

#### TREATMENT TECHNOLOGIES

Aquaculture
Aquifer Recharge
Biological Aerated Filters
Constructed Wetlands
Direct Reuse (NON-POTABLE)
Horticulture
Overland Flow
Rapid Infiltration
Silviculture
Microscreens
Controlled Release Lagoons
Swirl Concentrator

#### SLUDGE TREATMENT TECHNOLOGIES

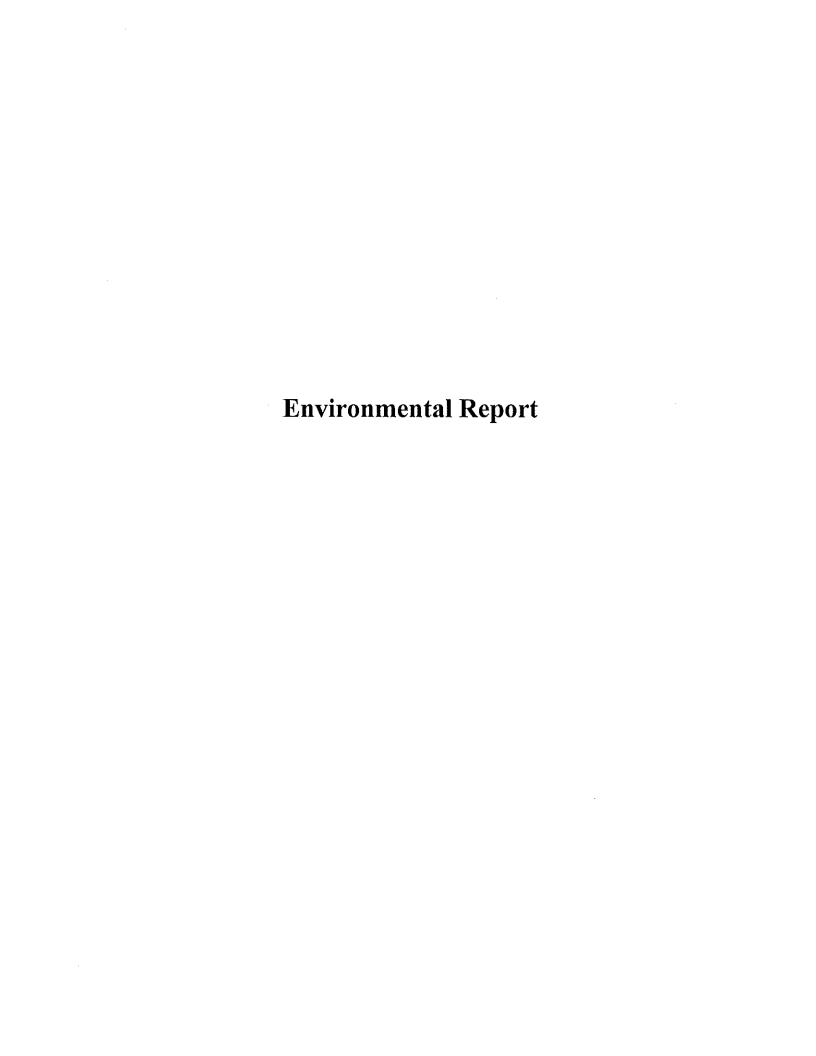
Aerated Static Pile Composting Enclosed Mechanical Composting (In vessel) Revegetation of Disturbed Land Aerated Windrow Composting

#### **ENERGY RECOVERY TECHNOLOGIES**

Anaerobic Digestion with more than 90 percent Methane Recovery Cogeneration of Electricity Self-Sustaining Incineration

## INDIVIDUAL & SYSTEM-WIDE COLLECTION TECHNOLOGIES

Cluster Systems
Septage Treatment
Small Diameter Gravity Sewers
Step Pressure Sewers
Vacuum Sewers
Variable Grade Sewers
Septic Tank Effluent Pump with
Pressure Sewers





## **ENVIRONMENTAL REPORT**

## FOR THE

Marion Township Act 537 Plan Update

Extension of the Public Sewer to Stouchsburg Village, Shady Cabins and US 422 Connection to Womelsdorf Sewer Authority Sanitary Sewer

**November 4, 2009** 



## **TABLE OF CONTENTS**

## **Executive Summary**

## Purpose and Need of Project

- 1. General
  - 1.1. Project Description (Proposed Action or Proposed Project)
  - 1.2. Purpose and Need of Project

## 2. Alternatives to the Proposed Action

- 2.1. Public Sewer Extension to Phase 1B SMA
- 2.2. Continued Use of Existing OLDS
- 2.3. Public Sewer to Marion Township STP
- 2.4. Community Land Disposal

## 3. Affected Environment/ Environmental Consequences

- 3.1. Land Use/Important Farmland/ Formally Classified Lands
  - 3.1.1. Affected Environment
  - 3.1.2. Environmental Consequences
  - 3.1.3. Mitigation

## 3.2. Floodplains

- 3.2.1. Affected Environment
- 3.2.2. Environmental Consequences
- 3.2.3. Mitigation

#### 3.3. Wetlands

- 3.3.1. Affected Environment
- 3.3.2. Environmental Consequences
- 3.3.3. Mitigation

## 3.4. Cultural Resources

- 3.4.1. Affected Environment
- 3.4.2. Environmental Consequences
- 3.4.3. Mitigation

## 3.5. Biological Resources

- 3.5.1. Affected Environment
- 3.5.2. Environmental Consequences
- 3.5.3. Mitigation

## 3.6. Water Quality Issues

- 3.6.1. Affected Environment
- 3.6.2. Environmental Consequences
- 3.6.3. Mitigation

## 3.7. Coastal Resources

- 3.7.1. Affected Environment
- 3.7.2. Environmental Consequences
- 3.7.3. Mitigation

## 3.8. Socio-Economic/ Environmental Justice issues

- 3.8.1. Affected Environment
- 3.8.2. Environmental Consequences
- 3.8.3. Mitigation

## 3.9. Miscellaneous Issues

- 3.9.1. Affected Environment
- 3.9.2. Environmental Consequences
- 3.9.3. Mitigation

## 4.0 Summary of Mitigation

- 5.0 Correspondence
- 6.0 Exhibits/ Maps

#### **Executive Summary**

Marion Township desires to correct existing on-lot sewage system problems within the Stouchsburg Village and Shady Cabin residential areas, US 422 (Conrad Weiser Parkway) commercial area by implementing the preferred alternate identified in the Act 537 Sewage Facilities Plan Update – **The Plan:** 

- (1). Installing a public sewer extension along Canal Road, Sheridan Road, Edris Road, Conrad Weiser Parkway and Main Street, providing public sewer service to the portion of Marion Township identified in the 1B Sewage Management Area (SMA), in the Marion Township <u>Act 537 Sewage Facilities Plan Update **The Plan**</u>, serving the existing 185 EDU's consisting of 20 light commercial uses and 165 residential uses.
- (2). Construct and operate a sanitary sewer pump station that collects the sanitary sewer flow from the Phase 1B area and convey it into the Womelsdorf Sewer Authorities 20" sewer main east of the Tulpehocken Creek.
- (3). Upgrade the aearation and mixing equipment in the Womelsdorf Sewer Authority Treatment Plant's Solids Batch Reactor units to provide improved treatment of wastewater, and expand the capacity of the current treatment equipment to allow an additional 50,000 gallons per day to be allocated to Marion Township.
- (4). Establish the central administration and ownership of the public sewer facilities in Marion Township including the existing and proposed Womelsdorf Sewer Authority's facilities serving Stonecroft Village, the over 55 single-family residential development along William Penn Boulevard.
- (5). Establish the central administration of the public sewer service to the Dutch Valley Food Distributors, Inc. facilities connected to the Tulpehocken Township public sewer system in Mt. Aetna.
- (6). Establish the authority for the administration and improved management of the on-lot management sewer service to all residents of Marion Township with on-lot sewage systems.
- (7). The Engineer's opinion of probable total project costs for implementing the preferred alternative is \$4,970,000.00. This estimated cost includes right-of-way acquisitions, legal, financing, engineering & design, permitting, inspections, and contingencies. This is the number utilized in the various rate calculations metrics in Tables 7-1 through 7-3.
- (8). Note: PA DEP approved the Marion Township <u>Act 537 Sewage Facilities Plan Revisions</u> sewer planning Codes A3-06943-052-3 and A-3-06943-044-3.
- (9). Preferred Alternative Estimated Costs:
  - Sewer extension construction cost opinion ranges from \$2,400,000 to \$2,800,000;
  - o New pump station construction cost opinion ranges from \$250,000 to \$300,000;
  - Upgrade of the Womelsdorf Sewer Authority treatment plant construction cost opinion ranges from \$450,000 to \$600,000;
  - The estimated cost and expenses for establishing the central administration of the existing public sewer service to Stonecroft Village and to Dutch Valley Food Distributors Inc. \$120,000 to \$200,000.

- (10) Abandon existing on-lot OLDS systems in the Sewer Management Area identified as Phase 1B.
- (11) Administer the public sewer services to all properties shown within the Phase 1A and 1B Sewer Management Areas within the Township.
- (12) Improve management of on-lot sewage system to remain within the areas of the Township not connected to the public sewer facilities.
- (13) Based upon the aforementioned, the Marion Township desires to obtain grants in the approximate amount of \$ 3,000,000 and loans in the approximate amount of \$1,000,000 in order to finance the project.

#### General

1.1 Project Description (Proposed Action/Proposed Project - Preferred Alternative)

The project consists of a Marion Township public sanitary sewer system from the Womelsdorf Sewer Authority system facilities at Conrad Weiser Parkway (US 422) near the Womelsdorf Borough line (SEE MAP 1) to the Phase 1B SMA Stouchsburg Village, Shady Cabins, and commercial lots along U.S. 422. (SEE MAP 10,11c & d) The tie-in to the WSA's existing sewer system will convey domestic strength sewage from the improved properties in the Phase 1B SMA in Marion Township to the Womelsdorf Sewer Authority system.

The new sewers in Marion Township will be both gravity and low-pressure sewers. Maps 10 and 11 c & d in Appendix A show the location of various components of the preferred alternative.

All lots within the Phase 1B Sewer Management Area along Canal Road, Sheridan Road and Edris Road will be connected to the sewer. Laterals will be extended to the right of way lines for the lots along the sewer but only the Phase 1B lots will be connected due to the limited capacity in the Womelsdorf Sewer Authority treatment plant. The laterals will be installed for the Phase 2 lots but the lots will not be connected to the public system until the WSA plant has the capacity for the additional lots.

## 1.1.1 Tie in to the Womelsdorf Sewer Authority

The tie-in from Marion Township Canal Road Pump Station into the WSA system will be a force main under the Tulpehocken Creek with a connection to the existing 20" diameter sewer that extends along the western boundary of the Borough with the Township. The existing 20" sewer line is generally parallel with the Tulpehocken Creek from its crossing under U.S. 422 to the WSA treatment plant. (SEE MAP 10) The proposed pump station is appropriate due to the conditions of the existing 20" WSA sewer main.

The new collection sewer in Marion Township will be a flatly sloping 8" diameter PVC gravity line from Main St. in Stouchsburg to the proposed location of the Canal Road Pump Station associated with the WSA tie-in facilities.

The utilization of a pump station and force main as the means to connect to WSA system allows for flexibility in the final design thereby, allowing the actual point of connection to be altered to accommodate flood plain requirements. The existing WSA 20"

sewer main is below the elevation of the 100-year flood along the Tulpehocken Creek. WSA reported that the sewer system was televised and grouted eliminating the sources of I & I. The application of a force main for this connection allows for its relocation of the connection point during final design providing a connection that will not adversely impact the integrity of the 20" sewer in the flood plain.

## 1.1.2 Upgrade of the Womelsdorf Sewer Authority Treatment Plant

This project funding will include funds to be made available to the Womelsdorf Sewer authority for the upgrade of the treatment plant. Preliminary studies by the Authority have proposed that the addition of aeration system equipment and aeration controls for the two SBR treatment units will provide Marion Township with the 50,000 (+) gallons per day capacity for connection of the Phase 1B SMA.

## 1.1.3 Main Street Collection Sewer

The collection sewer for Stouchsburg Village will be in Main Street extending approximately from 2,600 feet west of the intersection at Canal Road to 840 feet east of the Canal Road intersection. The manhole at Canal Road will be the low point conveying flow into the Canal Road section of the gravity collection sewer. Sewer extensions will be installed along side streets of Water Street, Sharff Road, Marion Drive and Klopp Alley.

The sewer has been located along the south side of the Main Street due to the request of the UGI Utilities Inc. because of their existing 8" natural gas main along the north side of Main St. Marion Township's 8" diameter gravity sewer will average 12' to 15' deep. The installation of the sewer main will include the installation of the laterals from the main to the curb line for each existing dwelling as shown in The Plan.

Bedrock surveys for the proposed gravity sewer alignment will be developed during the final design phase.

It is anticipated that an income survey within Stouchsburg Village and Shady Cabins will establish the presence of low-to-moderate income for families living in the Phase 1B SMA area. The area should qualify for funding from Berks County CDBG funds and realize benefits of the grants as set forth in the estimated user rates in Tables 7-1 through 7-1C in The Plan.

## 1.1.4 Canal Street Road Collection Sewer

The Canal Road gravity collection sewer will be relatively flat for most of its entire length, which extends for approximately 3,500 LF along Canal Road from Main Street to Sheridan Road and 5,500 LF from Sheridan Road to the new pump station. A 1,800 LF side street extension will be extended from Canal Road along Sheridan Road under US 422 to Edris Road and along Edris Road.

## 1.1.5 US 422 Low Pressure Sewer

Commercial lots along U.S. 422 from Sheridan Road to Church Road will be connected into a low-pressure sewer along the north side of 422. All commercial use lots are in Phase 1B Sewer Management Area. Residential lots along U.S. 422 are in the Phase 2 Sewer Management. The low-pressure sewer will connect at two locations to the gravity sewer and include valves to allow for discharge at two locations establishing the system flow conditions that will flush the flatly sloping gravity sewer line in Main St and Canal Road.

## 1.2 Purpose and Need of Project

The purpose of the public sewer system will allow the owners of the lots in the Phase 1B SMA to abandon the existing substandard on-lot OLDS serving the dwellings in Phase 1B SMA. The door-to-door survey, water samples and analysis of the lot sizes indicate potential malfunctions with very limited site conditions for the repair and continued use of the OLDS systems.

## 2.0 Alternatives to the Proposed Action

2.1 Proposed sewer extensions in the Phase 1B.

From pages 20 – 64 of the Act 537 Plan the alternatives were considered and resulted in the selection of the preferred alternative, which is the proposed public sewer extension. Other alternatives considered are as follows:

- "Continued use of OLDS governed by a Sewage Management Plan;
- Public wastewater collection and conveyance to a new treatment plant constructed, owned and operated by the Marion Township;
- Community land disposal facility.

The Act 537 Plan selected a public collection system connected into the existing WSA system over the other three alternatives for the following reasons:

#### 2.2 Continued Use of OLDS

The continued use of on-lot disposal systems, (OLDS) conflicts with the 537 Plan statement, "based on the results of the lot-by-lot investigation conducted for the residential lots and the commercial lots with existing Phase 1B SMA, the existing lots on-lot sewer facilities have conditions that prohibit OLDS repairs and expansions meeting Chapter 73 standards, thereby, preventing a long-term, on-lot sewage disposal solution."

No costs were developed because the continued use of the OLDS is technically unfeasible.

## 2.3 Proposed public sewer system to a Marion Township treatment plant facility

Four alternatives were considered in comparison to connecting into the WSA system. Costs were developed for the Marion Treatment plant alternatives. The four (4) Marion treatment plant alternatives will add a wastewater stream discharge into the Tulpehocken Creek which is a Wild and Scenic river resource, require condemnation of agricultural preserved land and potentially impact existing historic and archaeological sites.

## 2.4 Proposed community land disposal in Marion Township.

The land disposal alternative was considered in comparison to connecting into the WSA and the treatment plant system. General water quality sampling indicates that the ground water supply in the Phase 1B SMA area is high in nitrates and contaminated with bacteria. The land disposal alternate proposed disposing additional wastewater effluent into the groundwater. It was considered unfeasible due the presence of the karst topography and the potential to further adversely impact the groundwater with wastewater effluent which may include residual traces of elements that can not be removed with typical wastewater treatment technology. The ground water is the only source of drinking for the area.

No costs were developed to evaluate the alternate.

## 3. Affected Environment/Environmental Consequences

## 3.1. Land Use/Important Farmland/ Formally Classified Lands

## 3.1.1. Affected Environment

Map 1 shows the areas of improved sewer service. Map 10 and 11c and 11d show the proposed sewer extension to the Phase 1B and 2 Sewer Management Areas for Stouchsburg Village, Shady Cabin, and U.S. 422 areas. Map11c and d show the proposed alignment of the new force main connection to WSA and the proposed area for the new Canal Road pump station.

The sewer extension project is through a suburban – rural area, with the sewer alignment following the existing patterns of development along the existing roads. The proposed alignment has avoided the roads that cross the protected farmland areas of the Township.

Page 59 of The Plan states, that "The alternatives considered are consistent with the Zoning and Subdivision and Land Development Ordinances of Marion Township."

Approximately five acres will be disturbed in the for the installation of the sewer and two acres will be disturbed for installing the new pump station and force main.

## 3.1.2. Environmental Consequences

Eliminating the existing OLDS in the Phase 1B SMA will improve the water quality of the groundwater because the existing sewage effluent discharge into the groundwater will be stopped. Nitrate concentrations and other trace elements in the groundwater will gradually reduce over time as groundwater recharge into the aquifer dilutes the existing concentrations of these elements.

## 3.1.3. Mitigation

Constructing the proposed connection to the WSA sewer facilities with the force main connection and the stream crossing under the Tulpehocken Creek will have minimal affect to the environment

The project plans for the stream crossing will be submitted to the Berks County Conservation District establishing the required soil erosion and sedimentation measures for work in and around the stream. Construction of the new pump station and force main will also have an approved E&S plan.

## 3.2. Floodplains

## 3.2.1. Affected Environment

Map 5 shows the 100-year flood plain areas of the Township. The sewer extension will serve existing dwellings in the floodplain and will be constructed in and along sections of Canal Road in the floodplain.

Sewer design and construction within and below the level of the 100-year flood event will be in compliance with the requirement of FEMA and the Township's Ordinance.

The new Canal Road pump station will be located above the 100-year flood plain. No other portion of the proposed project lies within the 100-year flood plain.

## 3.2.2. Environmental Consequences

Removal of the existing OLDS from the lots in and along the flood plain at the Shady Cabins dwellings will improve the water quality of the Tulpehocken Creek.

## 3.2.3. Mitigation

Other than removing the existing OLDS from the 100-year flood plain, no other mitigation measures are necessary.

#### 3.3. Wetlands

#### 3.3.1. Affected Environment

Map 8 illustrates the wetlands and hydric soils areas along the Tulpehocken Creek and the unnamed tributaries that flow into the creek. The proposed public sewer will cross a few of the smaller tributaries and require GP 5 permits as part of the final design process. No adverse impact will occur as a result of the streamwetland-hydric soil crossings.

## 3.3.2. Environmental Consequences

The Act 537 Plan states that "mapped wetlands in the Marion Township are shown on Map 8. Final design will confirm the

presence or absence of small wetland areas that may be along the sewer alignment. The proposed sewer alignment will generally follow existing roads and the environmental consequences will be di minimis.

## 3.3.3. Mitigation

No mitigation measures are necessary as a result of the proposed sewer extensions, and new pump station and force main.

#### 3.4. Cultural Resources

#### 3.4.1. Affected Environment

The preferred alternative, the connection to the WSA facilities will have di minimis effect on cultural resources because the sewer extension is along the existing disturbed areas associated with the existing roads. SEE MAP 10.

## 3.4.2. Environmental Consequences

On May 29, 2009 a letter from PHMC alerted the Township to the possible presence of historical and archaeological resources in and along the sewer alignment and likewise advised there are known sites associated with the four (4) Marion Township treatment sites. "Phase I Cultural Resources Survey" for the sewer alignment will be conducted as a part of the Final Design. The recommendation to connect to WSA facilities as the preferred alternative effectively eliminated the need to evaluate the four (4) alternative treatment plant sites.

## 3.4.3. Mitigation

The PHMC's response letter, dated May 29, 2009 is found in Appendix D. A "Phase I Cultural Resources Survey" will be undertaken as apart of the final design and subject to the successful negotiations with the WSA regarding the inter-municipal agreement. It is anticipate a Phase I Cultural Resources Survey will state, that there are no existing significant historic materials to warrant any further investigation because the sewer alignments follow the existing development patterns along and within existing roads.

ĺ

## 3.5. Biological Resources

## 3.5.1. Affected Environment

Lots within the Phase 1B Sewer Management Area, the sewer alignment in and along the existing road and the proposed pump stations and stream crossing alignment.

## 3.5.2. Environmental Consequences

A Pennsylvania Natural Diversity Inventory (PNDI) Search will be performed covering the sewer alignment.

## 3.5.3. Mitigation

None required.

## 3.6. Water Quality Issues

#### 3.6.1. Affected Environment

The Marion Township groundwater resources and the Tulpehocken Creek.

## 3.6.2. Environmental Consequences

The groundwater resources in the Phase 1B Sewer Management Area have been adversely affected from the disposal of sewage effluent into the groundwater from the substandard OLDS serving the area. Also, the substandard OLDS within the lots in and along the flood plain of the Tulpehocken Creek in Shady Cabins may be adversely impacting the quality of the Creek due to the presence of intermittent high groundwater table levels.

- a) illegal discharges from the existing OLDS into the stream/flood plain is a violation of the Clean Water Act;
- b) contamination of the groundwater by malfunctioning OLDs.

## 3.6.3. Mitigation

Installation of a public sewage collection system to the lots and dwelling designated as Phase 1B SMA will eliminate polluting the groundwater.

- 3.7. Coastal Resources: Not Applicable.
  - 3.7.1. Affected Environment
  - 3.7.2. Environmental Consequences
  - 3.7.3. Mitigation
- 3.8. Socio-Economic/ Environmental Justice issues
  - 3.8.1. Affected Environment

Marion Township, and the Tulpehocken Creek

## 3.8.2. Environmental Consequences

Installation of the public sewer system in and along the Tulpehocken Creek flood plain and the Shady Cabin area will eliminate potential for sewage effluent from malfunctioning OLDS entering the Tulpehocken Creek, thereby improving water quality downstream and inherently improving soci-economic value to the inhabitants living along and using the creek downstream of the Township.

Installation of a public sewage collection system in the Stouchsburg Village and U.S 422 area will certainly improve the socio-economic status by sustaining property values, improving useable areas of lots by the removal of the malfunctioning OLDS, and reducing, or completely eliminating any health hazards associated with sewage effluent discharging into the groundwater.

## 3.8.3. Mitigation

Construct a new public sewer system with the new pump station and force main connecting into the WSA system.

- 3.9. Miscellaneous Issues: None.
  - 3.9.1. Affected Environment
  - 3.9.2. Environmental Consequences
  - 3.9.3. Mitigation

1

## Conclusion:

The attached Table provides a quantitative comparison of the alternatives available for the Township's effective sewer improvements. The alternatives considered will provide a low pressure sewer system and a gravity system collecting the sewage from the existing dwelling in Marion Township Phase 1B SMA to a new pump station and a force main connection to the WSA system. The WSA treatment plant will be upgraded to accommodate the additional flow from Marion Township.

## 4.0 Summary of Mitigation

Construction of a sewage collection system in the Phase 1B SMA (Stouchsburg Village, Shady Cabins, commercial lots along U.S. 422 and Edris Road) will improve the groundwater resource, reduce or eliminate health hazards associated with malfunctioning OLDS, sustain property values, and in general, improve the quality of life of the residents in the area.

Construction of a new pump station and force main will minimize the impact of the public sewer crossing the Tulpehocken Creek. In addition, the water quality of the creek will be improved, thereby increasing the recreation draw from the local inhabitants, and decreasing health hazards associated with raw sewage.

## 5.0 Correspondence (SEE THE PLAN)

- a. Limited Amendment to Approved Act 537 Sewage Facilities Plan Update
- b. PHMC letters
- c. PNDI letters

## 6.0 Maps (SEE THE PLAN)

Maps 1 through 11C: Township Maps and Proposed Public Sewers to Phase 1B SMA

Evaluation of Alternatives for providing a Public Sewer System with a connection to Womelsdorf Sewer Authority for the Phase 1B SMA versus the Marion Township STP @ Site 2 for the Phase 1B and Phase 2 SMA's:

	Technically feasible (20% wt.)	Economically feasible (20% wt.)	Environmentally acceptable to PADEP (40% wt.)	Mitigation measures required (20% wt.)	Average Weighted Score
No sewers	5	5	0	Ò	2
WSA ·	4	4	5	5	4.6
Conn.		<u></u>			
Marion Twp. STP Site 2	3	4	3	3	3.2
SIC 2					

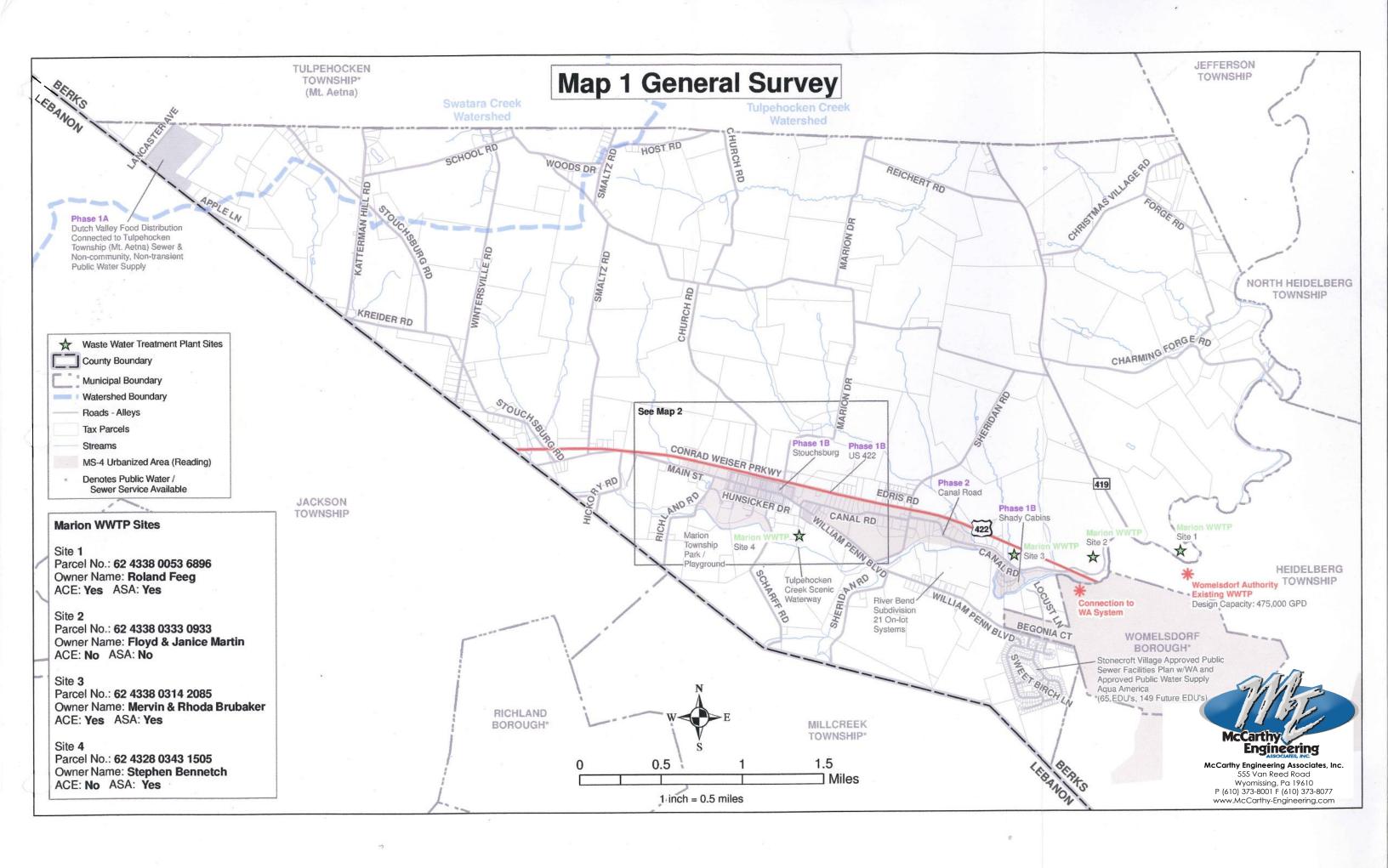
### Notes:

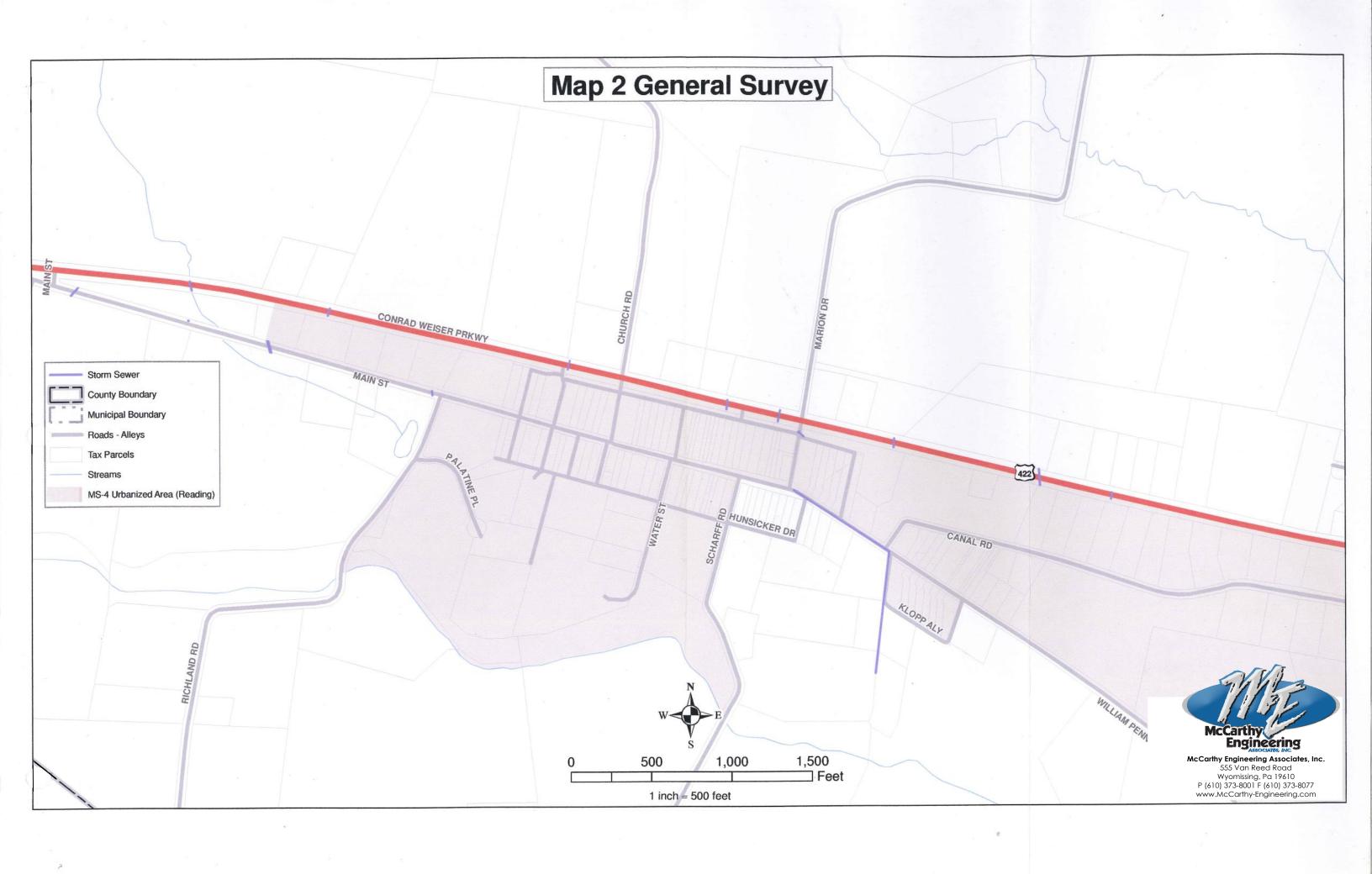
- 1. Five (5) represents the most acceptable; zero (0) represents the least acceptable.
- 2. Of the four evaluation factors, the "Environmentally acceptable to PADEP" is weighted twice that of the other three since the PADEP has the responsibility of enforcing the Clean Water Act.

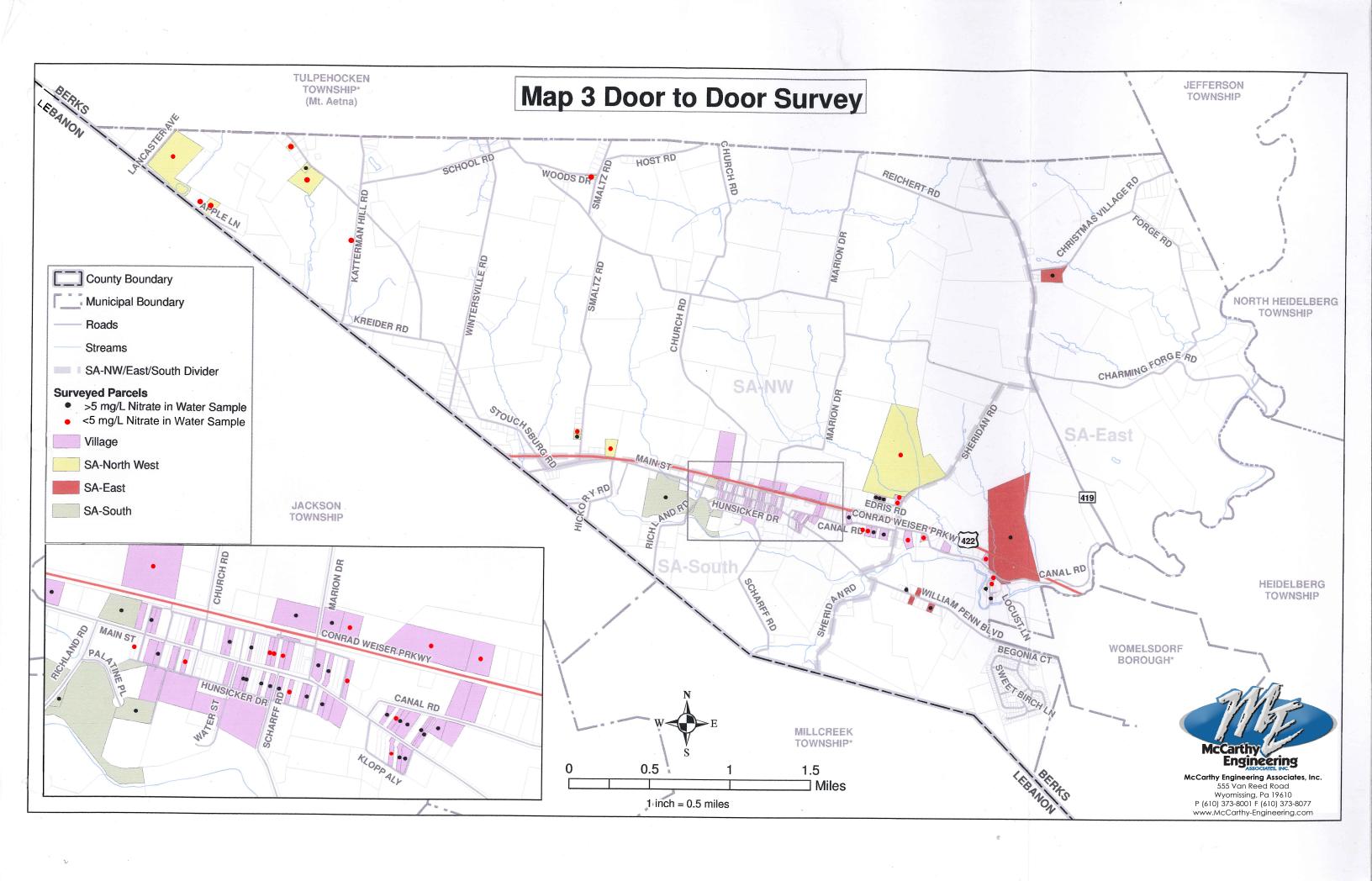


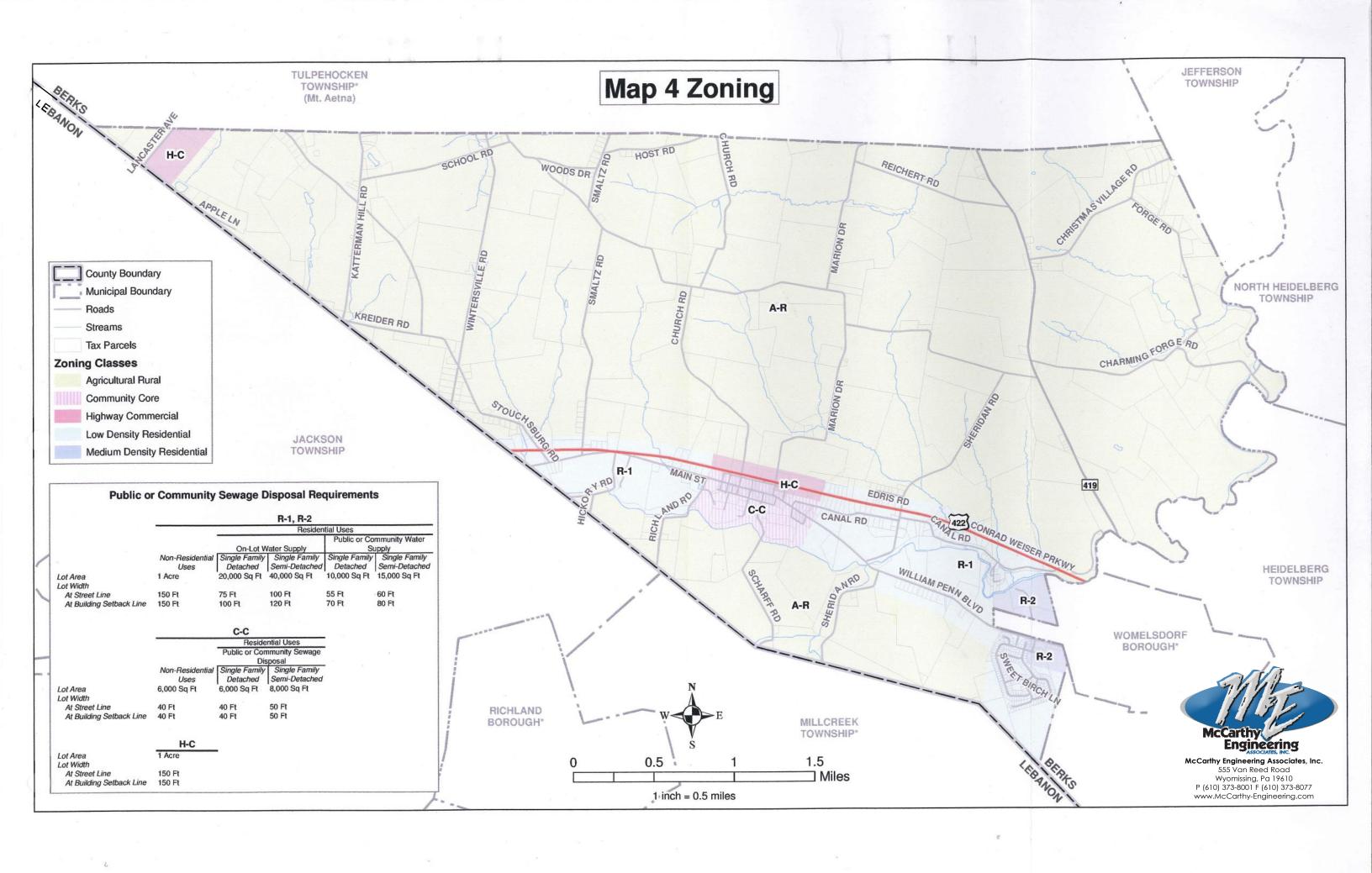
### **Maps 1-11C**

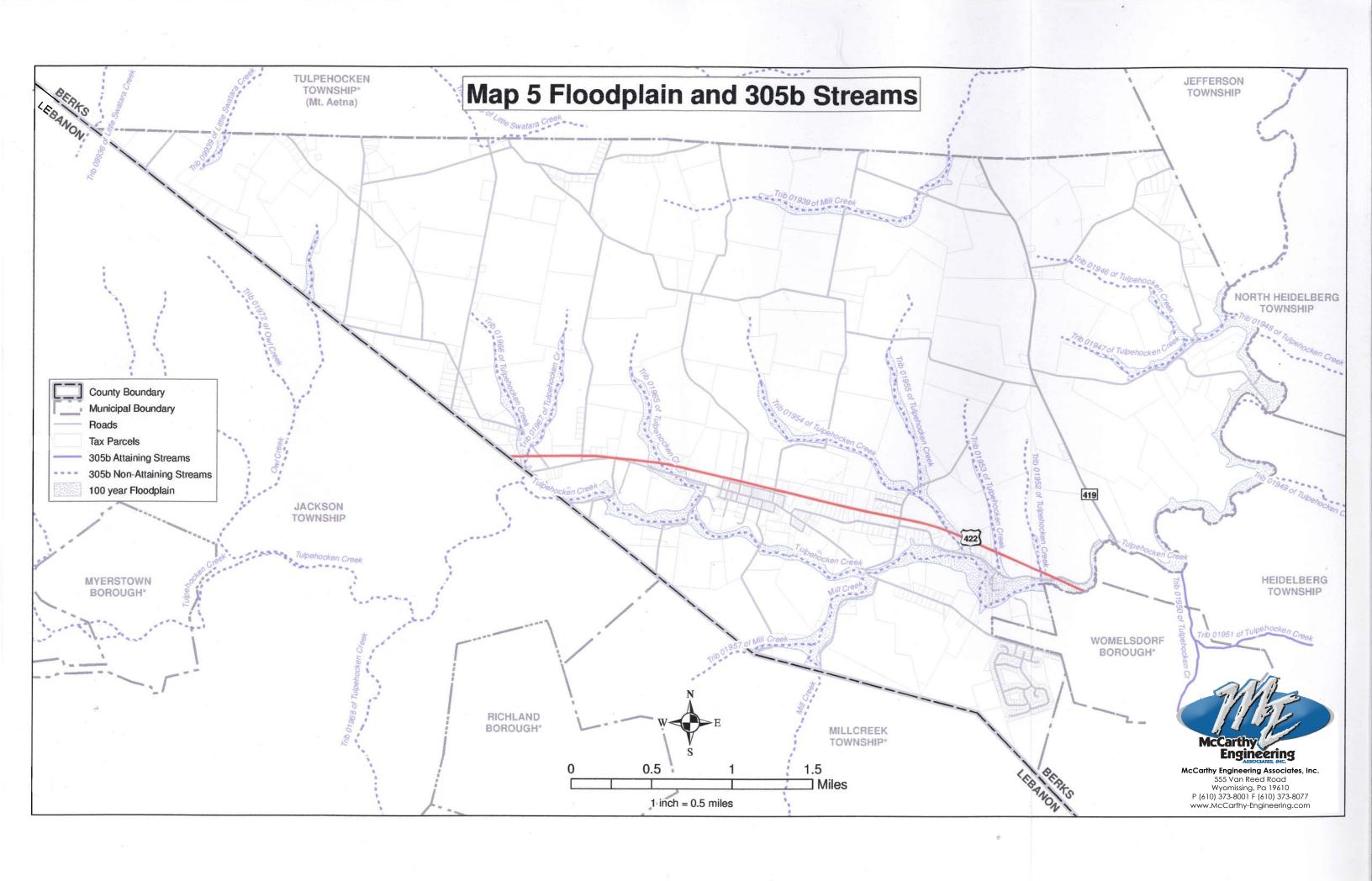
- Map 1 General survey
- Map 2 General Survey Stouchsburg Village
- Map 3 Door to Door Survey
- Map 4 Zoning
- Map 5 Floodplain and 305b Steams
- Map 6 Geology
- Map 7 General Soils
- Map 8 Hydric Soils
- Map 9 Prime Agricultural Soils
- Map 10 Proposed Public Sewer with MS-4 Areas & Agricultural Easement/Security Areas
- Map 11A Proposed Public Sewer-Conventional Alignment (Canal Road)-Phase 1B & 2 (Collection and Conveyance)
- Map 11B Proposed Public Sewer-Phase 1B & 2 (Connection to Womelsdorf Authority Facilities)
- Map 11C Proposed Public Sewer-Phase 1B & 2 (Connection to WWTP 1, 2, or 3)

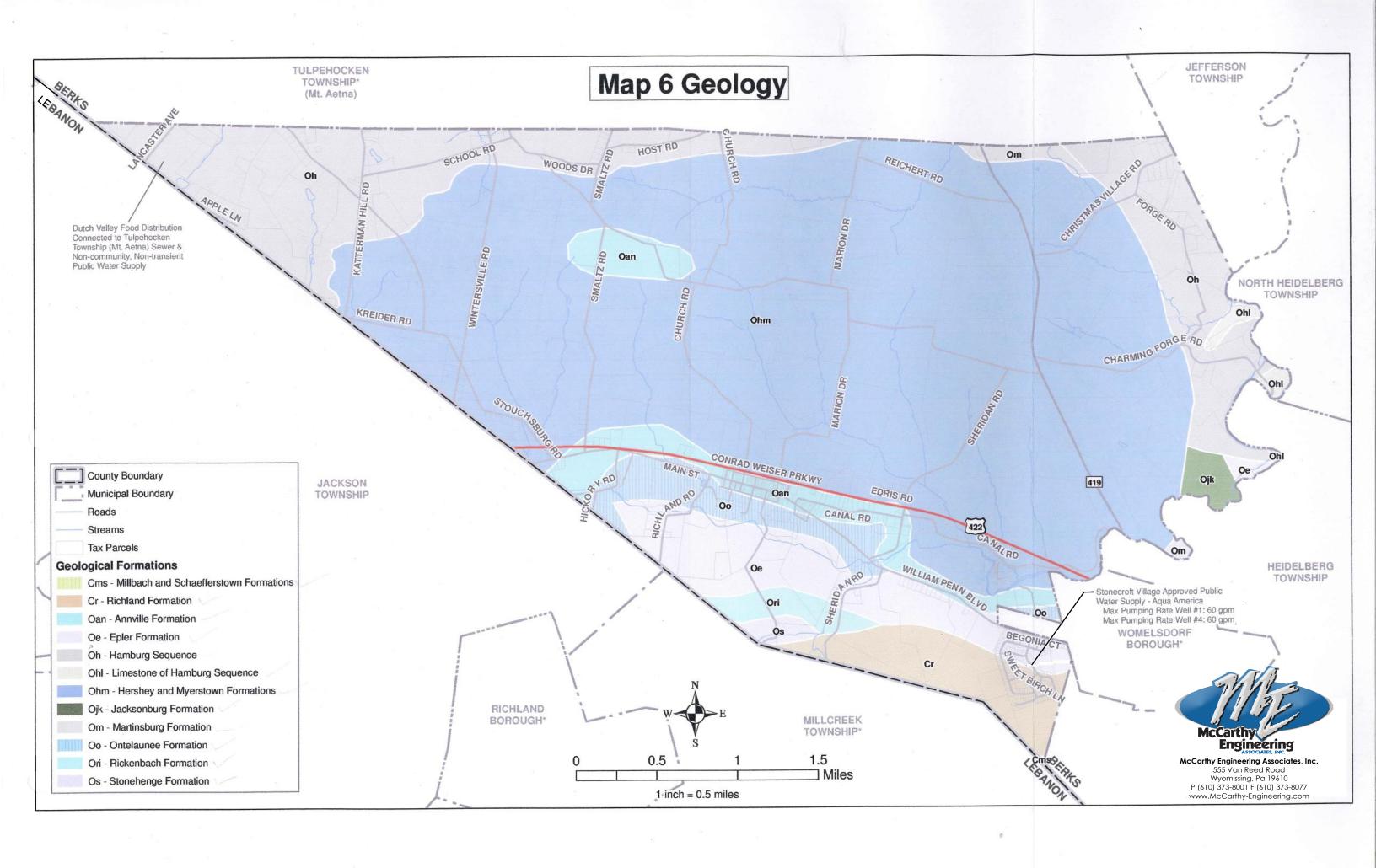


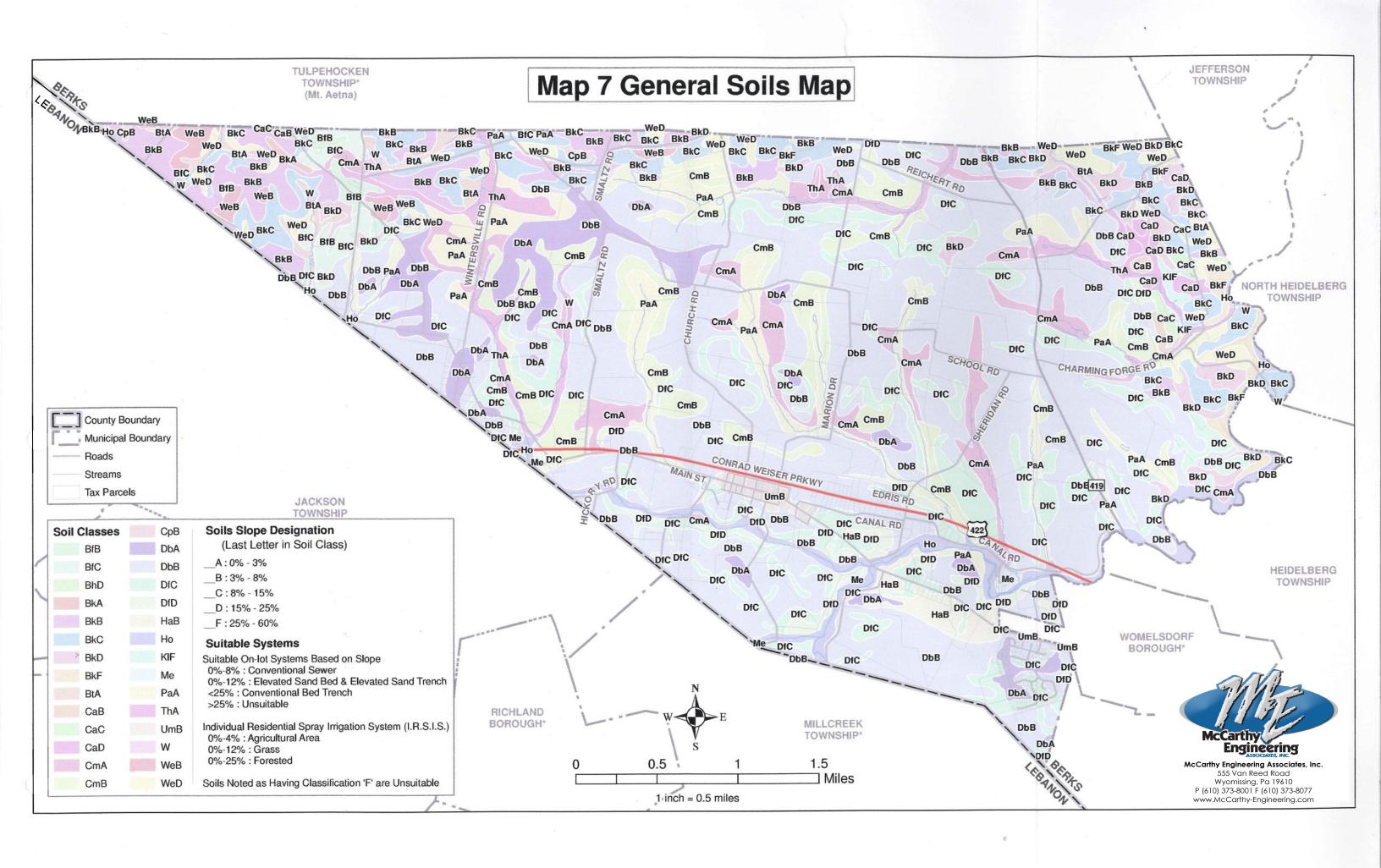


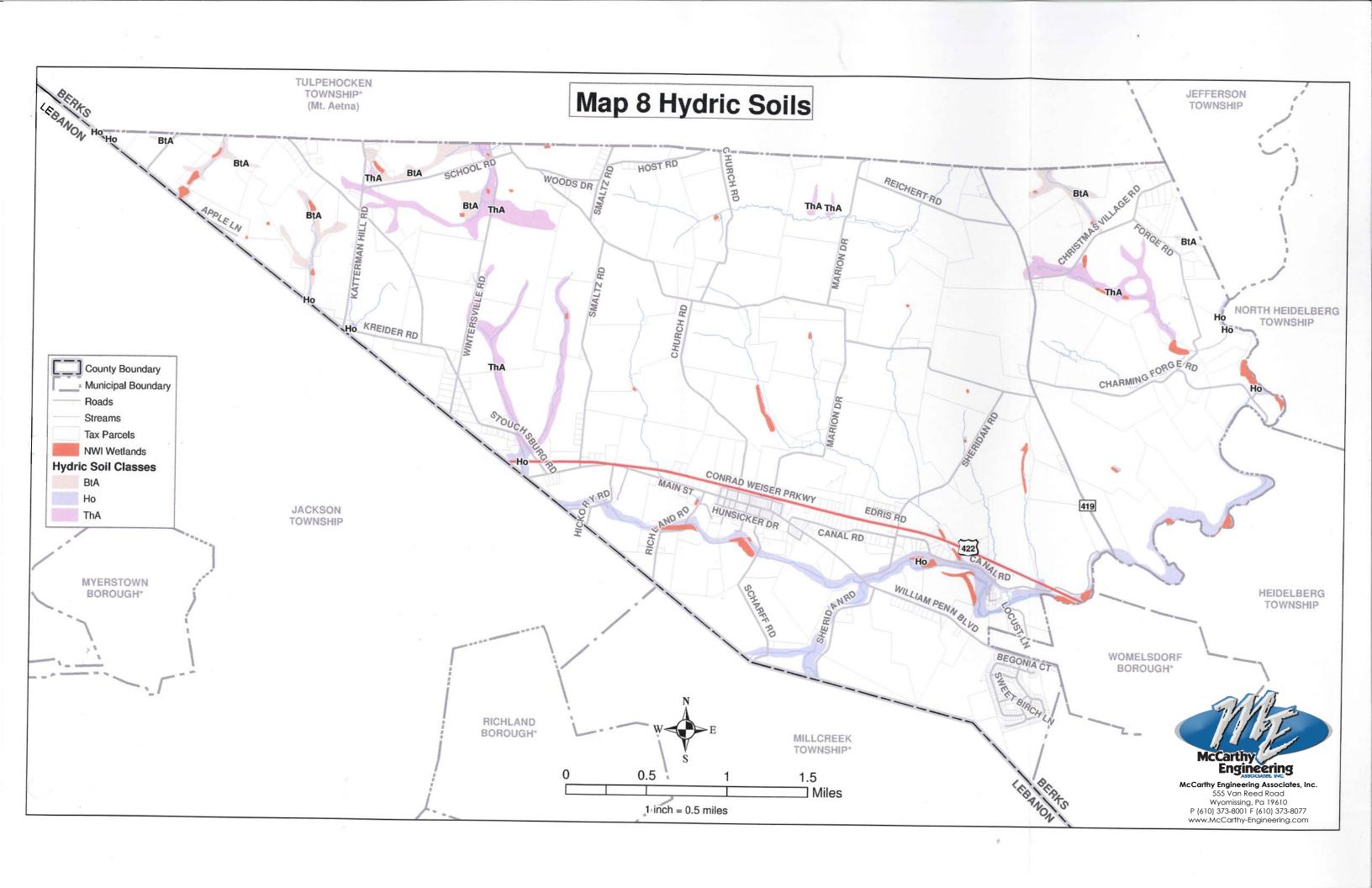


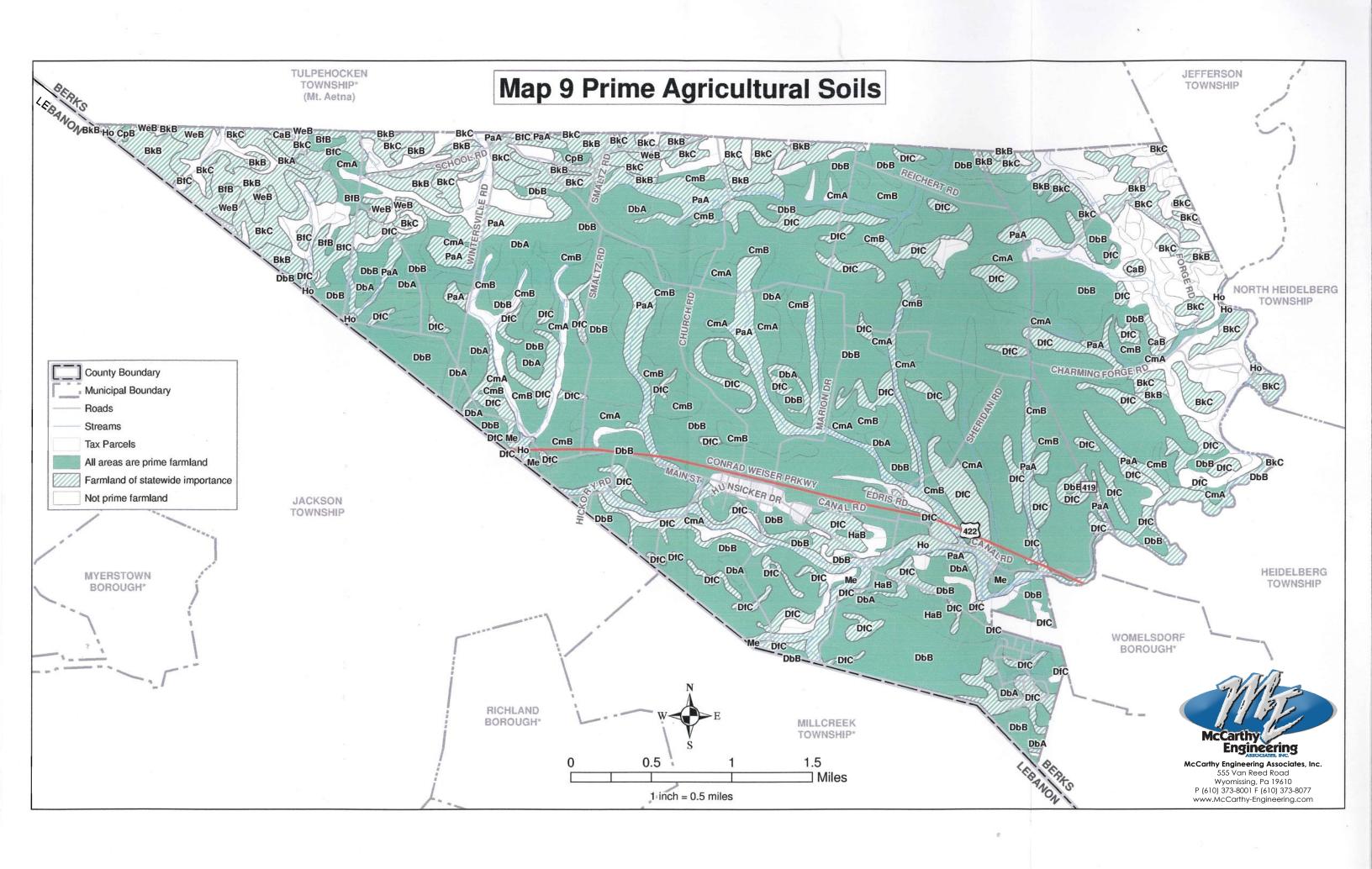


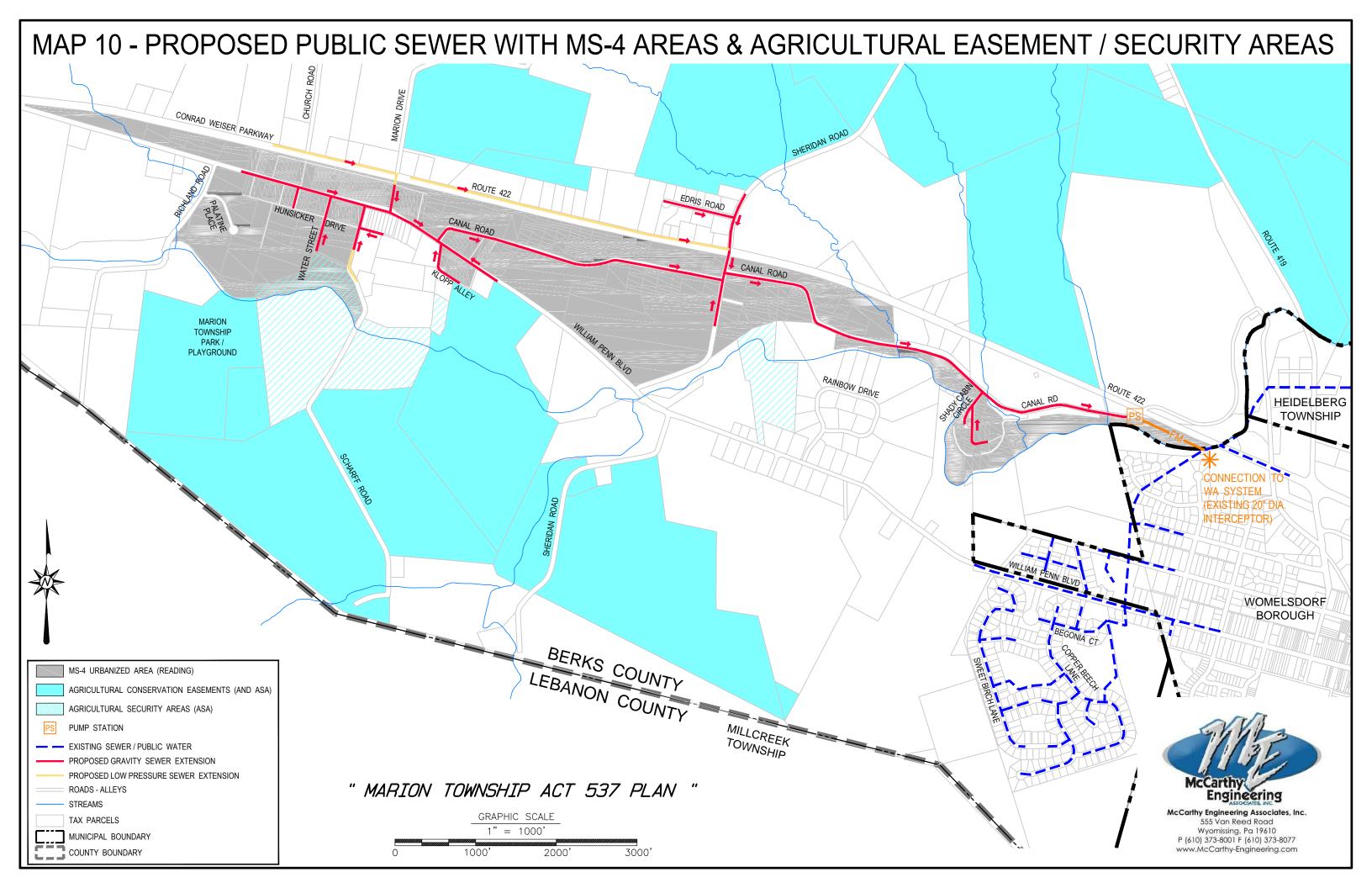


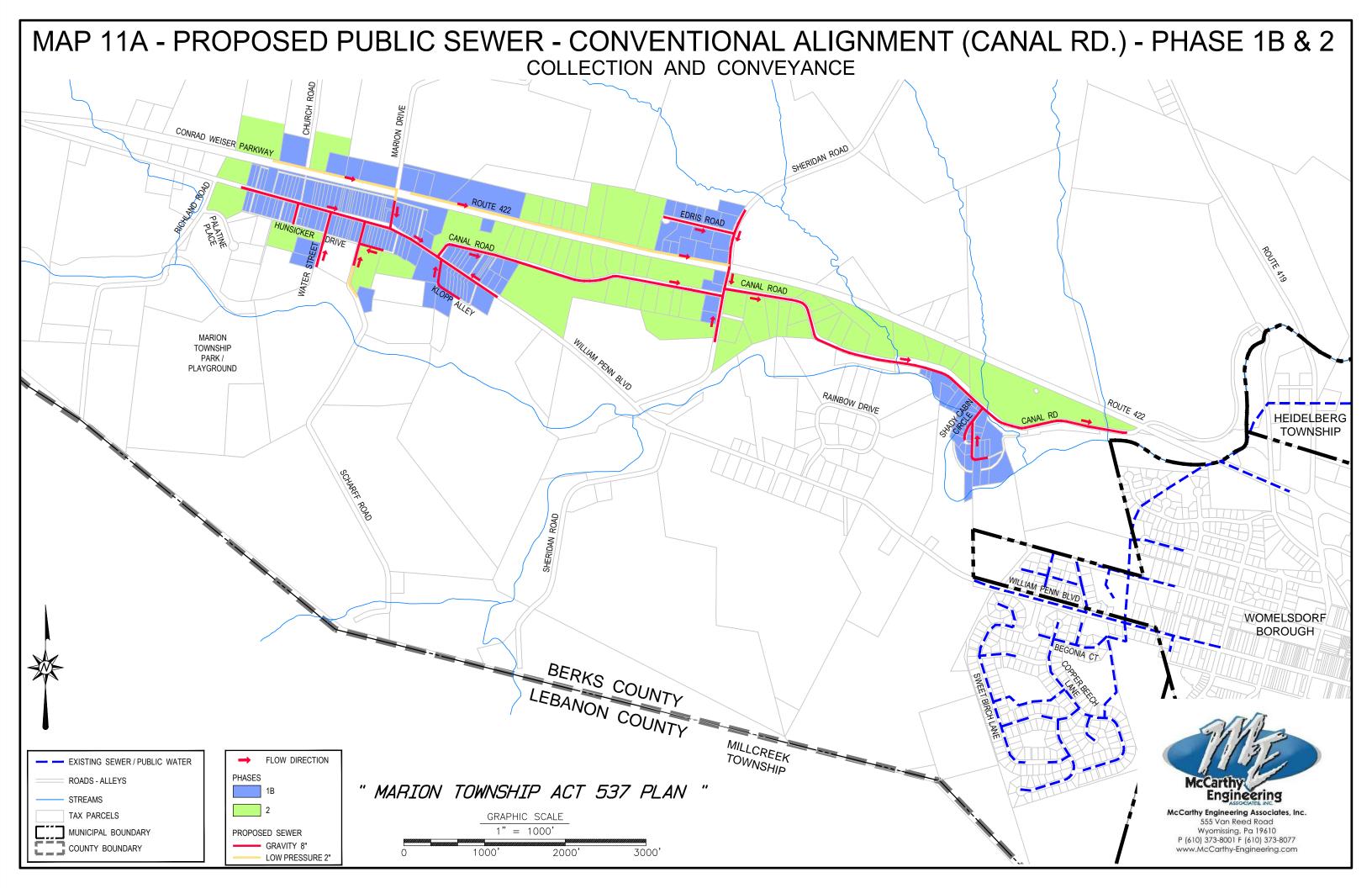


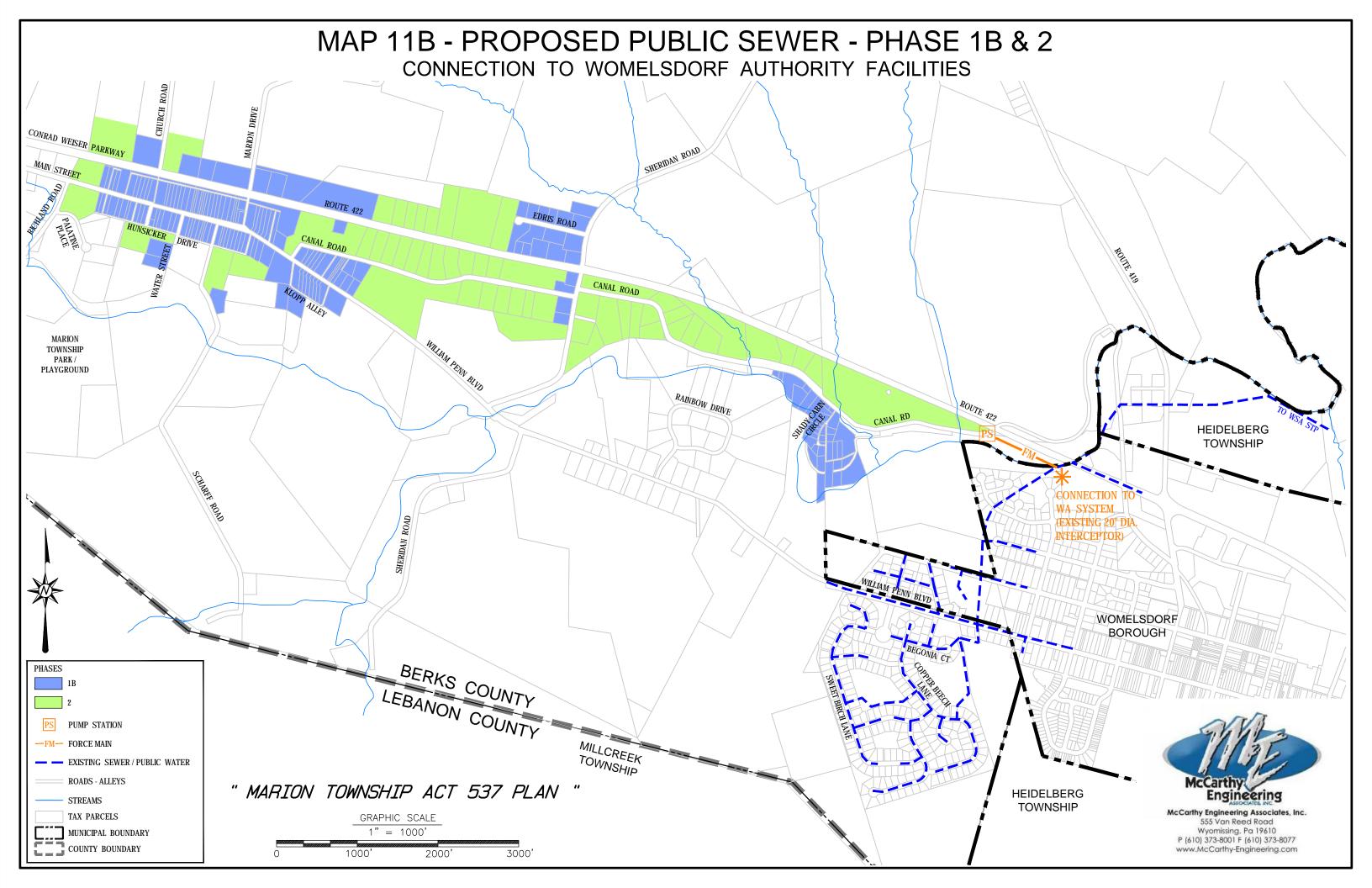


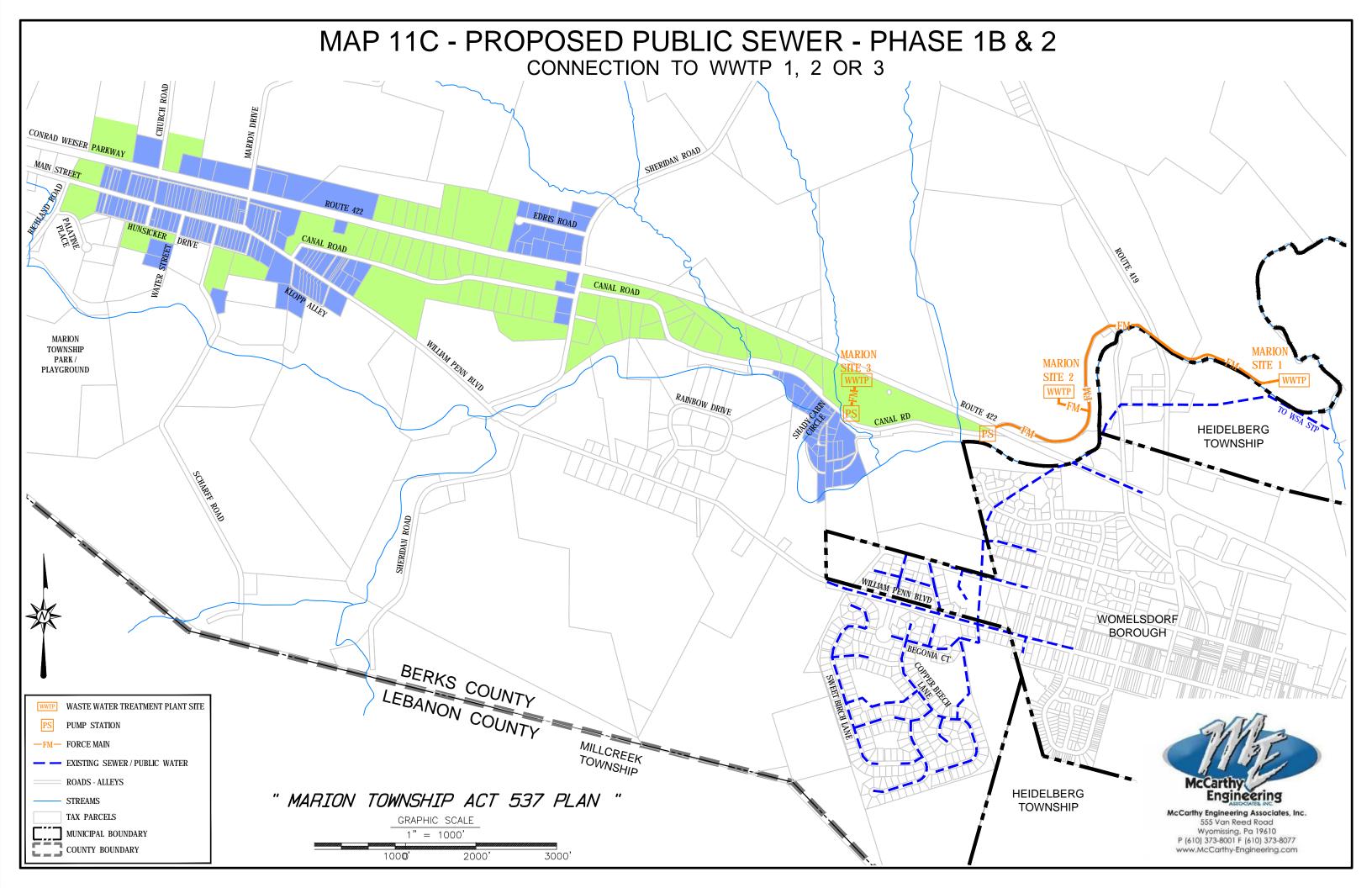














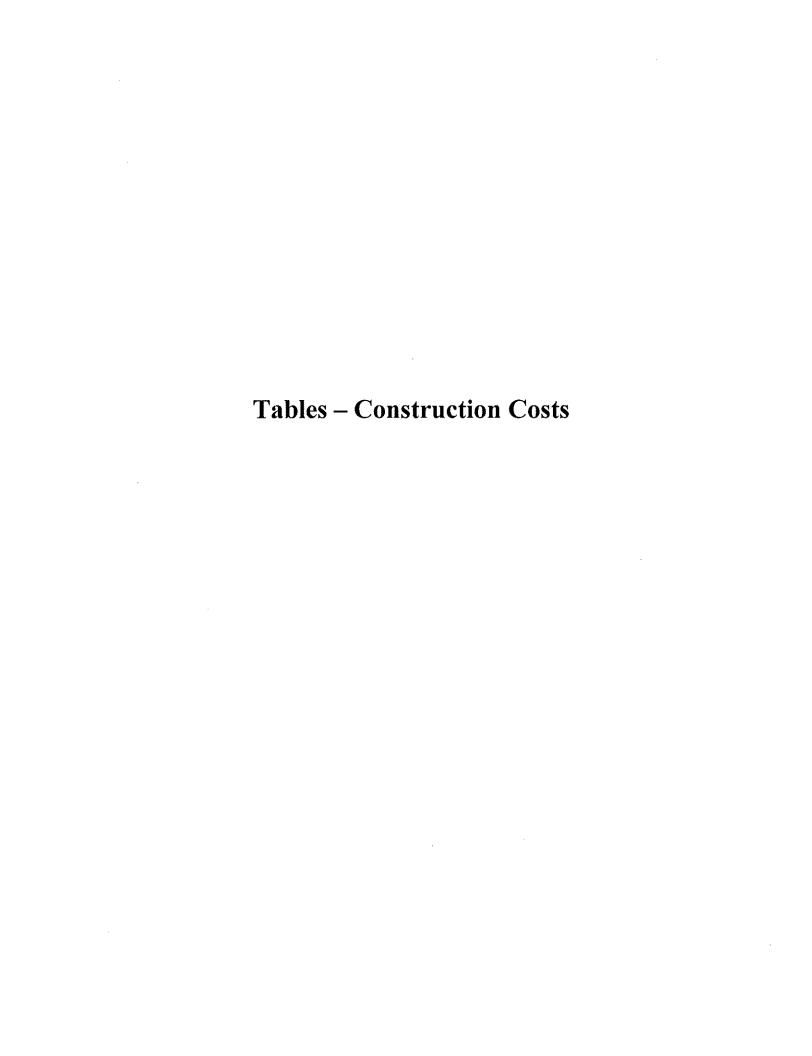




TABLE 6-0
Preferred Alternative - Gravity and Low Pressure System - Womelsdorf Connection

\_\_\_\_\_\_

PROJECT: Marion Township Act 537 Sewer Plan Update Job No. 140022

CLIENT: Marion Township DATE: March 18, 2014

420 Water Street REV.: 02/2017 Womelsdorf, PA 19567 EST. BY: AEG

ITEM	DESCRIPTION	QUANT. UNIT	J	JNIT COST	COST
100	Gravity and Low Pressure System	1 LS	\$	2,453,175	\$ 2,453,175
101	Canal Road Pump Station	1 LS	\$	275,000	\$ 275,000
102	Womelsdorf Limited Plant Upgrade	1 LS	\$	470,000	\$ 470,000
			TC	TAL	 \$3,198,175

<sup>\*</sup> Unit Costs are in 2013 dollars

TABLE 6-1
Preferred Alternative - Gravity and Low Pressure System - Womelsdorf Connection (Detailed Analysis)

\_\_\_\_\_

PROJECT: Marion Township Act 537 Sewer Plan Update Job No. 140022

CLIENT: Marion Township DATE: March 18, 2014

420 Water Street REV.: 02/2017 Womelsdorf, PA 19567 EST. BY: AEG

ITEM	DESCRIPTION	QUANT. UNIT	UNIT COST	COST
100	SANITARY SEWER			
101	8" PVC (<10' depth)	13725 LF	35.00	\$480,375.00
102	8" PVC (10'-15' depth)	5100 LF	45.00	\$229,500.00
103	8" PVC (>15' depth)	1275 LF	55.00	\$70,125.00
104	2" PVC Pipe	5400 LF	20.00	\$108,000.00
105	1.5" PVC Pipe	450 LF	15.00	\$6,750.00
106	Precast Manhole (<12' depth)	44 EA	2500.00	\$110,000.00
107	Precast Manhole (>12' depth)	15 EA	3000.00	\$45,000.00
108	Stone backfill (Township)	4750 CY	15.00	\$71,250.00
109	Permanent roadway restoration (trench)	8500 SY	60.00	\$510,000.00
110	6" PVC laterals	18500 LF	33.00	\$610,500.00
111	Grinder Pump Unit	24 EA	4500.00	\$108,000.00
112	Boundary Valve	24 EA	200.00	\$4,800.00
113	Air Release Valves	3 EA	4000.00	\$12,000.00
114	Cleanouts / Flushing Stations	4 EA	1000.00	\$4,000.00
115	Flush/video lines	25500 LF	1.75	\$44,625.00
116	Testing	25500 LF	1.50	\$38,250.00
		ŗ	ГОТАL	\$2,453,175.00

<sup>\*</sup> Unit Costs are in 2013 dollars

### TABLE 6-2 Low Pressure System - Womelsdorf Connection

### ENGINEERING COST ESTIMATE

\_\_\_\_\_

PROJECT: Marion Township Act 537 Sewer Plan Update Job No. 140022

CLIENT: Marion Township DATE: March 18, 2014

420 Water Street REV.:

Womelsdorf, PA 19567 EST. BY: AEG

ITEM DESCRIPTION	QUANT. UNIT	UNIT COST	 COST
100 Low Pressure Sewer	1 LS	\$ 2,475,700	\$ 2,475,700
101 Womelsdorf Limited Plant Upgrade	1 LS	\$ 470,000	\$ 470,000
		TOTAL	 \$2,945,700

<sup>\*</sup> Unit Costs are in 2013 dollars

### TABLE 6-4 Summary - Present Worth Analysis of Treatment Alternatives

### ENGINEERING COST ESTIMATE

PROJECT: Marion Township Act 537 Sewer Plan Update

Job No. 140022

CLIENT: Marion Township

DATE: March 18, 2014

420 Water Street

REV.:

Womelsdorf, PA 19567

EST. BY: AEG

PLANT	EST. CAPITAL COST	EST. ANNUAL O & M COST	A	ORTH OF NNUAL M 6%, 20 YRS	TOTAL PRESENT WORTH IO LAND)
Extended Aeration Plant	\$ 1,633,900	\$ 216,897	\$	2,487,792	\$ 4,121,692
SBR	\$ 1,941,700	\$ 216,897	\$	2,487,792	\$ 4,429,492
Aerated Lagoon	\$ 1,928,900	\$ 216,547	\$	2,483,777	\$ 4,412,677

### TABLE 6-5 Present Worth Analysis - Packaged Extended Aeration Plant

### **ENGINEERING COST ESTIMATE**

PROJECT: Marion Township Act 537 Sewer Plan Update

Job No. 140022

CLIENT: Marion Township

DATE: March 18, 2014

\$1,633,900

420 Water Street

REV.:

Womelsdorf, PA 19567

EST. BY: AEG

TELEPHONE: (610) 589-2860

ITEM	DESCRIPTION	QUANT. UNIT	Į	UNIT COST		COST
100	Wastewater Treatment Plant					
101	Earthwork & Utilities	1 LS	\$	79,000	\$	79,000
102	Access Road	1 LS	\$	84,500	\$	84,500
103	Site Fence & Other Improvement	1 LS	\$	41,100	\$	41,100
104	140000 GPD Plant	1 LS	\$	1,320,000	\$	1,320,000
105	Outfall	1 LS	\$	15,800	\$	15,800
106	Conrol building	1 LS	\$	84,500	\$	84,500
107	Lawn Restoration	1 LS	\$	9,000	\$	9,000

**Total Estimated Construction Cost:** 

TABLE 6-6 Present Worth Analysis - Sequencing Batch Reactor (SBR) Plant

PROJECT: Marion Township Act 537 Sewer Plan Update

Job No. 140022

**CLIENT: Marion Township** 

DATE: March 18, 2014

420 Water Street

REV.:

Womelsdorf, PA 19567

EST. BY: AEG

TELEPHONE: (610) 589-2860

ITEM	DESCRIPTION	QUANT. UNIT	J	JNIT COST	COST
100	Wastewater Treatment Plant				
101	Earthwork & Utilities	1 LS	\$	110,700	\$ 110,700
102	Access Road	1 LS	\$	84,500	\$ 84,500
103	Site Fence & Other Improvement	1 LS	\$	51,700	\$ 51,700
104	140000 GPD Plant	1 LS	\$	1,475,000	\$ 1,475,000
105	Influent Pump Station	1 LS	\$	68,500	\$ 68,500
106	Outfall	1 LS	\$	36,900	\$ 36,900
107	Conrol building	1 LS	\$	105,400	\$ 105,400
108	Lawn Restoration	1 LS	\$	9,000	\$ 9,000

Total Estimated Construction Cost:

\$1,941,700

### TABLE 6-7 Present Worth Analysis - Aerated Lagoons Plant

### **ENGINEERING COST ESTIMATE**

\_\_\_\_\_

PROJECT: Marion Township Act 537 Sewer Plan Update

Job No. 140022

CLIENT: Marion Township

DATE: March 18, 2014

\$1,928,900

420 Water Street

REV.:

Womelsdorf, PA 19567

EST. BY: AEG

TELEPHONE: (610) 589-2860

ITEM	DESCRIPTION	QUANT, UNIT	U	NIT COST	COST
100	Wastewater Treatment Plant				
101	Earthwork & Utilities	1 LS	\$	896,000	\$ 896,000
102	Access Road	1 LS	\$	84,500	\$ 84,500
103	Site Fence & Other Improvement	1 LS	\$	79,000	\$ 79,000
104	140000 GPD Plant	1 LS	\$	685,000	\$ 685,000
105	Influent Pump Station	1 LS	\$	68,500	\$ 68,500
106	Outfall	1 LS	\$	36,900	\$ 36,900
107	Conrol building	1 LS	\$	63,200	\$ 63,200
108	Lawn Restoration	1 LS	\$	15,800	\$ 15,800

**Total Estimated Construction Cost:** 

TABLE 6-3
Low Pressure System - Womelsdorf Connection (Detailed Analysis)

\_\_\_\_\_

PROJECT: Marion Township Act 537 Sewer Plan Update Job No. 140022

CLIENT: Marion Township DATE: March 18, 2014

420 Water Street REV.:

Womelsdorf, PA 19567 EST. BY: AEG

ITEM	DESCRIPTION	QUANT. UNIT	UNIT COST	COST
100	SANITARY SEWER			
101	1.5" PVC Pipe	6350 LF	15.00	\$95,250.00
102	2" PVC Pipe	8860 LF	20.00	\$177,200.00
103	3" PVC Pipe	10290 LF	25.00	\$257,250.00
104	Grinder Pump Unit	185 EA	4500.00	\$832,500.00
105	Boundary Valve	185 EA	200.00	\$37,000.00
106	Air Release Valves	9 EA	4000.00	\$36,000.00
107	Cleanouts / Flushing Stations	18 EA	1000.00	\$18,000.00
108	Stone backfill (Township)	4750 CY	15.00	\$71,250.00
109	Permanent roadway restoration (trench)	8500 SY	60.00	\$510,000.00
110	1.5" PVC laterals	27750 LF	15.00	\$416,250.00
111	Additional 3" PVC to WSA connection	1000 LF	25.00	\$25,000.00
			TOTAL	\$2,475,700.00

<sup>\*</sup> Unit Costs are in 2013 dollars

### TABLE 6-8 Present Worth Analysis - Estimated O&M Costs

### ENGINEERING COST ESTIMATE

PROJECT: Marion Township Act 537 Sewer Plan Update

Job No. 140022

CLIENT: Marion Township

DATE: March 18, 2014

420 Water Street

REV.:

Womelsdorf, PA 19567

EST. BY: AEG

		PAG	CKAGE							PHA	SE 1B
	PLANT OPERATING	EX	TENDED	PA	CKAGE	ΑE	RATED	CON	VEYANCE	CON	VEYANCE
ITEM	COSTS	AEI	RATION	SB	R	LA	GOON	TO V	VSA	TO V	VSA
101	Electrical	\$	52,700	\$	52,700	\$	52,700				
102	Chemicals	\$	7,900	\$	7,900	\$	850				
103	Insurance	\$	837	\$	837	\$	837	\$	837	\$	837
104	Laboratory Analysis	\$	9,500	\$	9,500	\$	9,500	\$	9,500	\$	9,500
105	Operator Salary	\$	50,600	\$	50,600	\$	50,600	\$	16,900	\$	16,900
106	Secretary Salary	\$	11,600	\$	11,600	\$	11,600	\$	11,600	\$	11,600
107	Professional Services	\$	14,800	\$	14,800	\$	2,600				
108	Sludge Disposal	\$	28,500	\$	28,500	\$	47,400				
109	Maintenance	\$	31,600	\$	31,600	\$	31,600				
110	Telephone/ Internet	\$	6,360	\$	6,360	\$	6,360				
111	Misc. Supplies	\$	2,500	\$	2,500	\$	2,500				
112	Force main										
113	Treatment Surcharge										
114											
115	WSA O&M							\$	74,633	\$	74,633
	Total Annual O&M	\$	216,897	\$ :	216,897	\$	216,547	\$	113,470	\$	113,470

## User Rates and Funding Options for Preffered Alternative- Gravity & Low Pressure Sewer-WSA Connection \$7,000.00 connection fee **TABLE 7-1**

## ENGINEERING COST ESTIMATE

PROJECT: Marion Township Act 537 Sewer Plan Update Job No. 140022

REV.: 02/2017

DATE: March 18, 2014

EST. BY: AEG

CLIENT: Marion Township

420 Water Street

Womelsdorf, PA 19567

					ITE
PENNVEST CAP Rates with No 5 Grants	PENNVEST 30 Year with \$250k 4 Grant	40 Year 3.25% RUS Loan and 3 45% Grant	40 Year 3.25% 2 RUS Loan	Conventional Bond with Max. Typical 1 Grant	FUNDING ITEM ALTERNATIVES
185	185	185	185	185	EST. PROJI EDU'S COST
\$4,970,000 \$113,470 \$7,000		\$4,970,000	\$4,970,000	\$4,970,000	EST. PROJECT COST
\$113,470	\$113,470	\$113,470	\$113,470	\$113,470	EST. ANNUAL O&M COSTS
\$ 7,000	\$ 7,000	\$ 7,000	\$ 7,000	\$7,000	TAPPING
<del>€</del>	\$4,970,000 \$113,470 \$7,000 \$ 250,000	\$2,236,500	<b>⇔</b>	\$ 750,000	GRANTS
2.57%	1.00%	3.25%	3.25%	5.25%	INTEREST TERM RATES (YEAR
30	30	40	40	30	TERM (YEARS)
\$3,675,000	\$3,425,000	\$1,438,500	\$3,675,000	\$2,925,000	TERM AMOUNT (YEARS) FINANCED
,000 \$177,226 \$ 958	,000 \$132,712 \$ 717	,500 \$ 64,773 \$	\$165,478	\$195,732 \$ 1,058	ANNUAL DEBT SERVICE
↔	↔	<del>∨</del>	↔	<del>\$</del>	ANN DEB SER PER
958	717	350	894	,058	ANNUAL DEBT ANN SERVICE O&N PER EDU EDU
<b>↔</b>	<b>↔</b>	↔	↔	<del>\$</del>	ANN O&N EDU
613	613	613	613	613	UAL 1 PER
613 \$ 1,571 \$130.94	613 \$ 1,331 \$110.89	\$ 963	\$ 1,508	\$ 1,671	ANNUAL  DEBT ANNUAL ANNUAL PER EDU  SERVICE O&M PER COST PER PER EDU EDU PER EDU MONTH
\$130.94	\$110.89	\$ 80.29	\$125.65	\$139.28	COST PER EDU PER MONTH

## User Rates and Funding Options for Preffered Alternative- Gravity & Low Pressure Sewer-WSA Connection \$9,000.00 connection fee **TABLE 7-2**

### ENGINEERING COST ESTIMATE

PROJECT: Marion Township Act 537 Sewer Plan Update Job No. 140022

CLIENT: Marion Township

420 Water Street

Womelsdorf, PA 19567

REV:: 02/2017 EST. BY: AEG

DATE: March 18, 2014

S	4	ω	2	<u></u>	
PENNVEST CAP Rates with No Grants	PENNVEST 30 Year with \$250k 4 Grant	40 Year 3.25% RUS Loan and 45% Grant	40 Year 3.25% RUS Loan	Conventional Bond with Max. Typical Grant	FUNDING ITEM ALTERNATIVES
185	185	185	185	185	EST. PROJI EDU'S COST
\$4,970,000 \$113,470 \$ 9,000	\$ 4,970,000 \$113,470 \$ 9,000 \$ 250,000	\$ 4,970,000	\$ 4,970,000	\$ 4,970,000	EST. PROJECT COST
\$113,470	\$113,470	\$113,470	\$113,470	\$113,470	EST. ANNUAL O&M COSTS
\$ 9,000	\$ 9,000	\$ 9,000	\$113,470 \$ 9,000	\$ 9,000	TAPPING FEE
<del>\$</del>	\$ 250,000	\$ 2,236,500	<del>€</del>	\$ 750,000	GRANTS
2.57%	1.00%	3.25%	3.25%	5.25%	INTEREST RATES
30	30	40	40	30	TERM (YEARS)
\$ 3,305,000	\$ 3,055,000	\$ 1,068,500	\$ 3,305,000	\$ 2,555,000	TERM AMOUNT (YEARS) FINANCED
3,305,000 \$159,383	3,055,000 \$118,375	\$ 48,112	\$ 148,817	\$ 170,973	ANNUAL DEBT SERVICE
<del>♦</del>	↔	↔	↔	↔	ANNUAL DEBT SERVICE PER EDU
862	640	260	804	924	UAL TICE
<del>⊗</del>	<del>♦</del>	↔	€	↔	ANNI O&M EDU
613	613	613	613	613	UAL [PER
613 \$ 1,475 \$122.91	613 \$ 1,253 \$104.43	\$ 873	\$ 1,418	\$ 1,538	ANNUAL ANNUAL PER EDU O&M PER COST PER EDU PER EDU MONTH
\$122.91	\$104.43	\$ 72.78	\$118.15	\$128.13	COST PER EDU PER MONTH

## User Rates and Funding Options for Preffered Alternative- Gravity & Low Pressure Sewer-WSA Connection \$12,000.00 connection fee **TABLE 7-3**

## ENGINEERING COST ESTIMATE

PROJECT: Marion Township Act 537 Sewer Plan Update Job No. 140022

DATE: March 18, 2014

REV:: 02/2017 EST. BY: AEG

CLIENT: Marion Township

420 Water Street Womelsdorf, PA 19567

Womelsdorf, PA 19567 TELEPHONE: (610) 589-2860

ITEM ALTERNATIVES FUNDING EDU'S COST EST. PROJECT ANNUAL O&M COSTS TAPPING **GRANTS** INTEREST TERM AMOUNT RATES (YEARS) FINANCED (YEARS) FINANCED ANNUAL DEBT SERVICE ANNUAL DEBT SERVICE PER EDU ANNUAL ANNUAL PER EDU O&M PER COST PER PER EDU MONTH

O1	4	ω	2	<b>-</b>
PENNVEST CAP Rates with No 5 Grants	PENNVEST 30 Year with \$250k 4 Grant	40 Year 3.25% RUS Loan and 3 45% Grant	40 Year 3.25% 2 RUS Loan	Conventional Bond with Max. Typical Grant
185	185	185	185	185
\$4,970,000 \$ 113,470 \$ 12,000 \$	\$4,970,000 \$ 113,470 \$ 12,000 \$ 250,000	\$4,970,000 \$ 113,470 \$ 12,000 \$ 2,236,500	185 \$4,970,000 \$ 113,470 \$ 12,000	\$4,970,000 \$ 113,470 \$ 12,000 \$ 750,000
\$ 113,470	\$ 113,470	\$ 113,470	\$ 113,470	\$ 113,470
\$ 12,000	\$ 12,000	\$ 12,000		\$ 12,000
<del></del>	<del>\$</del>	\$ 2,2	↔	<del>\$</del>
1	250,000	236,500	1	
2.57%	1.00%	3.25%	3.25%	5.25%
30	30	40	40	30
\$ 2,750,000 \$ 132,618	\$2,500,000 \$ 96,870	\$ 513,500 \$ 23,122	\$ 2,750,000	\$2,000,000 \$ 133,834
<del>\$</del>	↔	↔	\$ 1	<del>\$</del>
32,618	96,870	23,122	\$ 123,827	33,834
<del>⇔</del>	€	€	€	<del>⇔</del>
717	524	125	669	723
↔	↔	↔	↔	<del>⊗</del>
613	613	613	613	613
\$ 1,330	\$ 1,137	\$ 738	613 \$ 1,283	\$ 613 \$ 1,337
717 \$ 613 \$ 1,330 \$110.85	\$ 613 \$ 1,137 \$ 94.75	738 \$ 61.53	\$106.89	\$111.40

Appendix B:
Sewage Needs

# APPENDIX B

SEWAGE NEEDS



ACT 537 SEWAGE FACILITES PLAN MARION TOWNSHIP, BERKS COUNTY

January, 2006

# CHECK OF BACKGROUND RECORDS

The Sewage Enforcement Officer Brian McFeaters was consulted regarding the Township's history of repairs and malfunctions. The SEO prepared a plot of the Township parcels indicating where permitted repairs were done. The records showed that a majority of the complaints and subsequent repairs were within the Stouchsburg Village area.

All the repairs were done in compliance with the Department's regulations Chapter 73. The repairs varied from damaged building sewers, replacement beds and bed rehabilitation. Due to the lot sizes within the Village of Stouchsburg the nature of the many of the repairs were "Best Technical Guidance" type of activity even though some of the repairs were implemented before the creation of the BTG term in the regulations.

Prior to the start of the "door to door "survey the Township adopted a Holding Tank Ordinance in the event the "door to door" survey found malfunctions which would require repair. The Holding Tank Ordinance is attached in Appendix D1.

The records indicate that repairs have been successful in most cases. Only one system

is the only reported confirmed malfunction herein and is within the Townships Highway Commercial district. It is a restaurant. The site's water use is associated with preparation of food for retail and the washing of eating and cooking utensils.

with disposal bed problem is being managed under a pump and report program. This site

The SEO records indicate very little activity that would be associated with wastewater other than domestic wastewater.

ACT 537 SEWAGE FACILITES PLAN MARION TOWNSHIP, BERKS COUNTY

January, 2006

# WATER SAMPLING NARRATIVE

During March 2003, a groundwater pollution event occurred that adversely affected some of the private wells in the Stouchsburg. The cause of the groundwater pollution was never officially determined. An investigation was conducted which included water samples from some of the wells. Numerous complaints were filed at the Township Office. Interviews with the landowners and the results of the samples concluded that the source of the pollution was manure spread on a farm field. The field was north of the Stouchsburg.

Apparently, the manure was spread on a snow-covered field. A subsequent rainfall caused the runoff to flow into a limestone solution channel. Within a matter of 6-12 hours, the contamination was detected in residences in Stouchsburg which is generally south of the farm site. The farm field was north of SR 422 and east of Marion Drive. Two of the wells sampled at the time of the incident were south of SR 422 and east of Marion Drive. The other two wells were north of SR 422 and west of Marion Drive, generally west of the farm site.

The Township Supervisors decided to implement a 537 Plan Update is response to the complaints from this incident. The "door to door" and water well survey began in January 2005 and randomly canvassed the existing dwellings and businesses throughout the Township.

Water supply wells in Stouchsburg and throughout Marion Township are private. Most are drilled but some dug and cisterns are still utilized in the in some dwellings in Stouchsburg. Two public wells are presently under construction by Aqua America for the Stonecroft Village development in the east Section of this evaluation. This development adjoins Wornelsdorf Borough. Wornelsdorf Borough has a public water system owned and operated by a local municipal water authority independent of the Aqua America water system for the Stonecroft Village development.

#### GROUNDWATER

March 2003 Incident Water Samples: (SEE APPENDIX C1)

TABLE I (Four Units Sampled)

North of SK 422	South of SR 422
Stouchsburg Nursery	Steve Sweigert
Michael Allgyer	Ed Frazer

ACT 537 SEWAGE FACILITES PLAN MARION TOWNSHIP, BERKS COUNTY

Jamuary, 2006

# 537 Plan Water Well Survey:

TABLE 2

TOTAL	SAMPLED	
	No.	Percent
180 units Stouchsburg Village Section (SVS)	53 Sampled	29 %
225 units sewer district (SVS & East)	64 Sampled	29 %
524 units in the Township	78 Sampled	15 %

#### SURFACE WATER:

Surface water was not sampled in this program. "Non attaining" sections of streams shown on Map 5 are not the caused by water quality impacts from sewage systems facilities within Marion Township; therefore, surface water samples were not taken, with the exception of one spring that is used as the water supply for a private dwelling.

ACT 537 SEWAGEFACILITES PLAN MARION TOWNSHIP, BERKS COUNTY

January, 2006

#### RESULTS

The determination of Sewage Disposal Needs considers three issues.

- A. Public Health Needs
  B. Water Pollution Needs
  C. Future Needs

#### A. Public Health Needs

The consideration of dwellings and facilities classified as

- A. Confirmed Malfunctions –
- B. Suspected Malfunctions –

C. Potential Malfunctions –

- observed and/or reported sewage system known, unresolved on-lot disposal system problems
- malfunction. conditions in the event of a future dwelling and lot do not render repairable groundwater quality is unsatisfactory for systems where water well survey indicates drinking water and/or where the existing problems from the door to door survey

SURVEY SOUTH	Village Section)	Cabins area-See	(excluding Shady	SURVEY EAST	WEST	NORTH AND	SURVEY	SECTION	VILLAGE	SURVEY	TOTAL SURVEYS	SEWER DISTIRCT	IN PROPOSED	EX.DWELLINGS	NUMBER OF					DESCRIPTION
. 2				ī			s			36								> 0 col/100mL	COLIFORMS	TOTAL
				-		•	0		:	14								> 0 col/100mL	COLIFORMS	TECAL.
3				-			-	-		37								> 5 mg/L	NITROGEN	NITRATE -
۰				-			_			×							600	_	AREA	ğ
3				2			7			63	75					MORE	ONE OR	EXCEEDING	DWELLINGS	TOTAL
6				2			=			77	88				≈ <b>2</b> 15				DWELLINGS	TATOI

				Chical Calo (mario
P.C	7	59	2	POTENTIAL
				MALFUCNTIONS
2		2		SUSPECTED
				MALFUNCTIONS
1	1		_	CONFIRMED
TOTAL	COMMERCIAL	RESIDENCES	AS SURVEYED	DESCRIPTION

ACT 537 SEWAGE FACILITES PLAN MARION TOWNSHIP, BERKS COUNTY

January, 2006

#### B. Water Pollution Needs

The Township will require water conservation measures be implemented by owners and users under an OLDS Ordinance. This will better managed water use in the Township and sewage disposal under the Department's Chapter 73 regulations. Water use by agricultural and industrial activities, is regulated by PA Act 220 when the 30-day average water use is greater than 10,000 gallons per day. The continued enforcement of the Department's sewage management and disposal regulations will provide for the protection of the groundwater and surface water.

The quality of the groundwater resources within Stouchsburg will improve with the elimination/abandonment of the individual on-lot disposal systems in the village. The concentration of coliform bacteria and nitrates will decrease. The degree of improvement of the groundwater quality is not only a function of the elimination of the on-lot sewage facilities within Stouchsburg but it is also related to the protection of the groundwater throughout Marion Township as a source of drinking water supply.

A majority of the surveyed properties have point of entry or point of use, water treatment equipment within the dwellings in order to provide potable water in the dwelling. These devices treat the well water for various conditions ranging from hardness to bacteria and nitrates. The use treatment equipment on individual wells is considered the best approach for the Townships water supply needs. The disposal of backwash and brine from treatments must be properly managed. This is best accomplished by the disposal of brine wastes into improved sewage facilities.

#### C. Future Needs

Future needs are considered to be required within the Township's <u>Community Core</u> (CC), <u>Highway Commercial</u> (HC), <u>Residential Moderate Density</u> (R2) and <u>Residential Low Density</u> (R1), if the lots in the R1 district are in the path of the improved sewage facilities for the other districts. Marion Township's commitment to the preservation of agricultural land will discourage the development and use of land in the other rural areas of the Township. Future sewage disposal needs, will only be required to extent that the existing land uses and zoning permit, and only to the extent that the groundwater supply in the Township can support all land uses within the Township. This will require that a groundwater conservation and protection ordinance be implemented as a means to preserve the groundwater supply for the existing dwellings and uses.

The future sewage disposal needs will most likely require construction and operation of improved public sewage facilities in the existing developed areas Preliminary considerations anticipate the future needs will best be served by

#### ACT 537 SEWAGE FACILITES PLAN MARION TOWNSHIP, BERKS COUNTY

January, 2006

public sewage interconnection with the Womelsdorf Borough Authority. Map No. 10 depicts this area as "Improved Development".

The Womelsdorf Authority was contacted due their geographical and topographical location with regard to the Marion Township facilities with existing sewage disposal needs. The Womelsdorf Authority reply is attached in Appendix B. They reported the capacity of their recently expanded wastewater treatment facility is allocated and unavailable for the use of the Marion Township dwellings and commercial establishments without a significant investment by the Marion community to expand the Womelsdorf wastewater treatment facilities. The joint determination of funding for planning, design and plant expansion must be carefully evaluated in regard to the 537 Plan update for Marion Township because the Marion community has limited resources for development. It is possible that the costs associated with the extension of sewers from the Womelsdorf Authority facilities will control the future sewage disposal needs in Marion Township.

Other adjoining municipal governments were contacted for the same even though their geographic and topographic positions were not as conducive to serve the future sewage disposal needs.



#### WATER QUALITY

2003 Well Problems

Sewage Needs Survey and Water Samples





www.analyticallob.com PA 22-293 NJ 77010 **NELAP Accredited** 





34 Dogwood Lanc - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1431

# Certificate of Analysis

March 17, 2003

Light Heigel & Assoc. Mr. Brian McFeaters

Lab ID#: 229684

Palmyra, PA 17078

Project Name: Marion Township Drinking Water Tests

#0d

This report relates only to the sample(s) as received by the laboratory. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

Qualifier Flags

iffer Flags - These flags may follow individual results for a specific analyte U - Indicates that the analyte was not detected
J - Indicates an estimated value between method detection limit and the practical quantitation limit for the analyte of the calibration range of the analysis
E - Indicates an estimated value oveside of the calibration range of the analysis
B - Indicates that the analyte was found in the method blank associated with the

result of ND indicates that the analyte was Not Detected at the Reporting Detection Limit (RDL). ALSI is a NELAC accredited laboratory. ALSI certifies that all applicable test results, meet the requirements of NELAC. For an inventory of our NELAC accreditations and Scope of Work please visit our website at www.analyticallab.com or contact your Project Manager at (717) 944-5541 for a complete listing. If you have any questions in reference to this laboratory report, please contact your ALSI project coordinator or the laboratory manager listed at the bottom of this report at 717-544-5541.

Note: This document is included as part of the Analytical Report and must be retained as a permanent record thereof.

03/22/03

03/15/03 13:22

EPA 524.2

J. Martrano Laboratory Manager



www.analyticallab.com NELAP Accredited P.A. 22-293 NJ 77010

34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-141

#### Certificate of Analysis March 17, 2003

Light Reigel & Assoc. 430 East Main Street Mr. Brian McFeaters Palmyra, PA 17078

Discard: 03/31/03 Page: 1 of 2

Acceived: 03/10/03 17:05

Lab ID #: 229684001

Mr. Brian McFeaters Prop Data 63/11/03 03/13/03 63/23/03 03/13/03 03/13/03 62/23/03 63/21/69 63/11/60 03/13/03 63/23/63 03/113/03 03/13/03 03/13/03 03/13/03 10/21/50 63/52/69 03/13/03 23/22/03 50/51/50 Drinking Water 03/11/03 14:53 22:61 60/61/60 03/13/03 13:22 03/13/03 13:22 03/13/03 13:22 03/13/03 13:22 03/13/03 13:22 03/13/03 13:22 03/13/03 13:22 22:51 50/51/50 בבינג כס/כנ/כס 03/13/03 13:22 03/13/03 13:22 03/13/03 13:22 22:E1 50/61/60 03/13/03 13:22 22:21 60/21/50 25/23/03 33:22 Completed .. FO#: Macrix: Collected by: EPA 524.2 SPA 524.2 EPA 524,2 EPA 365.4 SPA 524.2 EPA 524.2 EPA 524.2 EPA 524.2 EPA \$24.2 EPA 524.2 EPA 524.2 EPA 524.2 ZPA 524.2 EPA 524.2 EPA 524.2 EPA 524.2 EPA 524.2 EPR 524.2 EPA 524.2 Kethod Marion Township Drinking Water Tests 0.10 ğ 9.5 7/5a 7/60 1/50 T/6n 7/6n J/En 1/60 ę g Date Collected: 03/10/03 14:35 Sample ID: Tina Swedgart Project Name: trans-1,1-01chlorocthene cis-1,2-Dichloroethene 1,2,4-Trichlorobenzene 1.1.1.Trichlorocthane 1,1,2-Trichlorpethane Carbon Tetrachloride Phosphorus, Soluble 1, 2-Dichlorobenzene .. 4 -Dichlorobenzene Analysis Parameter 1, z-bichloropropane 1,2-bichloreethane 1,1-Dichlorocthene Mathylene Chloride VOLATILE ORGANICS Tetrachlorocthene Chlorobenzene HET CHCCHCOTRY Total Mylenes Ethylbenzene Benzone Toluene



,,,,,

F . F . C . T . A . C .

#### ANALYTICAL SERVICES, INC. LABORATORY

www.analyticallab.com NELAP Actredited PA 22-293 NJ 77010





www.analyticaliab.com



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

#### Certificate of Analysis March 17, 2003

Falmyra, FA 17078 430 East Main Street Mr. Brian McFeaters Light Heigel & Assoc.

> Lab ID #: 229684001 Received: 03/10/03 17:05

Discard: 03/31/03 Page: 2 of 2

PO#:

Project Name: Marion Township Drinking Water Tests

Committee of the control of the							į
Date Collected: 03/10/03 14:35	4:35			Collected k	Matrix: Drinking water Collected by: Mr. Brian McFeaters	McFeater:	
Analysis Parameter VOTITTIN OFFICENCY	Result	Cates	TOR	Nothod	Completed	Frep Date By	γ
Trichlormethene	ş	1/6n	0.5	KPA 524.2	03/13/03 13:22	03/13/03	4
Vinyl Chloride	¥	1/8n	8.0	EPA 524.2	03/13/03 13:22	£0/£1/£0	Ğ.
HICHORIOLOGY					. :		
Fecal Coliform	450	T TW001/100	F	SH18-9222 D	03/10/03 20:32 03/10/03	£0/01/60	<u> </u>
focal Coliform	>201 col/100ml	/100ml		SM18-9223	05/10/03 22:23	£0/01/£0	KBW .
g. coli	>201 col/100ml	/100ml		SM10-9223	03/10/03 22:23	03/10/03	Œ
Surrogates	Regult	Cateo	Recovery	ry Limito			
1.2-Dichlorobenzene-de	3.7	1/gu	74.41	(06.1 - 04)			
4 - Bromofluorobenzene	:	1/gu	92.24	(70 - 130)			

Methods for the analysis of volatile organics require that - the sample be preserved to a pK less than 2 using RCL. This - sample had a pK greater than 2 when received by the lab.

1. The method before the beautiful and the sample as received by the laboratory, and may only be reproduced in full.

Raymond J. Martrano Laboratory Manager



ANALYTICAL SERVICES, INC. LABORATORY

........

NELAP Accredited



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

#### Certificate of Analysis March 17, 2003

Mr. Brian McFeaters Light Heigel & Assoc. 430 East Main Street Palmyra, PA 17078

Received: 03/10/03 17:05 Lab ID #: 229684002 Discard: 03/31/03

Page: 1 Of 2

₽0#:

Date Collected: 03/10/03 14:52	Sample ID: Ed Frager	Project Name: Marion Township Drinking Water Tests
Collected by	мэстіх	Drinking Water Tests
 Collected by: Mr. Brian McFeaters	Matrix: Drinking Water	PO#:

							1
Analysis Parameter	Regult	Dates	7.0X	Method	Completed	Prop Date	À
WET CHEMISTRY		,	-				į
Phosphorus, Soluble	. มอ	1/5¢	0.10	EPA 365.4	55:41 00/11/60	03/11/03	2
VOLATILE ORGANICS				•		-	
Benzene	N	1/En	ů,	EPA 524.2	65:CT C0/CT/C0	03/13/03	i i
Carbon Tetrachloride	<b>5</b>	1/En	o. \$	EPA 524.2	65:CT, T0/ET/T0	03/13/03	Š
Chlorobeniene	O.S.	ug/L	5.0	EPA 524.2	03/13/03 13:59	Co/CT/CO	ų.
1.2-Dichlorobenzene	3	1/5n	9,0	EPA 524.2	02/11/00 13:59	03/13/03	G G G
1, 4-Dichlorobenzene	ă	1/6n	0.5	EPA 524.2	03/13/03 13:59	03/23/03	OK.
1,2-Dichloroethane	dN	1/gu	0.5	EPA 524.2	02/13/03 13:59	09/12/03	GK.
1,1-Dichlorocthene	9	1/bn	0.5	SPA 524.2	65:EI CO/EI/CO	03/13/03	CH.
cia-1,2-Dichloroethene	gk	1/En	2.0	EPA 524,2	65:E1 E0/E1/E0	03/13/03	QHP.
trans-1,2-0ichloroethene	ş	1/eu	0.5	EPA 524.2	03/13/03 13:59	20/23/03	GHC
1,2-0ichloropropane	ŧ	1/En	8.0	EPA 524.2	65:ET t0/ET/E0	03/13/03	GHC
Ethylbenzene	ğ	1/6n	0.5	EPA 524.2	05/13/03 13:59	03/13/03	GHG
Methylene Chioride	8	ug/t	0.5	EPA 524,2	02/13/03 13:59	50/11/60	QH.C
Styrene	ð	ug/t	٥.5	SPA 524.2	65:CI CO/CI/CO	03/13/03.	4
Tetrachlorosthene	Š	ug/ĭ	٥.٥	EPA 524.2	03/13/03 13:59	to/ft/to	d'HC
Toluene	<b>8</b>	1/ <b>E</b> n	0.5	EPA 524.2	03/13/03 13:59	CO/CT/CO	QKC
Total Xylenes	ŭ	17/En	۲. ت	EPA \$24.2	03/13/03 13:59	63/13/63	G G G
1,2,4-Trichlorobanzene	ğ	1/gu	o.5	EPA 524.2	03/13/03 13:59	£0/£1/£0	CHC
1,1,1-Trichlorosthane	ð	1/61	0.5	EPA 524.2	03/13/03 13:59	03/13/03	QHC
1, 1, 2-Trichloroethane	ð	1/6n	o in	EPA 524.2	63/11/67/11/60		



SERVICES, INC. "ABORATORY **UNALYTICAL** 

www.analyticaliab.com



NELAP Accredited
PA 22-293 NJ 77010

# Certificate of Analysis

March 17, 2003

Mr. Brian McFeaters Light Heigel & Assoc. 430 East Main Street Palmyra, PA 17078

Received: 03/10/03 17:05 Lab ID #: 229684002 Discard: 03/31/03

Page: 2 of 2

PO#:

Project Name: Marion Township Drinking Water Tests

Matrix: Drinking Water Collected by: Mr. Brian McFcaters Date Collected: 03/10/03 14:52 Sample ID: Ed Frazer

Analysis Perameter	Result	Ond to	305	Nethod	Completed	Prep Date, By	ř
VOLATILE ORGANICS (continued)					•	•	
Trichloroethene	ę	1/6n	3 5.0	EPA 524,2	GHC 60/61/60 63:61 60/61/60	63/13/03	ę
Vinyl chloride	Д	na/tr	2.0	EPA 524.2	GHC - c0/c1/c0 65:61 60/61/c0	CO/CT/CO	e e
		•					
HICROBIOLOGY		•		ı	•	•	
Fedal Coliform .	630	col/100mL 1		SM18-9222 D	03/10/03 20:36 03/10/03	03/10/03	MOX
Total Coliform 1	1001/100 TOTY	/100ml	is.	SM18 9223	03/110/03 22:22 03/110/03	63/10/03	Ð
E. Coli	>201 col/100ml	/100ml	ন	SMIB-923	03/10/01 22:23 03/10/03	E0/07/E0	30
Surrogates	Rooult	Unit to	Recovery	Linits			•
1,2-Dichlorobenzene-da	3.9	7/5n	78.33	(70 - 130)			
4-Bromofluorabenzene	4.2	7/fn	84.24	(70 - 130)			

Commenter

wethods for the analysis of volatile organics require that - the sample be preserved to a pX less than 2 using HZI, This - semple had a pK greater than 2 whom received by the lab.

intribute institutione maintenent enemain the demonstrate in the state of the state

Raymond J. Martrano Laboratory Manager de le



www.analyticallab.com

NELAP Accredited
PA 22-295 NJ 77010

34 Dogwood Lane - Middletown, PA 17057 Phone; 717-944-5541 Fax: 717-944-143

#### Certificate of Analysis March 17, 2003

Received: 03/10/03 17:05 Lab ID #: 229684003 Discard: 03/31/03 Page: 1 of 2 Light Heigel & Adsoc. 430 East Main Street Palmyra, PA 17078 Mr. Brian McFeaters

			İ	: Ka manaarran	Dy: Mr. Brian Mcreaters	. אכי פארפו	и
Analysis Parameter	Result	Unite	ğ	Method	Completed	Prep Date	Â
WEE CHEMISTRY							•
Phosphorus, Soluble	Ę.	.7/6u	0.30	EDA.365.4	63/13/03 14:53	03/11/03	35
VOLATILE ORGANICS		•					
Denzene	CIA!	7/5a	.0.	EPA 524.2	03/13/03 34:36	C0/11/60	Ē
Carbon Tetrachloride	ě	. 1/5a	6.5	EPA 524.2	03/13/03 14:36	50/52/60	٠, 5
Chlorobenzene	ģ	7/6n	5.0	EPA 524.2	£0/£1/50 -9£:*T £0/£1/50	50/51/50	ž
1,2-Dichlorobenzene	Q.	1/6a	0.5	EPA 524.2	03/13/03 14:36 03/13/03	03/13/03	ž
1.4-Dichlorobenzene	NO	7/6n	0.5	BPA 524.2	03/13/03 14:36	63/11/63	÷
1,2-Dichloroethane	ę,	7/5a	, 12	EPA 574.2	03/13/03 14:36	03/13/03	7
1,1-Dichlorocthene	QX	, 7/6a	0.5	EPA 524.2	פלישת בט/בת/בט	03/13/03	ř
cis-1,2-Dichlorocthons	ğ	7/6a	5.0	EPA 524.2	03/13/03 14:36	10/11/10	Ę
trans-1,2-Dichloroethene	ě	1/5n	ن. و	EPA 524.2	03/13/03 14:36	50/51/50	Ë
1,2-Dichloropropane	ě	T/6n	0.5	EPA 524.2	03/13/03 14:36	60/62/60	Ę
Ethylbenzene	ð	7/6n	0.5	EPA 524.2	03/13/03 14:36	10/22/20	Ę
Methylone Chloride	ę	7/8n	5.0	EPA 524.2	32:37 60/61/60	63/51/69	복
Styrene	ē	7/6n	0,5	EPA 524.2	03/13/03 14:36	60/61/60	Ē
Tetrachloroethene	Q.	7/60	0.5	EPA 524.2	03/13/03 14:36	63/23/03	ž
Tolugne	ğ	7/50	9-5	EPA 529.2	03/13/03 14:36	60/52/60	Ę
Total Xylenes	D	7/6n	۲. در	EPA 524.2	03/13/03 14:36	10/11/10	F
1.2,4-Trichlorobenzene	ę	1/6a	6.5	SPA 524.2	03/13/03 14:36	10/11/10	통
1,1,1-Trichloroethane	Q.	7/6a	٠, د	CPA 524.2	03/13/03 14:36	50/52/60	F
1,1:2-Trichlorosthane	ğ	- 1/6n	0.5	EPA 524.2	03/13/03 14:36	10/11/60	Ė



www.analyticallab.com PA 22-293 NJ 77010



34 Dogwood Lang - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

#### Certificate of Analysis

March 17, 2003

Mr. Brian McFeaters Light Heigel & Assoc. 430 East Main Street Palmyra, PA 17078

Lab ID #: 229684003

Received: 03/10/03 17:05 Discard: 03/31/03

Page: 2 Of 2

Project Name: Marion Township Drinking Water Tests

PO#:

Sample ID: Mike Alg Date Collected: 03/10/03	•			Matri Collected b	x: Drinking y: Mr. Brian		rs.
Analysis Parameter	Result	Units	EDL	Kethod	Completed	Prep Date	צמ
VOLATILE ORGANICS (continued)							
Trichloroethene	. ND	ug/L	0.5	EPA 524.2	03/13/03 14:36	03/13/03	JHD
Vinyl Chloride	ָ אים	ug/L	0.5	EPA 524.2	03/13/03 14:36	03/13/03	JHD
MICROBIOLOGY	-					,	
Total Coliform 1	- ND	col/loomL	2	SM18-9223	03/10/03 12:23	03/10/03	KDN
Fecal Coliform	מזא	col/100mL	100	SM18-9222 D_	03/10/03 20:47	03/10/03	XBM
E. Coli	ND	col/100ml	1	SM18-9223	03/10/03 22:23	03/10/03	KĐN
Surrogatos	Result	Unite	Recover	y Limita			
1.2-Dichlorobenzene-d4	3.9	ug/L	77.5%	(70 - 130)			
4-Promofluorobenzene	4.1	ug/L	82.84	(70 - 130)	•		

#### Commonts:

Methods for the analysis of volatile organics require that - the sample be preserved to a pH loss than 2 using MC1. This - sample had a pH greater than 2 when received by the lab.

Raymond J. Martrano Laboratory Manager



www.analyticallab.com **NELAP Accredited** PA 22-293 NJ 77010



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Fax: 717-944-1430

#### Certificate of Analysis

March 17, 2003

Mr. Brian McFeaters Light Heigel & Assoc. 430 East Main Street Palmyra, PA 17078

Methylene Chloride

Tecrachlorocthene

1,2,4-Trichlorobenzene

1.1.1-Trichlorocthane

1.1.2-Trichloroethane

Total Eylenes

Styrene

Toluene

Lab ID #: 229684004

Received: 03/10/03 17:05 Discard: 03/31/03

Page: 1 Of 2

03/12/03 12:14 03/12/03

03/12/03 12:14 03/12/03

03/12/03 12:14 03/12/03

03/12/03 12:14 03/12/03

03/12/03 12:14 03/12/03

03/12/03 12:14 03/12/03

03/12/03 12:14 03/12/03 JH

03/12/03 12:14 03/12/03 JH

Project Name: Marion Township Drinking Water Tests

ND

ND

ND

МĎ

ND

מא

ND

PO#:

Sample ID: Stouchsburg Mursery Matrix: Drinking Water Date Collected: 03/10/03 15:52 Collected by: Mr. Brian McFeaters Analysis Paramoter Kethod Completed Prop Date WET CHEMISTRY Phosphorus, Soluble NO 03/13/03 14:53 03/11/03 VOLUTTLE ORGANICS Benzene MD ug/L EPA 524,2 03/12/03 12:14 03/12/03 Carbon Tetrachloride ND ug/L CPA 524.2 03/12/03 12:14 03/12/03 31 Chlorobenzene ug/L 0.5 EPA 524.2 00/12/03 12:14 03/12/03 1,2-Dichlorchenzene ND ug/L 0.5. EPA 524.2 03/12/03 12:14 03/12/03 1,4-Dichlorobenzene MD ug/L EPA 524.2 03/12/03 12:14 03/12/03 1,2-Dichloroethane ND ug/L 0.5 EPA 524.2 03/12/03 12:14 03/12/03 1,1-Dichlorocthene ug/% ND 0.5 EPA 524.2 03/12/03 12:14 03/12/03 Cis-1,2-Dichloroethene ND ug/L EPA 524.2 03/12/03 12:14 03/12/03 trans-1,2-Dichloroethene ND ug/L 0.5 EFA 574.2 03/12/03 12:14 03/12/03 1,2-Dichloropropane ·ND ug/L 0.5 EPA 524.2 03/12/00 12:14 03/12/03 Ethylbenzene ND ug/‰ 03/12/03 12:14 03/12/03

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

0.5

0.5

1.5

0.5

EPA 524,2

EPA 524.2

EPA 524.2

**TPA 524.2** 

EPA 524.2

EPA 524.2

EPA 524.2

SPA 524.2

EPA 524.2

<sup>1 -</sup> This analysis indicates that the sample does not exceed the drinking water kind established by the USEPA for Total Coliform and is considered to be becampiopisally polable

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.





NELAP Accredited
PA 22-255 NJ 77010 мичи.алалусісанар.сол



34 Dogwood Lane - Middletown, PA 17057 Phone: 717-944-5541 Far: 777-944-1430

#### Certificate of Analysis March 17, 2003

Light Heigel & Assoc. 430 East Main Street Mr. Brian McFeaters Palmyra, PA 17078

Received: 03/10/03 17:05 Discard: 03/31/03 Lab ID #: 229684004

Page: 2 of 2

FO#:

Project Name: Marion Township Drinking Water Tests

Mr. Brian McFeaters Matrix: Drinking Water Collected by: Sample ID: Stouchaburg Mursery Date Collected: 03/10/03 15:52

Analysis farameter Volatile Orchance (continued)	Result	Onfes	Jax	Mothod	Completed	Prep Date	À
Trichlorocthene	ę	7/50	5.0	5PA 524.2	03/12/03 12:14	03/22/03	ğ
Vinyl Chloride	ğ	1/6n	5.0	EPA 524.2	03/12/03 12:14	63/21/69	eg.
MICHOBIOCOCK	· ·			-	( ) - ii		
Fecal Coliform	Q	col/100mL 100		SM18-9222 D	03/10/03 20:50	03/30/03-	NO.
Total Coliform '	>201 col/100ml	/100ml		SM1.6-9223	03/10/03 22:23	60/01/00	ž
E. Coli	-	col/100mL 1		SH18-9723	02/10/03 22:23	£0/01/E0	ě
Surrogates	Result	onits	ROCOVELY	Limita			
1.2-Dichlorobenzene-d4	4.4	7/6n	\$7.64	(70 - 130)			
4-Bromofluorobenzene	B. <b>1</b>	1/5n	\$6.2*	(70 - 130)			

Raymond J. Martrano Laboratory Manager



WATER LABORATORY 21st Century Science Pure-Tiest

#### Bater Analysis Report

Stouchsburg PA 19567 Ed Frazer 17 Main Street

Date Reported: 03/10/2003 Fax Number: Lab Number: 107399-01

Analyst

Collom bacteria ze a large grap ol bozanta Ital are used as an indicalor organism lo hofiche the potential for discase-cuusing bacteria to be presen in water. Coalid Bacteria occur frequently in private water systems, usually from comannination by surface runoli or from human or animal waters. Consuming water with collorm bacter Date Analyzed 03/08/2003 Sampled: 03/07/2003 08:15 Sampler: Maximum Contaminant Level 0 col100mL Source: Pump Tank Ed Frazer 17 Main Street Stouchsburg >200.5 col/100mL Bacteria - Total Coliform

present may cause gastraintestinal threstet, fores, and other fluitke symptoms. Results from coliform bacteria tests are norm colonies present per 100 millitiers (mL) of water. 0 cal/100mL >200.5 col/100mL Bacteria - E.coli

E. coil (short for Escherichia coli) is a more specific bacteria. This is a type of fecal collorm bacteria commonly found in the intestines This sample FAILS to meet state and federal standards for Safe Drinking Water. ted the water. E. coli can produce a po coll result is a strong indication that human sewage or animal waste has col

The May two Containing of Level (MCL) has being exposition by gate and federal authorises. The MCL is the Training out the most association of the second of the most region. Some parameters have no established MCL.

David N. Brubacker, Technical Directo

regions arrowed the director when the opening to UKEN and K condend participany composals. Xelates only to the sample as received by the laboratory, and may only be

manure. It rained on Thursday morning and with the ground being frozen. I believe the and as I continued it grew stronger. When I finished showering and stepped out of the shower to wash my hair. I noticed a different smell to the water when I started to shower work telephone number is 610-678-8051 Ext. 309. If you cannot get through redial and my water most of the day and change the filters and reshock the well this afternoon. My my water has improved but it is still discolored and still has an odor. I am going to run to empty the pollutants from the well. Matins also told me that as long as I had Oberholtzer, I called Martin's again and they told me to run my water a long time to try involved in privately owned wells etc. But said she would check with someone in his problem I called the D.E.P and spoke to Lyn who told me that the agency dose not get Frazier my next door neighbor on the west side of me-reported his water was also bad. manure just ran off and ended up in the ground water. It is now Friday at 5 p.m. when Ed manure on Wednesday morning because his pit was full and had no place to go with the tub I glanced at the toilet and noticed a discoloration in the water, so I flushed thinking ask the operator to page me. The distance hetween the 3 well heads is about 75 yds, apart. Prior to Ed telling me about smell and color of the water. I then called others in the area to see if they had a problem Changing the filters and shocking the well did nothing to improve the situation of the down to Canal Road and found the address to be that of Brian Habbecker (610-589-5891) and by now the water had an overwhelming smell of dung. I called Martin's Water ight was not taking care of the condition. I am writing this as of Sunday 3/9/03 8 a, m. fiscoloration and bad smell my water was not safe to use. This meant that the bacteria have the water tested for that substance. Agriculture if there were any regs. She told me to find out what the farmer spread and to 886-1957) I called John and explained my situation and he said that he was spreading of R.T. 422 and that the farmers name was John Oberboltzer of 596 Marion Drive (610-Doug Hoover (2 houses east of me 610-589-5455) had no problem but told me that on he same problem. I asked them where it was and they told me 916 Canal Road, I drove Conditioning on Friday morning 3/7/03 they had told me that there was another report of hat it was possibly lettover from the previous use. When the bowl refilled the color was then proceeded to Martin's and purchased new filters and chlorine to shock my well ed, morning be saw that liquid manure was being spread on the field on the other side On the morning of 3/6/03 I took my shower at 5 am with no problem with my It was a greenish brown. I went down stairs and decided to wash the dishes This conversation was prior to the one with

Light, Height 1 MULOC 229684 34 Dogwood Lane Middletown, PA 17057 TEL: 717-944-5541 FAX: 717-944-1430 CHAIN OF CUSTODY/ COC#: REQUEST FOR ANALYSIS Please print. See back of COC for directions Sample Date: 103 524.2 VOC'S REG Client Name: MAKION TOWNShip WATER ST 616 COOLER TEMP: 4 705M COC SEAL INTACT: Contact: بر ق Y or N Phone #: TOTALL SHIPPING CARRIER Project Namel#: 365.41 0 GuotefPO#: TAT: Normal | 'Rush | 'sustance are appropriated SHIPPING NO: Date Required: Fax Results V or N #: 838-3820 XX None Nazsa طكمه NO OF CONTAMERS FOR ANALYSIS REQUESTED. TINA Sweiger į Ised hove to clekaning 2:52 huttu locutions -Ocutions not mater Ed Frazer 31.25 M.Ke Algyer 352 STOUCHS bing HUSCA Sampled by: Brian S. W 3-10-03 Received by: St. Am & ... Relinquished by: St. Am & ... Hill Hill Received by: 3-1.0-03 METHOD PROTOCOL: 5'1x " CFR136 🗆 3.10.0 DRINKING WATER 🗆 OTHER: <u>17:65</u> REPORTING REQUIREMENTS: PADER [ Relinquished by:

18/18

Š CUST

ALSI

17179442298

/17/2883 17:83

ACT 537 SEWAGE FACILITES PLAN MARION TOWNSHIP, BERKS COUNTY

January, 2006

# WATER QUALITY

2003 Well Problems

Sewage Needs Survey and Water Samples

DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND: T

 DOOR TO DOOR NEEDS SURVEY
 Munic: Marion Tous Co.: Becks Study Area: Date: 3 / 10 / 05
A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  (CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)
NAME: There & The Surject STREET: 53 Man St. CITY: World for ZIP: 19567 PHONE # 3845 5733 OWNER OR RENTER? NUMBER OF RESIDENTS: What third of The survey down have for ITS CORDINGS OF RESIDENTS:
ISIO (A)
Any contamination (Y) N What (TC, FC, N, etc.)
How large is your lot? 1/3.24. No. of dwelling units? / One or more sewage systems? / COMMERCIACRESIDENTIALS
 What kind of sewage system of you have? (CIRCLE ALL-THAT APPLY)  SEPTIC TANK  INGROUND BED  CESSPOOL  INGROUND TRENCH  STORM SEWER  OLD WELL  ELEVATED SAND MOUND PIPE TO DITCH
OTHER BORE HOLE PIPE TO SURFACE
Where does your laundry-and/or sink water go? (CIRCLE ALL THAT APPLY)  (_SEPTIC TANK_) INGROUND BED COMMUNITY SEWER  CESSPOOL INGROUND TRENCH STORM SEWER  OID WEIL EI EVA TEN SAND MOTHED TO DETECT TO THE STORM SEWER
How old is your system? Unkapun Was it permitted? Y/N When? Unkapun Have you every noticed any of the following near your ceptic system? GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS
OTHER OTHER DRAINS WASTEWATER BACKING INTO THE HOME
If you noticed any of the above, are they seasonal or year-round?
Have you ever had your system pumped out? (Y) N How often? 120. 37.5 Last time? 2/200/ If it was pumped, was it inspected for cracks or broken bassless (Y) N What part? Less (1) or place.
Has the system every been repaired(Y) N When? 2002By permit(Y) N What part? DEX.  TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED  COMMENTS:

DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND(Y) N

#### DOOR TO DOOR NEEDS SURVEY

7	
i i	
Speed a speed	
1750 145	
گ	
3	
3	

General weather conditions:

A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.

(CIRCLE OR FILLIN AS APPROPRIATE, ADD COMMENTS AS NEEDED)

NAME: [also SRILIN AS APPROPRIATE, ADD COMMENTS AS NEEDED)

ZIP. 14. 20 STOREST INC. STOREST CITY: STOREST S 47 Do you treat your water? (Y) N How? CL(WDISINFECTION, SOFTENER, ION, OTHER. Was the water ever tested? (Y) N When? | 9 8 8 Ady contamination: (Y) N What (TO, FC, M; etc.) How far is the well or spring from the drain field 135 ft. Is well UP/DOWNHILL No. of dwelling units? COMMERCIAL RESIDENTIALS How large is your lot? 45 × 225 One or more sewage systems?

COMMUNITY SEWER STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE Whatkind of sewage system of you have? (CIRCLE ALL THAT APPLY)

SEPTICT ANK
INGROUND BED
CESSEOOLOLD WELL
HOLDING TANK
BORE HOLE
PRIVY
BORE HOLE Section Section يدستهمك يمايا OTHER

COMMUNITY SEWER ELEVATED SAND MOUND - PIPE TO DITCH - SEEPAGE PIT - PIPE TO STEAM BORE HOLE - PIPE TO SURFACE Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)

SEPTIC TANK
CLESSEGOL
INGROUND TRENCH
OLD WELL
SEEPAGE PIT
HOLDING TANK
SEEPAGE PIT

57.55

Arbour

2

OTHER.

M. C. C. A.C. C. ve Ve Was it permitted? (V) N When? 1988 How old is your system? Line Level Low The Was it permitted? (\*\*) N. When? (\*\*) Was Have you every noticed any of the following near your septic system?

GREEN LUSH GRASS WEINESS ON SPONGY AREAS ODORS WATER PONDING OR SUFFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER LEVEL.

Has the system every been repaired? Y / W. When?
TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD; REPAIRED/REPLACED Last time? If it was pumped, was it in spected for cracks or broken baffles? Y / K. What part? Have you ever bad your system pumped out? Y / 🔊 How often?

If you noticed any of the above, are they seasonal or year-round?

do iwe have your permission to confirm this information by looking around  $\langle \vec{q}' 
angle$  in

COMMENTS

#### DOOR TO DOOR NEEDS SURVEY

The state was the result are intended to be treated by the state of the washer conditions: _(v. 168 And		 	
Z,	rsystem? 1980 Was it permitted Y proticed any of the following near your exptic system? REEN LUSH GRASS WETNESS OR SPONGY ATER PONDING OR SURFACING SYSTEM OV LUGGISH DRAINS WASTEWATER BACKING THER AND THER AND THE STATE AND TH	No. of dwelling units?  COMMERCIAL/RESIDEN  (You have? (CIRCLE-ALL/HAT APPLY)  (N'GROUND BED)  TOGROUND TRENCH  ELEVATED SAND MOUND  K SEEPAGE PT  BORE HOLE	c.: MARICS TOP CO.: BEPS CE. Study Area: ral weather conditions: (c. HEM)  vey is being conducted to determine if here are any sewage problems in this area. This is a study are intended to be used in evaluating the need for community wide solutions.  CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDE E: ER NEST 4BETT (1.455/4EE STREET: 92 o FT U/9  (ASC. PHONE #: (c. 10-156-42/1 OWNER OR RENTER! NUMBER kind of water system do you have: WELL'S SPRING? CISTERN? FUBLIC? OTHER have a well: Is it DUG or ORILLED? HOW DEEP? 385 (c. Cacady Y) N have a well: Is it DUG or ORILLED? OF A Lawell UPDODYNHILL UP aris to be well or Spring from the drain field 260 (c. 16 well UPDODYNHILL UP aris to be well or Spring from the drain field 260 (c. 16 well UPDODYNHILL UP a water ever water? Y) N When? LUV DISINFECTION, SOFTENER, ION, OTHER be water ever waters? Y (N)What (TC, FC, N, etc.)

do I/We have your permission to confirm this information by looking around (Y) n

. !

Munic: Marcea Action Co. Marcea Grand State Date: Date: 16.16.15.  General are intended to be used in evaluating the need for community wide solutions.  (GROIN OF FILL IN AS APPROPRIATE, ADD COMMENTS AS INEEDED OF THE ACTION FOR THE ACTION OF THE ACTION
LACED DRAIN FIELD: REPAIRED/REF
1 😾

736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

#### Water Miralysis Keport

430 E Main Street Palmyra PA 17078 Light-Heigel & Associates Inc

> Date Reported: 01/20/2005 Phone Number: 717-838-1351 \_3b Number: 124466

Maximum Contaminant Level Date Analyzed Analyst Sampless after Ketter 윰 믉 돩 로 low old is your system?

A CASE

LAVE YOU every noticed any of the following near your septic system?

GREEN LUSH GRASS WEINESS OR SPONGY AREAS ODORS

WATER PONDING OR SURFACING SYSTEM OVERFLOW

WASTEWATER BACKING INTO THE HOME Vhere does your laundry and/or sink water go? ICIBCLE ALL THAT APPLY)

(SEPTIC TANK)

(INGROUND BED)

(CESSPOOL

INGROUND TRENCH

STORY

CESSPOOL

STORY

CESSPOOL

CESPOOL

CESSPOOL

CES What kind of sewage system of you have? (CIRCLE ALL THAT APPLY) Was the water ever tested? Y (N)When?
Any contamination? Y (N) What (TC, FC, N, etc.) One or more sewage systems? How large is your lot? o I/we have your permission to confirm this information by looking around (y) n as the system every been repaired? Y (N) When?

ANK REPAIRED/REPLACED: LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED Do you treat your water? Y' (NHow? CL/UV DISINFECTION, SOFTENER, ION, OTHER How far is the well or spring from the drain field 7/00 ft. Is well UP/DOWNHILL /6/10 If you have a well: Is it DUG or DRILLEDY HOW DEEP? without Cased? (F) N What kind of water system do you have WELL'S SPRING? CISTERN? PUBLIC? OTHER? it was pumped, was it inspected for cracks or broken baffles? Y / N What part? ave you ever had your system pumped out? Y (N) How often? the results are intended to be used in evaluating the need for community wide solutions. you noticed any of the above, are they seasonal or year-round? NAME: A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and General weather conditions: Munica 17067/PHONE #: 933-8528 Marion Mary Goonan PRIVY OTHER. HOLDING TANK OLD WELL HOLDING TANK PRIVY OTHER OLD WELL (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED)
TOO 747 STREET: 516 Soucks buy Read CIT Township con Krecks das BORE HOLE SEEPAGE PIT ELEVATED SAND MOUND BORE HOLE ELEVATED SAND MOUND SEEPAGE PIT NGROUND BED ') DOOR TO DOOR NEEDS SURVEY No. of dwelling units?
COMMERCIAL RESIDENTIALS OWNER OR RENTER? NUMBER OF RESIDENTS: \_Study Area: PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE STORM SEWER COMMUNITY SEWER COMMUNITY SEWER ODORS 1/27 C Last time? 1985 Read CITY: Myestown unknown Date: 1/2105

This sample was collected by an authorized sampler.

causes severe liness and even death.

E. coli (short for Escherichia coli) is a more specific boctera. This is a type of focal collorin boctoria commonly found in the intestines of animals and humans.

A positive E. coli result is a strong indication that human sewage or primal waste has contaminated the water. E. coli can produce a powerful touth that

0 cal/100mL

01/12/2005

Coliform bacteria are a large group of bacteria that are used as an indicator organism to indicate the potential for decase-causing bacteria to be present in water. Coliform bacteria occur feequently in private water systems, assually from contamination by surface out-off or form human or an incil wastes. Consuming water with coliform bacteria present may cross agrantionestical inference, lever, and other fluides symptoms. Results from coliform bacteria tests are normally expressed as the number of bacteria colonies present per 100 millifiers (nit.) of water.

Booleria - Elook

0 col(100m)

Nitrato Mitrogen Sacteria - Fecal Collicum

124466-01 Source: Marvin Boover 540 Sheridan Road Womelsdorf

Pass/Fail

Sampled: 01/10/2005

01/12/2005

01/12/2005

0 col/100mL

1.95 ang/L

Pacteria - Total Collegn

baby disease) when consuming water with high nitrates.

0 col/100mL

0 col/100mL

01/12/2005

Nitrate in devising water usually originates from fertilizate or from animal or human wastes. Nitrate affects the most sensitive individuals in the population (enlants under 6 months of age and a small component of the eduit population with abnormal stomach enzymes). They are prone to methemoglobinsmia (blue

285

10,4 mg/L 0 col/100mL

Fecal colitorm bacteria are specific to the intestinal tracts of warm-blooded animals and are thus a more specific lest for sowage or animal wasta

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL

Page 1

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Pure-Test Water Lab 736 East Lincoln Avenue Mycrstown, PA 77067 717-866-2234

#### Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 124545 Date Reported: 01/20/2005 Phone Number: 717-838-1351

Analyte	Result	Pass/Fail	Pass/Fail Muximum Contaminant Level Date Analyzed Analyst	Date Analyzed	Analyst	
124545-04 Source: M Gooman #5 544 Stouchaburg Road Alyerstown raw well cample	#5 5*4 Stouchsburg Road #	yerstown raw well cample	Sampled: 01/12/2005	Samplen Willia Kerier	دررد	
Bactetto - Fecal Coliforn	O col/100mL	Pass	0 col/100mL	01/14/2005	e G	
Fecal coliform bacteria are specific to the intestinal trads of warm-blooded animals and are thus a more specific its! for sowage or animal waste	o the intestinal tracts of warm-blood	ed animals and are thus a move spac	ific test for sewage or animal wasta			
Mitrale-Mitrogen	1,0m. t>	Pass 10.4 mg/L	10.4 ng/L	01/14/2005	윤	
Nitrate in drinking water usually origin	nates from fertilizers or from animal	or human wastes. Nitrate affects the	Ilrate in driving water usually originates from lentifizers or from animal or human wastes. Nitrate affects the most sensitive brollwidges from fentifizers or from animal or human wastes. Nitrate affects the most sensitive brollwidges from formal properties.			
(infants under 6 months of age and a	a small component of the adult popu	Jiation with abnormal slomach enzym	finants under 6 manths of age and a small component of the adult population with abnormal slomach enzymes). They are prone to methemoglobinemia (blue	a (blue		
baby disease) when consuming water with high nitrates.	or with high nitrates.					

윰 륟 01/14/2005 01/14/2005 Coliform bacteria are a large group of bacteria had are used as an indicator organism to indicate the potential for discase-causing bacteria to be present in wallor. Colorin bacteria secur (requerity in private weat 25 systems, such) from constitutional by surface rund or from human or parimal wastes. Consuming water with coliform bacteria may cause pataretrial infrasset, freet, and other file. Symptoms. Results from coliform bacteria feats are normally expressed as the number of bacteria schonies prosent por 100 milliters (rul.) of water. 0 col/100πL Fa 2.0 col/100mL Bacteria - Total Coliform

Bazteria - E.coti Carlo (2017) (Man).

E.coti (send for Extendra col) is a more specific bacteria. This is a type of fical conflorm bacteria commonly found in the infestines of animals and humans. A positive E. carl result is a strong indication that human sewage or mimal wate has contaminated the water. E. carl can produce a powerful took that acuses seware times and cream death.

This sample was collected by an authorized sampler.

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the	
t s	ğ
Ö.	
Ě	estab
oritic	6 TO
the l	ver s
edera	meter
pue	para
state	ome
id by	ator.
blishe	¥Bu
l esta	drink
beer	safe
.) has	E Po
Š	allow
evel	370
nou!	sdus
E	o,
Š	maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.
ximur	D E
he Ma	aximi
۰	E

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Have you ever had your system pumped out \( \forall \) | N How often? \( \frac{17C}{17C} \) | Oyzz Last time? \( \frac{57cmmer}{10c} \) | If it was pumped, was it inspected for cracks or broken balles? Y \( \text{N} \) What part?

None

If you noticed any of the above, are they seasonal or year-round?

Page 1

Has the system every been repaired? Y. (M. When? TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD. REPAIRED/REPLACED

COMMENTS

DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (\*\*)

DOOR TO DOOR NEEDS SURVEY	ten con	rhone #: \$6.6 \$ // Spring: crespected of our bave well? Spring: i. is it DuG of Drilled? How deep: il or spring from the drain field > 75. ft. cretested? Y (Whow? CL/UV DISINFECTI cretested? IN When? /O (\$28 on? Y (What (TC, FC, N, etc.)	How large is your lot? 7,23ac No. of dwalling units? / COMMERCIAIGESIDENTIALS	What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  (INGROUND BED> COMMUNITY SEWER CESSPOOL INGROUND TRENCH SIEDATED SAND MOUND PIPE TO DITCH HOLDING TANK BORE HOLE OTHER	Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  SEPTIC TANK INGROUND BED CESSPOOL OLD WELL BLEVATED SAND MOUND PRETO DITCH SEEPAGE PIT PRIVY PRIVY OTHER	How old is your system?
		onducted to determine if there are any see need for (CIRCLE OR FILL IN AS APPROPRIA	A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED)  NAME: As as see intended to be used in evaluating the need for community wide solutions.  STREET: AGL A A SEC. CITY W. C. CITY W. C.	A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED)  NAME: Ada of the server of th	A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED)  NAME: Ada of Server Server of you have WELLY SPRING? CISTERNY PUBLIC? OTHER?  Thou have a well: Is it DUG of CIRLLED SPRING? CISTERNY PUBLIC? OTHER?  How far is the well or spring from the drain field 2 75 ft. Is well UP/DOWNHILL Down  Do you treat your water? Y (W) How? CL/UV DISN/FECTION, SOFTENER, ION, OTHER  Was the water ever tested? W When?  Any contamination? Y (W) When?  COMMERCIAL THAT APPLY)  What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  COMMUNITY SEWER  ELEVATED SAND MOUND  PIPE TO SURFACE  OTHER  PIPE TO SURFACE  OTHER	A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  NAME:   CINCLE OR FILL IN AS APPROPRILES. ADD COMMENTS AS NEEDED  NAME:   CINCLE OR FILL IN AS APPROPRILES. ADD COMMENTS AS NEEDED  NAME:   CINCLE OR FILL IN AS APPROPRILES. ADD COMMENTER OF RESIDENTS. ZIP.   CINCLE ALL STREET.   CINCLE ALL OWNER OR RENTER? NUMBER OF RESIDENTS. ZIP.   CINCLE ALL STREET.   CINCLE ALL OWNER OR RENTER? NUMBER OF RESIDENTS. ZIP.   CINCLE ALL STREET.   CINCLE ALL STREET.   CINCLE ALL STREET.   CINCLE ALL STREET.   COMMUNITY SEWER   CINCLE ALL THAT APPLY   CINCLE ALL THAT APPLY   COMMUNITY SEWER   CINCLE ALL THAT APPLY   CINCLE ALL THAT APPLY   COMMUNITY SEWER   CINCLE ALL THAT APPLY   CINCLE ALL T

Ne

736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

#### Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Shototic - Fecto Coliform 0 colifolism.

Colifolism and specific test for savage or animal waste feed coliform baderia are specific to the intestral tracts of warm-blooded animals and one thus a more specific test for savage or animal waste feed coliform.

4.57 and feed coliform Pass 10.4 mg/f.

Nitrale in dicking waiter usually originates from terificers or from animal or human wastes. Nitrale affects the most sensitive includates in the population (infants under in months of age and a small component of the adult population with attractual stomach enzymes). They are prone to methomoglobinonia (blue tably disease) when consuming water with high nitrates.

124545-03 George: Hitayzer #4 1471 Ketterman Hill Road I Alyerstown in a weett sample

Sampled: 01/12/2005

01/14/2005 01/14/2005

This sample was collected by an authorized sampler.

Bayteria - Elasis

0 cal/100mL

Bacteria - Total Coliform

3.1 col/100mL

10.

0 col/100mL

Colleron buscers are a large group of bacteria that are used as an indicator organism to indicate the potential for decase-causing bacteria to be present in water. Collision bacteria occur forquently in private water systems, usually from contamination by surface nuclif or from burnan or calinati whates. Consuming water with collision bacteria present may cause quastrionization illnesses, lever, and other fill-like symptions. Results from collisions bacteria present part of the fill beginn and the fill bacteria collisions bacteria bacteria resonant per 100 millitious (mL) of water.

E. col. (ahort for Escherichia coli) is a more specific bacleria. This is a type of fecal collorim bacteria commonly found in the intestices of arimats and humans.

A positive E. col result is a strong indication that human sewage or animal waste has contaminated the water. E. coll can produce a powerful taxin that

0 cot/100mL

Phone Number: 717-838-1351 Date Reported: 01/20/2005

Pass/Fail Maximum Contaminant Level Date Analyzed Analyst Science: Sales Keller 윩 욻 흙 흄 Iow old is your system? 3/2 Was it permitted(Y)/ N When? / ? 7.3
lave you every noticed may of the following near your septic system?
GREEN LUSH GRASS WEINESS OR SPONGY AREAS ODORS
WATER PONDING OR SURFACING SYSTEM OVERFLOW
SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)
. SEPTIC TANK INGROUND BED What kind of sewage system of you have? (OJRCLE ALL THAT APPLY) How large is your lot? 430 acc One or more sewage systems? Whatkind of water system do you have (WELLD SPRING? CISTERN? PUBLIC? OTHER? If you have a well: Is it DUG on DRILLED HOW DEEP? 190 ft. Cased(Y)/N as the system every been repaired? Y (WWhen? ANK REPAIRED/REPLACED: LINE: REPAIR: (ave you ever had your system pumped out?(Y)/N How often? 1/2017 Host lime? It was pumped, was it inspected for cracks or broken baffles? Y (What part? lave you ever had your system pumped out?(Y) N How often? you noticed any of the above, are they seasonal or year-round? ZIP: 19567 the results are intended to be used in evaluating the need for community wide solutions.

(CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)

NAME: Hard of Ecotoma n STREET: 109 Main St. A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and o liwe have your permission to confirm this information by looking around (y) , in General weather conditions: Marion HOLDING TANK PRIVY OTHER PRIVY OTHER\_ CESSPOOL CESSPOOL OTHER OLD MELL HOLDING TANK PHONE #: Py (D/When?

By permit? Y / N What part?

LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED  $\alpha_{\rm l}^{'5}$ ELEVATED SAND MOUND SEEPAGE PUD BORE HOLE INGROUND TRENCH INGROUND TRENCH ELEVATED SAND MOUND SEEPAGE PIT INGROUND BED BORE HOLE DOOR TO DOOR NEEDS SURVEY Barles STREET: 109 COMMERCIALRESIDENTIALS No. of dwelling units? OWNER OR RENTERO NUMBER OF RESIDENTS: -MIN Study Area: COMMUNITY SEWER STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE STORM SEWER PIPE TO DITCH PIPE TO STEAM COMMUNITY SEWER PIPE TO SURFACE 2000 2003 Date: Le porteci 11/2/05

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

analyze Drinking Water (#38-338)

Pure-Test is Certified by the PA DEP to

736 East Lincoln Avenue Myerstown, PA 17067 717-865-2234

Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 124545 Date Reported: 01/20/2005 Phone Number: 717-838-1351

Analyte	Result		Pass/Fail	Pass/Faii Maximum Contaminant Lovel Dale Analyzed Analyst	Date Analyzed	Analyst	
124545-02 Source: Hill Zechinan #3 109 Halm Street Wentetrdurf raw well sample	109 Halm Street	Wenterdurf raw well st	omple	Sampled: 01/12/2005	Sampler: Mike Keller	Collec	
Bacterla - Fecal Coliform	17 col/100mL	-	Fai	0 col/100mL	01/14/2005	qup	
Fecal coliform bacteria are specific to the Intestinal facts of warm-blooded animals and are thus a more specific test for sewage or animal waste contamination.  Nitrate-Animone 10.4 molf. 10.4 molf. 10.4 molf.	ntestinal tracts of warn 26.0 mo/t.	a-blooded animals and are Ih	us a more spec Fall	are thus a more specific test for sewage or animal waste contam Fait	ination. 01/14/2005	<del>g</del>	
Nation in drinking water usually originates from lendizers of from animal or human wastes. Nitrite affects the most sensitive individuals in the population (failure under 6 months of age and a small component of the adult population with abnormal stomach enzymes). They are prone to methomoglobinemia (blue bady under 6 months of age and a small component of the adult population with abnormal stomach enzymes). They are prone to methomoglobinemia (blue bady	from lertilizers or from nont of the adult popul	animal or human wastes. Nit falion with abnormal stomach	rate affects the enzymes). The	most sensitive individuals in the population y are prone to methemoglobinemia (blue b	(infants aby		
disease) when consuming water with high nitrates.  Bacteria - Total Coliform 109.	nitrates. 109.1 col/100mL		Fail	0 col/100ml_	01/14/2005 dnb	qup	

OWNER OR RENTER! NUMBER OF RESIDENTS: 02

What kind of water system do you have? (WELL?) SPRING? CISTERN? PUBLIC? OTHER? If you have a well: Is it DUG or DRILLED? HOW DEER? 178 R. Cased(Y) N How far is the well or spring from the drain field  $\mathcal{SO}$  ft. Is well UP/DOWNHILL for ex Do you treat your water (D) IN How? CL/UV DISINFECTION SOFTENER) ION, OTHER

Was the water ever tested? (N When! Sept. 2004. Any contamination? Y (N What (TC, FC, N, etc.)

A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.

(CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS INEEDED)

STREET: 107

eckman

ZIP: 1856 7 PHONE #:

NAME: Harold

Study Area:

ප්

General weather conditions:

Munic.: Marion

DOOR TO DOOR NEEDS SURVEY

01/14/2005 Colliorm bactions are a large group of bacteria that are used as an indication organism to indicate the potential for decase-carusing bacteria to be present in water. Colorm bacteria exact frequently in provide water systems, usually from continumental produce nursh or from burson or animal waster. Consuming water with colorm bacteria present may cause gasteriated inference, force, and other fit was emptions. Results from colliorm bacteria tests are normally expressed as the number of bacteria colorings present per 100 militiates (int.) of water. 0 col/100ml Bacteria - Total Coliform

ŧ

01/14/2005

0 col/100mL

諨

can U corr rudm.

E coil (short for Escherichia coil) is a more specific bacferia. This is a type of fecal coillorm bacferia commonly found in the intestines of animals and humans. A possitive is cost could in a strong indication that humans are age or ontimal waste has contaminated the writer. E coil can produce a powerful took that courses severe filtness and even death.

This sample was collected by an authorized sampler.

COMMERCIAL RESIDENTIAL?  COMMERCIAL RESIDENTIAL?  CINCLE ALL THAT APPLY)  CINCROUND BED  NGROUND TRENCH  BORE HOLE  SEPFAGE PIT  BORE HOLE  CIRCLE ALL THAT APPLY)  COMMUNITY SEWER  PIPE TO SURFACE  PIPE TO SURFACE  STORM SEWER  PIPE TO SURFACE  STORM SEWER  PIPE TO SURFACE  STORM SEWER  PIPE TO SURFACE  PIPE TO SURFACE  PIPE TO SURFACE  Was it permitted? Y (N) When?  Was it permitted? Y (N) When?  MEAN YOUN SERVER  WESTER SOURY AREAS  ACING  SYSTEM OVERFLOW  MACING
--

The Maximum Contamnant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL. Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Has the system ever been repaired? YAW When?
TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS

Page 1

do iwe have your permission to confirm this information by looking around  $\overrightarrow{x}$  ) n

Last time? Say 1- 4009

Have you ever had your system pumped out? (3)/N How often? 1906 3x2. If it was pumped, was it inspected for cracks or broken baffles? Y (3) What part?

If you noticed any of the above, are they seasonal or year-round? 🔨 🕰

736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

## Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Phone Number: 717-838-1351 Date Reported: 01/20/2005 Lab Number: 124545

General weather conditions:

Muzic.:

Marion

ç

Study Area:

Date: 1/13/05

DOOR TO DOOR NEEDS SURVEY

Section 3 - E. co. 5  Oct/100ct. 01/14/2005  E. colisional for Escherichia coli) a a more specific bacteria. This is a type of local collorer bacteria commonly found in the intestines of animals and humans.  A positive E. coli result is a strong indication that human sewage or animal waste has contaminated the water. E. coli can produce a powerful toxin that causes sewere likests and even death.	Colditation - Total Collison and large group of bacteria that are used as an indicator organism to indicate the potential for disease-causing panderta to the present invater. Collison bacteria or as a large group of bacteria that are used as an indicator organism to indicate the potential for disease-causing panderta to the present invater. Collison bacteria organization by harder variety from contamination by surface mort for thuman or cammal weater. Consuming water with collison bacteria present invate or cause graticiantesmal therees, and other flue-dise symptoms. Results from collisions bacteria todd are normally expressed as the number of bacteria colonize present per 100 milliabers (int.) of water.	11.6 mg/L.  11.6 m	1243-83-01 Source: H. Zichman #2 197 Abits Street VrometsJorf the well simple Sampled: 91/12/2005 Surption: 0 col/190mL 0 col/	ail Meximum Contaninant Levoi
gg	<u> </u>	, g	dnb	ed Analys
·		ű		
How large is your lot? / , 5 e.c. No. of dwelling units?  One or more sewage systems? COMMERCIALGESIDENTIALLY	Do you treat your water? Y. (N)How? CL/UV DISINFECTION, SOFTENER, ION, OTHER Was the water ever tested? (Y) N. When? 9/2023 Any contamination? Y. (N) What (TC, FC, N, etc.)	What kind of water system do you have? (VELL?) SPRING? CISTERN? PUBLIC? OTHER? If you have a well: Is it DUG or (DRILLED? HOW DEEP? 1/20 ft. Cased? (S) N How far is the well or spring from the drain field 2/40 ft. Is well UP/DOWNHILL (//)	NAME: 1 A for the Manual AS ALE ROTTEST (AUDICOMMENTS AS SHARDED)  NAME: 1 A for the following STREET: 1557 Shouth & but y fell city Mouston I  ZIP: 17067 PHONE #: 9334 9471 (OVINEROR RENTEXT NUMBER OF RESTRENT.)	A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.

This sample was collected by an authorized sampler.

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantily of a substance allowed in safe drinking water. Some parameters have no established MCL.

analyze Drinking Water (#38-338) Pure-Test is Certified by the PA DEP to

I dow old is your system? 40.

Have you every noticed any of the following near your septic system?

GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS

WATER PONDING OR SUBFACING SYSTEM OVERFLOW
SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME Where does your laundry and/or sink water go? (CIRGLEALL (THAT APPLY)

(SEPTIC TANK)

(NGROUND SEED)

(NGROUND TRENCH

OLD WELL

HOLDING TANK

SEEPAGE PIT

FINANCIANA

SEEPAGE PIT (as the system every been repaired?(V)/ N 'When?

'ANK REPAIRED/REPLACED' LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)

CEPTIC TANK

CINGROUND BED) (it was pumped, was it inspected for cracks or broken baffles(f) N What part? lave you ever had your system pumped out?(Y) / N How often? f you noticed any of the above, are they seasonal or year-round? IO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (y)/vPRIVY OTHER MINITO HOLDING TANK PRIVY your lot? / . 5 OTHER\_ OLD WELL CESSPOOL sewage systems? ELEVATED SAND MOUND SEEPAGE PIT BORE HOLE BORE HOLE INGROUND TRENCH COMMERCIALGRESIDENTIAL No. of dwelling units? 5-7×2 1 STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE PIPE TO DITCH PIPE TO STEAM COMMUNITY SEWER COMMUNITY SEWER STORM SEWER PIPE TO SURFACE ? 9/2003 problems

736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

#### Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 124576 Date Reported: 01/20/2005 Phone Number: 717-838-1551 Maximum Contaminant Level Date Analyzed Analyst å 윰 Sampler: Mile Action 01/15/2005 01/14/2005 Nistae in diniving water usually originates from editivers or from entities to human wastes. Nistae alfects the most sensitive individuals in the population (inhants under 6 months at age and a small component of the adult population with abnormal stomach enzymes). They are prone to methemoglobinomia (blue body diseasely when consuming water with high nitrates. Fecal colliors bacteria are specific to the intestinal tracts of warm-blooded animus and are thus a more specific test for sewage or unimal waste Sampled: 01/13/2005 0 col/100mL Pass/Fail 8 124576-03 Source: Patricia Houza 79 552 Stauchsburg Road Alyerstown 0 col/i03mL Result Booleria - Fecal Coliform Nitrate-Mitrogen

(inhart under months of age and a small component of the adult population with abnormal storach engines). They are prone to methemoglobinomal (blue bady decease) when consuming water with high nitrions.

Pages

Ocilion bacterio are a large group of bacteria that are used as an indicator organism to indicate the potential for discoso-cousing bacterio to be present in water. Collorn bacterio accord requeriely in private water systems, cusually from contamination by suddeen from collorn bacterio accord requeriely in private water systems, cusually from contamination by suddeen from collorn bacterio present may cause goateriotistical literases, fever, and other fluelike symptems. Results from collorn bacterio bacterio according to the programming expressed as the number of bacteria coloris present by fifth of white.

g

먑

expressor as we wenter through a contract per nor minimus a rest, or water.

Fass 0 colf (VCmL 0 colf) (VCmL 0 col

This sample was collected by an authorized sampler.

The Maximum Contaminant Level (MCL) has been established by state and federal subronites. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

STREET. S. E. S. Shounds burg (R.). OITT: Mulgared Residents. 3. SPRING: CISTERN: PUBLIC: OTHER! Date: / / /3/ 03 A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.

(CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED) COMMUNITY SEWER COMMUNITY SEWER STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE PIPE TO SURFACE STORM SEWER PIPE TO DITCH PIPE TO STEAM Ŝ ZIP: 17062 PHONE #: \$.33-\$.745 (OWNEROR RENTER') NUMB What kind of water system do you have? (WELL?) SPRING? CISTERN? PUBLIC? OT If you have a well: Is it DUG or (PRILIED)? HOW DEEP? 45 ft. Cased: (\$\tilde{\mathcal{C}}\$) N How far is the well or spring from the drain field \$\infty\$ is \$\infty\$ of tt. Is well UP/DOWNHILL \$\infty\$ Do you treat your water? Y (\$\tilde{\mathcal{C}}\$)How? CL/UV DISINFECTION, SOFTENER, ION, OTHER Was the water ever tested? Y (\$\tilde{\mathcal{C}}\$)When? COMMERCIAL RESIDENTIAL? Was it permitted (Y) N When? Study Area: Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)

CESPTIC TANK
CESPTOL

CESPTOL

CESPTOL

COLD WELL

HOLDING TANK
BORE HOLE

FRIVY What kind of sewage system of you have? (CIECLE ALL THAT APPLY)

SEPTICTANK
CESPOOL
OLD WELL
BLOWN
HOLDING TANK
BORE HOLE

PRIVY No. of dwelling units? DOOR TO DOOR NEEDS SURVEY Co.: (1 Serks Any contamination? Y /(N) What (TC, FC, N, etc.) 1300 NAME: No/son Lchman CESSPOOL OLD WELL HOLDING TANK PRIVY General weather conditions: One or more sewage systems? Iowold is your system? How large is your lot? Munic.: Marion OTHER OTHER

f you noticed any of the above, are they seasonal or year-round?

OTHER

zrselens

Z

fave you every noticed any of the following near your septie system?
GREEN LUSH GRASS WEITNESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME

lave you ever had your system pumped out? (I) N How often? 10-20 23 Last time? 1765

(as the system every been repaired? Y /A When?

ANK REPAIREDREPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED OMMENTS:

40 I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y) ,

736 East Lincoln Avenue Myorstown, PA 17067 717-866-2234

#### Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Date Reported: 01/20/2005 Phone Number: 717-838-1351 Lab Number: 124576

Bacteria - Total Cotiform

28.8 col/100mL

Coliform bacteria are a targe group of bacteria trait are used as an indicator organism to Indicate the presentation disease-causing bacteria to be present in water.

Coliform bacteria occur frequently in private water systems, usually from confamination by surface runoif or from human or animal wasters. Consuming water with colliform bacteria present hary cause gasterintestinal finesses, frees, and other flu-like symptoms. Results from coliform bacteria tests are normally expressed as the number of bacteria colonies present per control of 100 millitiess (mL) of water. Nitrate-Nitrogen 2.90 mg/L PBss 10.4 mg/L PBss 01/14
Nitrate in dinking water usually ediplates from leaffacts or form animal or human wastes. Nitrate affocts the most sensitive individuals in the population (infants under 8 months of age and a small component of the adult population with abnormal stomach enzymes). They are prone to methemoglobinemia (blue baby disease) when consuming water with high nitrates. Bacterie - E.culi Sealeria - Fedal Coliform 0 col/100mL Pass 0 col/100mL Pass Fedal coliform bacteria are specific to the intestigal tacts of warm-blooded animals and are thus a more specific test for sewage or animal waste 124576-02 Source: Nelson Lehman #8 562 Stouchsburg Road Wyerstown E. cof (short for Escherichia cui) is a mate specific bacteria. This is a type of focal cultivam bacteria commonly found in the intestines of animals and humans. A positive E. coli result is a strong indication that human sewage or animal waste has contaminated the water. E. coli can produce a powerful touth that causes severe titness and even death. 0 col/100miL 355 Pass/Fail Maximum Contominant Level Date Analyzed Analyst 0 col/100:nL Sampled: 01/13/2005 Surption think Notice 01/15/2005 dnb 01/15/2005 01/14/2005 ĝ ĝ 윱

This sample was collected by an authorized sampler.

The Maumum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL

Page I

O IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y) N

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Ep;	eld_200_ft. Is well UP/D V DISINFECTION, SOFTEN \$1,200 \$4.	How large is your lot? 270 a.c. No. of dwelling units? 2  The or more sewage systems? COMMERCIAL (RESIDENTIAL); Fairing)	What kind of soware system of you have? (CIRCLE ALL THAT APPLY)  CESPTIC TANK  INGROUND BED  CESSPOOL  OLD WELL  HOLDING TANK  SEPPAGE PIT  PIPE TO SURFACE  OTHER  OTHER  OTHER  OTHER	Vhere does you laund to and or sink water go? (CIRCLE ALL THAT APPLY)  (SEPTIC TANK)  INGROUND BED  COMMUNITY SEWER  COMMUNITY SEWER  COMMUNITY SEWER  STORM SEWE	fow old is your system?  (ave you every noticed any of the following near your septic system?  GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS  WATER PONDING OR SURFACING SYSTEM OVERFLOW  SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME  OTHER	you noticed any of the above, are they seasonal or year-round?	as the system every been-tegaired? Y) N When? ANK REPAIREMREPLACED LIVE: REPAIREMREPLACED DRAIN FIELD: REPAIREMREPLACED) OMMENTS:
-----	--	--	---	--	--	--	---

Pure-Test Water Lab
736 East Lincoln Avenue
Myerstown, PA 17067
717-866-2234

#### Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 124576 Date Reported: 01/20/2005 Phone Number: 717-838-1351

Pass/Fail Maximum Contaminant Lovel Date Analyzed Analyst å 윰 Sunjaby: Mike Koffor 01/15/2005 01/14/2005 Minate in dinking water usually propinates from ferditizers or from animation thuman wastes. Nitrate affects the most sensitive individuals in the population (infante under 6 months of ogo and 8 small component of the adult population with abroomal stemach enzymes). They are priore to methemoglobhemie (blue bas) without consuming water with high nitrates.

| Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/100nl | Col/1 Archeria - Fecal Coliform 0 col/100mL 0 col/100mL colored animate and are thus a mon specific tool for sewage or animal waste Sampled: 01/13/2005 10.4 mg/L Ē 124576-01 Source: David Schrack #7 105 Christmas Village Road - Wemelsdorf 14.2 mg/L Result Nitrale-Nitrogen

01/15/2005 E. coli (short for Eschorichia col) is a more specific backola. This is a type of local colliform backeta commonly found in the intestinas of animals and humans.
A positive E. coli result is a strong endication that human sewage or animal waste has contaminated the water. E. coli can produce a powerful local that causes severe illnoss and even death. Collism bacteria are a large group of bacteria that are used as an herbater organism to indicate the potential for disease-causing bacteria to be present in water. Collism bacteria correctively water water of more bacteria organism are animal wastes. Consuming water with collism bacteria present may exust opsilominately lierasess. Ever, and other file-like symptoms. Results from collism bacteria tests are normally expressed as the number of bacteria proteins person for 100 millities (m.). If waste,

ş

This sample was collected by an authorized sampler.

The Maximum Contaminant Level (MCL, has been established by state and federal authorities. The MCL, is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

DOOR TO DOOR NEEDS SHRVEY
------------------------------

 Munic. Marion Los Co. Marks Study Area: Date: 113 105	
 to determine if the used in evaluati	
 NAME: [14ch 12/1/c, Loads STREET: S.R. 501 190. Bar fees OTTY: Musishents. ZIE: 176 6.7 PHONE #: COMNEROR RENTER: NUMBER OFFEESBENTS. What kind of many englands went for STREET: SEEDINGS STEETINGS OFFEESBENTS.	_, .0
If you have a well: Is to DUG of DRILLED? HOW DEEP? 2/20 ft. Cased(T) N  How far is the well or spring from the drain field 7/20 ft. Is well UP/DOW/HILL UP  Do you treat your water? (V) N How? CLUV DISINFENDED ION, OF TERE  Was the water woor tested? (V) N When?	
 7hat (TC, FC, N, etc.)	
 an of you have? (CIRCLE	
 CESSPOOL OLD WELL OLD WELL OLD WELL OLD WELL SEEPAGE PIT FIVY BORE HOLE OTHER OTHER	
 Where does your launder and/or sink water go? (CIRCLE ALL THAT APPLY)  (SEPTIC TANK) INGROUND BED CESSFOOL OLD WELL CELEVATED SAND MOUND) PIPE TO DITCH SEEPAGE PIF PRIVY BORE HOLE PRIVY BORE HOLE	
 Iow old is your system? /98 C. Was it permitted (T) N When? /99 C.  Iave you every noticed may of the following near your septic system?  GREEN LUSH GRASS. WETNESS OR SPONGY AREAS ODORS ALGORISH DRAING OR SURFACING SYSTEM OVERFLOW  SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER.	
 [you noticed any of the above, are they seasonal or year-round? Nonc.  Lave you ever had your system pumped out Y/N How often? YEAT // Last time? Cof 2004.	
O I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND Y Y	

L'Ure-Lest Water Lab 736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

### Water Analysis Report

∠ight-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 124545 Date Reported: 01/20/2005 Phone Number: 717-838-1351

water. Collown bacteria occur frequently in profeto water systems, usually from contamination by surface runoff or from human or animal wastes. Consuming water with collown bacteria present may cause gastrointestinal linesses, fever, and other burlles symptoms. Results from collown bacteria tasts are normally expressed as the number of bacteria colonies present per 100 millitiers (mL) of water.  3ec-Urria - E. coli 0 col/100mL 0,1/14/2005 dnb
E. coli (short for Escherichia coli) is a more specific bacteria. This is a type of fecal colligon bacteria commonly found in the intestines of animals and humans

This sample was collected by an authorized sampler.

causes severe illness and even death.

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

735 East Lincoln Avenue Myorstown, PA 17057 717-866-2234

#### Water Analysis Acport

Lab Number: 124645 Date Reported: 01/20/2005 Phone Number: 717-838-1351

Analyte	Result	Pass/Fail	Pass/Fail Maximum Conteminant Level Dale Analyzed Analysi	Date Analyzed	Analyst	
124645-02 Source: Irvin Musser #11 19 Edris Read - Wom-sadorf	19 Edris Road Wom-Asdorf		Sampled: 01/17/2005	Sampler: Alter Seffer	effer	
Bactería - Fecal Coliform	0 col/100mL	Pass	2 col/100ml.	01/19/2005	qup	
Fecal coliform bacterla are specific to the in	Fecal coliform bacierla are specific to the intastinal tracts of warm-blooded animals and are thus a more specific test for sowage or animal waste	thus a more spec	ific test for sewage or animal waste			
Mili ato-fulfrogen	5.46 mg/L	Pass 10.4 mort	10.4 ma/L	01/19/2005	dg.	
Nihate in drinking water usually originates it	Alfrate in drinking water usually originates from fordilizers or from animal or human wastes. Nitrate affects the most sensifive individuals in the papulation	Nirale affects the	most sensitive individuats in the population		2	
Inhans under 5 months of age and a small component of baby disease) when consuming water with high nitrates.	I fillulas trader b manhs of age and a small component of the adult population with abnormal stomech enzymes). They are prene to methemoglobinamia (blue baby disease) when consuming water with high nationes.	ial slomach enzym	es). They are prone to methemoglobínemiz	a (blue		
Bactena - Total Coliform 0 col/100nu		Pass	0 col/100inL	01/19/2005	dnb	

Bactera - Total Coliform 0 col/100nt. Pass 0 col/100nt. 01/19/2005
Collorm bacteria are a targer group or bacteria bits are used as an indicator organism to indicate the potential are disease-causing bacteria to be precent in water. Colform bacteria are along group or bacteria water states. In water, Colform bacteria present may cause gargeries, usually precent contramination bacteria present may cause gargeries, usually are contramination of the minimal variets. Consuming water with colform bacteria present may cause gargeries, usually device.

Pass of the manufacture of bacteria colonias present por 100 milliliters (ml.) of water.

Pass 0 colf (20/ml.)

E. colf jamel for Escaberials colf is a more shocklic bacteria. This is a type of lexal colform bacteria organism or distribution and humans. A positive E. col result is a strong indication that human sevage or animal waste has contaminated his water. E. coli can produce a powerful look in hall concers severe liness and even death.

늄

This sample was collected by an authorized sampler.

The Maximum Contaminant Loval (MCL, has been established by state and federal authonities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Page 1

O LWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y) N

### Pure-Test Water Lab 736 East Lincoln Avenue

736 East Lincoln Avenue Myarstown, PA 17067 717-866-2234

Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: -124645
Date Reported: 01/20/2005
Phone Number: 717-838-1351

Backerio - E.coli Sucteria - Total Colforn Eacteria - Febal Coliform 124645-01 Source: Werkin Weiter #10 4221 Contad Weiter Parkway Wometsdorf E. coll (short for Escherichia coll) is a more specific bacieria. This is a type of fecal colliform bacteria commonly found in the finlestines of animals and humans.

A positive E. coll cosul is a strong indication that human sewage or animal waste has confaminated the water. E. coll can produce a powerful toxin that Collorm bacters are a large group of bacteris that are used as an indicator organism to indicate the potential for decase-causing bacteris to be present in water, Collorm bacteris occur lieguratily in private water systems, usually from contamination by surface randef or from human or annot waster. Consuming water with collorm bacteris present may prove systemiselensful interests, lever, and other further symptoms. Results from collorm bacteris tests are normally expressed as the number of bacteris colorioss present per 100 millitlets (rit.) of water. baby disease) when consuming water with high nitrates. Nicate in dunling water usually originates from fertilizers or from animal or human wastes. Nitrate althois the most sensitive individuals in the population instants under 6 months of age and a small component of the adult population with abnormal stomech enzymes). They are prone to methemoglobhemia (blue Feest collorm bacteria are specific to the intostrial tracts of warm-blooded animals and are thus a more specific test for sewage or animal waste ∆ mg/L 0 cal/100ml 0 col/100mL 0 col/100mL 25 Pass Pass/Fail Maximum Contaminant Lovel 10.4 mg/L 0 cst/100mt 0 col/100ml 0 col/100miL Sampled: 01/17/2005 Date Analyzed Analyst Samples: Alke Koffer 01/19/2005 01/19/2005 01/19/2005 01/19/2005 캶 윰 햜

This sample was collected by an authorized sampler.

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

) o liwe have your fermission to confirm this information by looking around  $(\mathbf{y})$  n

How old is your system? 16 yes Was it permitted I) N When? Have you every noticed any of the following near your septic system? GREEN LUSH GRASS WETNESS OR SPONGY AREAS WATER PONDING OR SURFACING SYSTEM OVERFLOW Ins the system every been repaired? Y / When?

NANK REPAIRED/REPLACED: LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED Where does your laundry and/or sink water (SECTIC TANK)
CESSPOOL Tave you ever had your system pumped out YN How often? 5565 f it was pumped, was it inspected for cracks or broken baffles? YN What part? I you noticed any of the above, are they seasonal or year-round? What kind of sownge system of you have? (CIRCLE ALL THAT APPLY)

(SEPTIC TANK)

(INGROUND BED) How far is the well or spring from the drain field 200 ft. Is well UP/DOWNHILL CAD Do you treat your water? Y (N How? CL/UV DISINFECTION, SOFTENER, ION, OTHER Was the water ever tested? Y (N When? 7 /5 /5)

Any contamination? Y (N What (TC, FC, N, etc.) One or more sewage systems? How large is your lot? What kind of water system do you have? WELL? SPRING? CISTERN? PUBLIC? OTHER? If you have a well: Is it DUG or ORILLED? HOW DEEP? 365 ft. Cased? 60 N A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and Munic.: General weather conditions: Marion PRIVY OTHER PRIVY SLUGGISH DRAINS OLD WELL HOLDING TANK OTHER OLD WELL HOLDING TANK ons: Sing Co. /ac. WASTEWATER BACKING INTO THE HOME 10GROUND TRENCH INGROUND BED >
INGROUND TRENCH
ELEVATED SAND MOUND
SEEPAGE PIT ELEVATED SAND MOUND SEEPAGE PIT BORE HOLE BORE HOLE DOOR TO DOOR NEEDS SURVEY 7 COMMERCIAICRESIDENTIAL? No. of dwelling units? OWNEROR RENTER? NUMBER OF RESIDENTS: Study Area: STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE PIPE TO DITCH STORM SEWER PIPE TO SURFACE COMMUNITY SEWER COMMUNITY SEWER ODORS Last time? 1887 5 14/3 CITY Date: 1 / 18 / 2005 problem 200

A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  CIRCLE OR FILL IN AS APPROPRIATE: ADD COMMENTS AS NEEDED)  NAME: And CIRCLE OR FILL IN AS APPROPRIATE: ADD COMMENTS AS NEEDED)  ZIP: And Comment of the common of the comment
---

Have you every noticed any of the following near your septic system?

Have you every noticed any of the following near your septic system?

GREEN LUSH GRASS
WETNESS OR SPONGY AREAS
WATER PONDING OR SURFACING
SYSTEM OVERFLOW

SLUGGISH DRAINS
OTHER

If you noticed any of the above, are they seasonal or year-round?

Have you ever had your system pumped out? Y (M) How often?

Have you ever had your system pumped out? Y (M) How often?

Has the system every been repaired? Y (M) Row often?

Has the system every been repaired? Y (M) Row often?

TANK REPAIRED/REPLACED

LINE: REPAIRED/REPLACED

DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y) N

If you nonced any of the above, are they seasonal of year-round:	HAT APPLY)  MOUND  MOUND  A A BA   What kind of seesage system of you have? (CIRCLE ALL THAT APPLY)  (SEPTIC TANK)  CESSPOOL  OLD WELL  HOLDING TANK  PRIVY  OTHER  At Grad Street  BORE HOLE  OTHER  OTHER  At Grad STREET  FRIVY  OTHER   NAME: TOGO PHONE *: STREET: SBS THICK ALD COMMENTS AS MEEDED.  NAME: TOGO PHONE *: STREET: SBS THICK AND COMMENTS AS MEEDED.  ZIP: 17087 PHONE *: GWNEBOR RENTER? NUMBER O  What kind of water system do you have? WELL? SPRING? CISTERN? PUBLIC? OTHER?  If you have a well: Is it DUG of DRILLED? HOW DEEP? 70 ft. Cased(Y) N  How far is the well or spring from the drain field 300 ft. Is well UPDOWNHILL 40  Do you treat your water? (Y) N How? CL/UV DISINFECTION SOFTENER/ION, OTHER  Was the water over tested (Y) N When? 300/  Any contamination? N What (TOFC, N, etc.) Some Conference with the second street of the second	Munic: Marcon Co.: Co.: Study Area:  Munic: Marcon Co.: Co.: Study Area:  General weather conditions: State of Co.: Tec.  General weather conducted to determine if there are any sewage problems in this area. This is the results are intended to be used in evaluating the need for community wide solutions.		
	COMMUNITY SEWER STORM SEWER PIPE TO DITCH PIPE TO SURFACE  ODORS W THE HOME	COMMUNITY SEWER STORM SEWER PIPE TO DITCH PIPE TO SURFACE	TE; ADD COMMENTS AS MEEDED  TEST THE COMMENTS OF RESIDENTS: 3  CISTERN? PUBLIC? OTHER?  TO G. Cased ON TO THE COMMENTS OF RESIDENTS. 3  Is well UP/DOWNHILL WOOD TO THE CONTROLL OF THE CONTRO	Date: / 1/8   OS  is area. This is a general survey and olutions.

DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUNDEY) N

Has the system every been repaired? Y (N) When?
TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED
COMMENTS:

Have you ever had your system pumped out? Y (N)How often?

If it was pumped, was it inspected for cracks or broken baffles? Y (N)What part?

Last time? New System

# Pure-Test Water Lab 736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 124680 Date Reported: 12/19/2005 Phone Number: 717-858-1351

Maximura Contaminant Level Date Adalysis Aralysis Aralysis Aralysis Aralysis Aralysis (14.4 mg/l. 10.4 mg/l. 10.4 mg/l. 10.120/2005 dnb 0 col/100mL 01/20/2005 dnb 0 col/100mL 01/20/2005 dnb	Sampled: 01/18/2005 Sampler: #iko: lkeffer 10.4 mg/L 01/19/2005 dnb 0 col/100mL 01/20/2005 dnb 0 col/100mL 01/20/2005 dnb	Sampled: 01/18/2005 Samplet: Mise Noffer 10.4 mg/L 01/19/2005 dhb 0 col/100m/L 01/20/2005 dnb 0 col/100m/L 01/20/2005 dnb	Sampled: 01/18/2005 Sampler: Alka kerfer 10.4 mg/t. 01/19/2005 dnb 0.ce/170/2005 dnb 0.ce/170/2005 dnb
Result St Apple Lane Alycrycown Parss 2.72 mg/L 2.205 col/100mL Fail 1.0 col/100mL Fail	by an authorized sampler. BE Apple Lanc Myerstown 2.72 ng/L 101.3 col/100mL Fall 4.2 col/100mL Fall	by an authorized sampler. Ses flexible for Richland 12.2 mg/L 12.4 col/100mL Fall 0 col/100mL Pass	by an authorized sampler.  Woods Drive Wondsdorf Pass 4.92 mg/L Pass 0 col/190m/L
Analyte Result 124680-01 Source: British Miller #12A 85 Apple Lane Alycritown Hiroste-Nitogen 2.72 mg/L 2.72 mg/L 98 decien 2.72 mg/L 7.2005, col/100mL 840clein 2.600ii 1.0 col/100mL 1.0 col/100mL	This sample was collected by an authorized sampler. 124680-02 Source: Brish Miller #128 B5 VipNe Lanc Myerstown Nitrate-Hitrogen 2.72 mg/L Bestera - Total Coliform 101.3 col/100mL Bacteria - E.coli	e was collected   purce: Bruce Wobber #13 Collom	This sample was collected by an authorized sampler. 680-64 Source: Eric Snyder 1114 Woods Drive Wonelsdorf Ningle-Ninger 4.92 mg/L Golforn 0 colliforn.

This sample was collected by an authorized sampler.

The Mawmum Contaminant Level (MCL) has been established by state and federal authorities. The MCL, is the maximum quantly of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Kone How old is your system?

Have you every noticed any of the following near your septic system?

Have you every noticed any of the following near your septic system?

GREEN LUSH GRASS WEINESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER. Was it permitted (E) N When?

OTHER

COMMUNITY SEWER STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE

Where does your laundry and/or sink water go? ICIRCLE ALL THAT APPLY)

(INGROUND BED)

(ESSPOOL

OLD WELL

OLD WELL

HOLDING TANK

BORE HOLE

If you noticed any of the above, are they seasonal or year-round?

Dec 15xxx Last time? 1885 Have you ever had your system pumped out(Y) N How often? (A) What part? (If) What part? Has the system every been repaired (2) N. When? 1985 By permit? Y. (3) What part? Confidence LANK REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS

DO IME HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y) N

#### Pure-Test Water Lab 736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

## Water Analysis Report

Palmyra PA 17078 Light-Heigel & Associates Inc 430 E Main Street

Lab Number: 124718

Date Reported: 01/24/2005 Phone Number: 717-838-1351

Broteria - E.coli Bacteria - Total Coliform Rectorin - Fescal Coliform 0 col/100mL Pass 0 col/100mL Pass 0 col/100mL Pass 0 col/100mL 124718-04 Source: Ivan Weaver #18 4082 Smaltz Road Weinelsdorf UCOV INJUNE.

C.COII (short for Escherichia coli) is a more specific bacteria. This is a type of lecal colliform bacteria commonly found in the intestinas of antinais and humans. A positive E. coli result is a strong indication that human sewage or animal waste has contaminated the water. E. coli can produce a powerful tooth that causes severe likess and even death. Niliate in drinking water usually originates from fertilizers or from animal or human wastes. Niliate affects the most sensitive individuals in the population (infants under 6 months of age and a small component of the adult population with obnormal stemach enzymes). They are prone to methemoglobinemia (blue baby disease) when consuming water with high nitrates. Coldom bacteria are a large group of bacteria that are used as an indicator organism to indicate the potential for disease-causing bacteria to be present in water. Coldom bacteria occur inequently in private water systems, usually from consumination by surface, noted or from human or enhand waters. Concurring water with coldism bacteria present may cause o gastionicationial incesses, lever, and other fall-like symptoms. Results from coliform bacteria tests are normally expressed as the number of bacteria colonies present per 100 millitiers (m.t.) of water. 2.0 col/100mL Pass/Fail Maximum Contaminant Level Date Analyzed Analyst 0 col/100mL Sampled: 01/19/2005 Sampler: wike Ketter 01/21/2005 01/21/2005 01/21/2005 융 g 윮 킇

This sample was collected by an authorized sampler.

treatment system or corrective measure. They should not be used to develop any of groundwater in Marion Township. These results are a general survey

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page I

DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND?(X)/ N

analyze Drinking Water (#38-338) Pure-Test is Certified by the PA DEP to

Has the system every been repaired? Y (When? TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS:	Have you ever had your system pumped out?(3)/ N How often? 12e 9 Last time? 1991 If it was pumped, was it inspected for cracks or broken baffles? Y /(N)What part?	WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER	How old is your system? 15 Was it permitted (Y) N When? 1983  Have you every noticed cany of the following near your septic system?  GREEN LUSH GRASS WETTNESS OR SPONCY APPAC CHOOSE	Where does you Liaundry and/or sink water go? (CHECLE ALL THAT APPLY)  (SEPTIC TANK)  (INGROUND BEJ)  (COMMUNITY SEWER  CESSPOOL  INGROUND TRENCH  STORM SEWER  S	What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  SEPTIC TANK  CIRCUND BED CESSPOOL INGROUND TRENCH STORM SEWER OLD WELL HOLDING TANK SEEPAGE FIT PRIVY BORE HOLE OTHER  OTHER  OTHER	How large is your lot? / @@ No. of dwelling units? / One or more sewage systems? / COMMERCIALGESIDENTIALLY	1 3 4	OWNEROR RENTER? NING? CISTERN? PUBLIC?	rrey is being conducted to determine if there are any serecults are intended to be used in evaluating the need for (CIRCLE OR FILL IN AS APPROPRIATE).  The before the conducted to determine if there are any serecults are intended to be used in evaluating the need for the conducted to the conduc	Munic: Marion Jup Co.: Berks Study Area: Date: 119105	NEEDS SURVEY
--	--	---	---	--	--	--	-------	--	--	---	--------------

736 East Lincoln Avonue Myerstown, PA 17067 717-866-2234

### Water Analysis Report

nc		
ght-Heigel & Associates I	430 E Main Street	Palmyra PA 17078

Lab Number: 124718 Date Reported: 01/24/2005 Phone Number: 717-838-1351

nalyte	Result	Pass/Fail	Pass/Fail Maximum Contaminant Level Date Analyzed Analyst	Date Analyzed	Analyst	
124718-03 Source: Debble	124718-03 Source: Debbie Werrell #17 4088 Smaltz Road Wemelsdorf		Sampled: 01/19/2005	Sampler: Anke Kefter	refter.	
actoria - Fecal Coliform	0 col/100mL	Pass	0 col/100mL	01/21/2005	qup	
Fecal coliform bacteria are spec	Fecal coliform bacteria are specific to the intestinal fracts of warm-blooded animals and are thus a more specific tost for sewage or animal waste	re thus a more spe	cific test for sewage or animal waste			
trate-Nitrogen	10.9 mg/L	Fail 10.4 mg/L	10.4 mg/L	01/21/2005	dib	
Nitrate in drinking water usually	Nitrate in drinking water usually originates from fertilizess or from animal or human wastes. Nitrate affects the most sensitive individuals in the population (inlants	. Nitrate affects the	most sensitive individuals in the population	(Inlants		
under 6 months of age and a sm	under 6 months of age and a small component of the aduit population with abnormal stomach enzymes). They are prone to methemoglobinemia (blue baby	nach enzymes). Th	ey are prone to methemoglobinemia (blue t	aby		
disease) when consuming water with high nitrates.	r with high nitrates.					

Beatletia - Total Coliforn.

Colliforn bacteria - Total Coliforn.

Collorm bacteria are a large group of bacteria bits are traced as an indicate organican to an indicate be potential for discussa-causing bacteria to be present in wheter Collorm bacteria or coloriforn bacteria bits are traced as an indicate organical by surface runal for from luman or animal wastes. Consuming water with collorm bacteria present may cause gastroiretatival lineases, fever, and other flu-like symptoms. Results from collorm bacteria tracts are normally expressed as the number of bacteria colories present por 100 militiates (ml.) of water.

윰

ę

Sactiona - E.coti [and to Expandina on the amore specific bacteria. This is a type of local coliform bodes to commonly found in the intestines of animals and humans.

A positive E. coti result is a strong infection that human sewage or animal waste has contaminated the water. E.cull can produce a powerful bath that causes severe literas and even doath.

This sample was collected by an authorized sampler.

These results are a general survey of groundwater in Marion Township. They should not be used to develop any treatment system or corrective measure.

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Manie: Marion Jourship Co.: Berts	100R Y Sudy Area: Date: / 119 / 1200
1 2	
A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.	problems in this area. This is a general survey and aunity wide solutions.
Reet: 4	20 Whole St. CITY: Wimeshorts SOWNER OF RESIDENTS. 3
What kind of water system do you have? (WELL) SPRING? CISTERN: PUBLIC? If you have a well: Is it DUG or (DRILLED? HOW DEEP? 14 0 th. Cased(V)   N	SPRING: CISTERN: PUBLIC: OTHER: W DEEP? 14 0 t. Cased(V) N
How far is the well or spring from the drain field 7 /oc_ft. Is well UP/DOWNHILL_OL Do you treat your water?(Y) /N How? CL/ <u>UV DISINFECTION, SOFTENBR</u> AON, OTHER	SOFTENER JON, OTHER
Was the water ever tested (2) N When?	
Any concamination: 1 (1) (That (10,10,11, etc.)	
+ 44	g units?
One or more sewage systems? COMMERCIA	COMMERCIAD/RESIDENTIAL?
em of you have? (CI	
HOLDING TANK SEEPAGE PIT PRIVY BORE HOLE	PIPE TO STEAM PIPE TO SURFACE
OTHER	
and/or sink water go NK	ATAPPLY) X//// COMMUNITY SEWER
OLD WELL BLEVATED SAND MOUND	
HOLDING TANK SEEPAGE PIT PRIVY	PIPE TO STEAM
	THE TOCOPERATE

How old is your system?

Have you every noticed any of the following near your septic system?

Have you every noticed any of the following near your septic system?

GREEN LUSH GRASS

WETINES OR SUPENONGY AREAS

WASTEWATER BACKING INTO THE HOME
OTHER.

If you noticed any of the above, are they seasonal or year-round?

OTHER

Have you ever had your system pumped out(V)/N How often? (2ec Uyr Last time? 1899

If it was pumped, was it inspected for cracks or broken haffles? Y (M)What part?

Has the system every been repaired? Y (M)When?

TANK REPAIRED/REPLACED

COMMENTS.

COMMENTS.

DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND Y

#### Pure-Test Water Lab 736 East Lincoln Avenue Myerslown, PA 17067 717-866-2234

## Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 124718
Date Reported: 01/24/2005
Phone Number: 717-838-1351

Bacleria - Fecal Coliform Bacteria - Total Coliform Nitrate-Nitrogen 124718-02 Source: Marion Township Building #16 420 Water St. Womelsdorf 10.4 mg/L

10.4 mg/L

10.5 mg/L

Nitrate in driping water usually originates from fertilizers or form animal or human wastes. Nitrate affects the most sensitive individuate in the population (inflants under 6 monits of age and a small component of the adult population with abnormal stomach enzymes). They are prone to methamoglobinomia (blue boby disease) when consuming water with high nitrates. E. coli (short ter Escherichia coli) is a more specific bacteria. This is a type of fecal coliform bacteria connronly found in fine linestines of animals and humans. As positive E. coli result a strong indication that human sewage or animal wasto has contaminated the water. E. coli can produce a powerful locks that causes severe tiless and even death. Colliorm bacteria are a large group of bacteria that are used as an indicator organism to indicate the potential for decase causing bacteria to be present it water. Colliorm bacteria occur frequently in private water systems, usually from contamination by surface rurnof or from human or animal wastes. Consuming water with colliorm bacteria present may cause gestrointestinal libresses, fever, and other flu-like symptoms. Results from colliorm bacteria trads are normally expressed as the number of bacteria colonies present per 100 millitiers (m.l.) of water. Feeal coliform bacteria are specific to the intestinal tracts of warm-blooded animals and are thus a more specific test for sewage or animal waste contamination.

16.3 mg/L

10.4 mg/L

10.4 mg/L 5 col/100mL 3.1 col/100mL 83.1 col/100mL Đ. <u>13</u> Pass/Fail Maximum Contaminant Level Date Analyzed Analyst 0 col/100mL 0 col/100mL 0 col/100mL Sampled: 01/19/2005 Sumpter: Adke Kerrier 01/21/2005 01/21/2005 큠 돩 윭 윯

's sample was collected by an authorized sampler.

These results are a general survey of groundwater in Marion Township. They should not be used to develop any treatment system or corrective measure.

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantily of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page I

DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND YVE

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Have you ever had your system pumped out? YN How often? YN Last time? 2003  Hit was pumped, was it inspected for cracks or broken baffles? YN What part?  Has the system every been repaired? YNWhen?  TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED	How old is your system? Leise 30 Shr 10 Was it permitted? N When? 1994.  Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS  WATER PONDING OR SURFACING SYSTEM OVERPLOW  SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME  OTHER	Where does your hundry and/or sink water go? (CIRCLE ALL THAT APPLY)  GEFTIC.TANK  INGROUND BED  CESSPOOL  INGROUND TRENCH  OLD WELL  HOLDING TANK  SEEPAGE PIT  PIPE TO SURFACE  OTHER  OTHER	One or more sewage systems?  What kind of sewage systems of you have? (CIRCLE ALL THAT APPLY)  (SEPTIC TANK)  CESSPOOL  OLD WELL  HOLDING TANK  PRIVY  BORE HOLE  OTHER  COMMERCIANT THAT APPLY)  LOGROUND BED  LOGROUND BED  STORM SEWER  STORM SEWER  STORM SEWER  PRIVE  PRIVE  BORE HOLE  PRIVE  OTHER	Co.: 25C  Single Co.: 25C  o determine if there a used in evaluating the EOR FILL IN AS APP  CO. TRILLED, HOV from the drain field.  N How? CL(UV DIS  N When?  That (TC, FC, N, etc.)	NEEDS SURVEY
--	--	--	--	--	--------------

736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

## Water Analysis Report

Light-Heigel & Associates Inc	430 E Main Street	Palmyra PA 17078

Lab Number: 124718
Date Reported: 01/24/2005
Phone Number: 717-838-1351

		-		
Analys	Kesser	đ	qup	
Date Analyzed	Sampion: Albo Reffer	01/21/2005	. 01/21/2005	is (blue
Pass/Fail Maximum Contaminant Level Date Analyzed Analyst	Sampled: 01/19/2005	0 col/100mt.	Pass 10,4 mg/L	te most aensitive Individuals in the populatio rmos). They are prone to methernoglobihomi
Pass/Fail	eber Parlevay	Pass	Pass	rastes. Mitate affocts in abnormal stomach onzy
Result	124718-01 Source: David Weaver (Blue Soruce) #15 4405 Conrad Weber Parleway Womelsdorf	0 col/100mL	Food content bacterio are special to the integral index of warm-dodocte animas and are this a nime special to the single (ביים איינים	Nirate in driving water usualy orginates from Terflikzers or from animal or human wastes. Mirate allocus the must sensive informulas in the population in the count of the adult population with abnormal stomach consymas). They are prote to methomoglobinemite (blue (infants under 6 menths of ago and a small component of the adult population with abnormal stomach consymas). They are protect to methomoglobinemite (blue
Analyte	124718-01 Source: David Weave Wometsdorf	Bacteria - Fecal Coliform	Focal collions bacters are specific in Nitrate-Nitrogen	Nitrate in drinking water usually originates from ferfilizers o (infants under 6 months of ago and a small component of

01/21/2005 Colorum bacteria are a large group of bacteria final are used as an indicator organism to indicate he potential for desas-causing bacteria to be present in water. Colorum bacteria are a large group of bacteria branch and water systems, such any analysis of the manner and animal washs. Consuming water with colorum bacteria per resent into cause gasterioristical interacts, lower, and other fib. We symptoms. Results from collicum bacteria per sent man or animal washs. Consuming water with colorum bacteria per 100 millillions (incl.) of water. 0 col/100mL Pass 0 col/100mL baby disease) when consuming water with high nifrates Bacteria - Total Coliform

읗

윰

01/21/2005 E. coli (shord or Escherich)a coli) is a more specific baddrid. This is a type of fecal coliform baddrid commonly (ound in the intestings of animals and humans. A positive E. coli result is a storeg industrion that human sewage or animal waste has contaminated the water. E. coli can produce a powerful taxin that causes severo iliness and even doelli. 0 cel/100mL Pass 0 col/100mL Bacleria - E.coli

's sample was collected by an authorized sampler.

treatment system or corrective measure. They should not be used to develop any of groundwater in Marion Township. These results are a general survey

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Munic: Maryon Tury Co.: (2.4) Study Area: Date: Z / (2.7) Conditions: Co. (3.4)
if the
NDE #: 539 /84 stem do you have? WELL CDUO or DRILLED? I
Do you treat your water (Y) N How? CL/UV DISINFECTION SOFTENER) ION, OTHER  Was the water ever tested? Y (N When?  Any contamination? Y / N What (TC, FC, N, etc.)
How large is your lot? 2 /2 arc No. of dwelling units? /
COMMERCIALRESIDENT CASA CONTRACTOR CONTRACTO
₽
PRIVY BORE HOLE PIPE TO SURFACE OTHER
Where does your launday-andor sink water go! CCIRCLE ALL THAT APPLY)  SERTIC TAINK  OESSPOOL  OLD WELL  BLEVATED SAND MOUND  PIPE TO STEAM  PRIVY  BORE HOLE  OTHER
How old is your system?  Have you every noticed any of the following near your septic system?  Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS  WATTER PONDING OR SURFACING  SYSTEM OVERFLOW  SLUGGISH DRAINS  WASTEWATER BACKING INTO THE HOME  OTHER

If you noticed any of the above, are they seasonal or year-round?

1/2/C10/2 Last time? Have you ever had your system pumped out? Y MY How often? If it was pumped, was it inspected for cracks or broken baffles? Y / N What part?

Has the system every been repaired? Y (Whon?

TANK REPAIRED/REPLACED

LINE: REPAIRED/REPLACED

DRAIN FIELD: REPAIRED/REPLACED

COMMENTS:

DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUNDYY ) N

## Pure-Test Water Lab 736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

### Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125285
Date Reported: 02/21/2005
Phone Number: 717-838-1351

This sample was not collected 125285-05 Source: Cox Manon Township Bacteria - Facal Collism Nitrate-Nitrogen Bacteria - Tolat Collism Sacteria - E.coli Sacteria - E.coli 200	This sample was not collected by (15285.04 Source Annwiller Narian Tewnship Sactisria - Fecal Coliforn 0 col/100r Nitrate-Nitrogen 83.1 col/1 Bactieria - Total Coliforn 83.1 col/1 Bactieria - E.coli	This sample was not collected by 125285-03 Source: Reenry Aktrion Township Bacteria - Fecal Collform 135 ong Nitrate-Nitrogen 135 ong 200.5 - 19ia - Total Coliform 200.5 - 128.8 or 12	This sample was not collected by 19285-02 Source: Walters Marion Township Bacataria - Facal Collibrim 10.1 mg Rackaria - Flata Collibrim 10.1 mg Rackaria - Flata Collibrim 0 od/10 Backaria - Ecoll 0 00/10	Analyte Result 12373-01 Source: Mayor Marten Township Bacteria - Fecal Coliform 11 col Nitrate-Nitrogen 13.5 m Bacteria - Total Coliform 200.5 Bacteria - E.coli 28.8 o
This sample was not collected by an authorized sampler.  125285-05 Source: Cox Marren Township  Bacteria - Fecal Coliform  54 col/100mL  54 col/100mL  Fail Nitrate-Nitrogen  13.2 mg/L  Fail Bacteria - Total Coliform  200.5 col/100mL  Fail Bacteria - E.coli  200.5 col/100mL	This sample was not collected by an authorized sampler.  (12528-94. Source: Menwiller Marian Township  Bacieria - Fical Coliform  Bacieria - Total Coliform  Bacieria - E.coli   This sample was not collected by an authorized sampler. 125285-03 Source: Keeney Akuron Township Bacteria - Fecal Collorm 61 col/100mL Fall Virtate-Nirrogen 200.5 col/100mL Fall - Vala - Total Coliform 129.8 col/100mL Fall Fall Fall	This sample was not collected by an authorized sampler.  135285-02 Source: Wolters warlon Township  SacJaria - Fecal Coliform 0 col/100mL  SacJaria - Fecal Coliform 10.1 mg/L  Pass  SacJaria - Tylal Coliform 0 col/100mL  SacJaria - Fecal 0 col/100mL  Pass  Baclaria - Ecoli 0 col/100mL  Pass	Result workship ion Township 13.5 mg/L 200.5 col/100mL 28.8 col/100mL	
sampler. Fall Fall Fall Fall	sampler.  Pass  Fail  Fail	sampler. Fail Fail Fail Fail	Pass Pass Pass Pass Pass	Pass/Fail Fail Fail Fail
Sampled: 02/15/2005 0 col/100mL 10.4 mg/L 0 col/100mL 0 col/100mL	Sampled: DZ/15/2005 0 col/100mL 10.4 mg/L 0 col/100mL 0 col/100mL	Sampices: 02/15/2005	Sampled: 02/15/2005 0 col/100mL 10.4 mg/L 0 col/100mL 0 col/100mL	Maximum Contaminant Lovel Sampled: 02/15/2005 0 cd/100mL 10.4 mg/L 0 col/100mL
Sampler: Christine F Al 02/17/2005 dnb 02/17/2005 dnb 02/17/2005 rch 02/17/2005 rch	Sampler: Christine N.A. 02/17/2005 dnb 02/17/2005 dnb 02/17/2006 rch 02/17/2005 rch	Samptor: Christine K.w. 02/17/2005 dnb 02/17/2005 dnb 02/17/2005 rch 02/17/2005 rch	Sampler: Christino II M 02/17/2005 drib 02/17/2005 drib 02/17/2005 rch 02/17/2005 rch	Dale Analyzed Analyze Sampher Cortective K.M. 02/17/2005 dnb 02/17/2005 dnb 02/17/2005 rch 02/17/2005 rch
time # A dnb dnb rch rch	stine % & dnb dnb rch rch	stine K x dnb dnb dnb rch	rch dnb dnb sclao K M	Analyst dnb dnb rch rch

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

LINE: REPAIRED/REPLACED

By permit? Y / N What purt?
DRAIN FIELD: REPAIRED/REPLACED

DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND? Y / N

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

#### If you noticed any of the above, are they seasonal or year-round? Have you every noticed any of the following near your soptic system? GREEN LUSH GRASS WETNESS OR SPONGY AREAS Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY) SEPTIC TANK INGROUND BED CESSPOOL INGROUND TRENCH If it was pumped, was it inspected for cracks or broken baffles? Y / N What part? How old is your system? What kind of sewage system of you have? (CIRCLE ALL THAT APPLY) SEPTIC TANK INGROUND BED A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions. (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED) Have you ever had your system pumped out? Y / N How often? One or more sewage systems? How large is your lot? Any contamination? Y / N What (TC, FC, N, etc.) Was the water over tested? Y / N When? Do you treat your water? Y / N How? CL/UV DISINFECTION, SOFTENER, ION, OTHER How far is the well or spring from the drain field. If you have a well: Is it DUG or DRILLED? HOW DEEP? What kind of water system do you have? WELL? SPRING? CISTERN? PUBLIC? OTHER? ZIP: /9567 PHONE #: NAME: General weather conditions! Мидіс.: Marion SLUGGISH DRAINS GREEN LUSH GRASS WETNES WATER PONDING OR SURFACING HOLDING TANK HOLDING TANK PRIVY OTHER OTHER OLD WELL OLD WELL ا ا WASTEWATER BACKING INTO THE HOME INGROUND BED INGROUND TRENCH ELEVATED SAND MOUND SEEPAGE PIT INGROUND TRENCH ELEVATED SAND MOUND SEEPAGE PIT DOOR TO DOOR NEEDS SURVEY BORE HOLE BORE HOLE STREET: Was it permitted? Y / N When? COMMERCIAL/RESIDENTIAL? No. of dwelling units? SYSTEM OVERFLOW ft. Is well UP/DOWNHILL OWNER OR RENTER? NUMBER OF RESIDENTS: Study Area; ft. Cased? Y/N PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE STORM SEWER STORM SEWER COMMUNITY SEWER COMMUNITY SEWER ODORS Last time? Date: 2 1/5 10.5

	Date: 2 / 5 / 65
DOOK TO DOOK NEEDS SURVEY	Co.: Med Area:
	c: Macion

NEEDS SUKVEX	
Munic. Macion Co.: (15/2/62 Study Area: Date: 2 1/5/05	
General weather conditions:	
ris being conducted to determine if ther tts are intended to be used in evaluatin (CIRCLE OR FILL IN AS.	
NAME: K. STREET: OWNER OF RENDER OF RESIDENTS: C. STREET: SPRING: CISTERN, PUBLIC: OTHER?	
What kind of water system of you have:  If you have a well: Is it DUG or DRILLED? HOW DEEP?  How far is the well or spring from the drain field  ft. Is well UP/DOWNHILL	
Do you treat your water? Y / N How? CL/UV DISINFECTION, SOFTENER, ION, OTHEK  Was the water ever tested? Y / N When?  Any centamination? Y / N What (TC, FC, N, etc.)	
How large is your lot?  No. of dwelling units?  COMMERCIAL/RESIDENTIAL?	
What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  SEPTIC TANK CESSPOOL  OLD WELL SEPEN AND MOUND PIPE TO DITCH SEPEN AND SEPEN AND SERVER  SEPEN AND MOUND PIPE TO STICKH SEPEN AND STIC	
Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY) SEPTIC TANK INGROUND BED COMMUNITY SEWER CESSPOOL INGROUND TEENCH STORM SEWER OTH THE BLEVATED SAND MOUND PPE TO DITCH	
TANK SEEPAGE PIT BORE HOLE	
How old is your system?  Was it permitted? Y / N When?  Have you every noticed any of the following near your septic system?	·
OTHI	
If you noticed any of the above, are they seasonal or year-round?	
Have you ever had your system pumped out? Y / N How often?  If "was pumped, was it inspected for cracks or broken baffles? Y / N What part?	
Has the system every been repaired? Y / N When?  TANK REPAIRED/REPLACED  TANK REPAIRED/REPLACED  DRAIN FIELD: REPAIRED/REPLACED  COMMENTE. ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	
E YOUR PERMISSIC	

AOOJ YE NOITAN	Have you ever had your system pumped out (Y) N How often? Sy Last time? Sy Ges.  If it was pumped, was it inspected for cracks or broken baffled Y) N What part? Za K  has the system every been repaired? Y (N When? By permit? Y / N What part?  TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED	If you noticed any of the above, are they seasonal or year-round?	How old is your system?  Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS  WATER PONDING OR SURFACING SYSTEM OVERFLOW  SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME  OTHER	Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  SEPTIC TANK  CESSPOOL  CESSPOOL  INGROUND BED  COMMUNITY SEWER  INGROUND TRENCH  STORM SEWER  OLD WELL  HOLDING TANK  SEEPAGE PIT  PRIVY  BORE HOLE  OTHER  BORE HOLE  PIPE TO SURFACE	How large is your lot? \$\frac{1}{2\cdot \cdot \c	W DEEP? 7/00 ft. Cased N N N N N N N N N N N N N N N N N N N	A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  (CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)  NAME:     CITY   CONTER OR RENTER? NUMBER OF RESIDENTS: 2   CONTER OR RENTER? NUMBER OF RESIDENTS: 2   What kind of water system do you have? WELL? SPRING? CISTERN? PUBLIC? OTHER?	Munic: Marion Two Co.: Bertes Study Area: Date: 2 1/2 1/05 General weather conditions: Co. & Study Area: Date: 2 1/25 1/05	DOOR TO DOOR
----------------	--	---	--	---	---	--	--	--	--------------

DOOR TO DOOR NEEDS SURVEY	Munic: Marien Jug Co. Re les Study Area: Date: 2 1/5/05 General weather conditions:	r is being conducted (ts are intended to b (CIRC)	OWNER OR RENTER! NUMBER  JG CISTERN! PUBLIC! OTHE  P. CO. ft. Cased(Y) N	Is well UE ON, SOFT	No. of dwelli COMMERCI	SSFO	Where does your launder and/or sink water go2 (CIRCLE ALL THAT APPLY)  SEPTIC TANK CESSFOOL OLD WELL HOLDING TANK BORE HOLE PRETO STEAM PIPE TO SURFACE OTHER	How old is your system? 235 Was it permitted? Y / N When?  Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER	If you noticed any of the above, are they seasonal or year-round?	Have you ever had your system pumped out! YN How often? Mel 4y Last time? 9y 250	Has the system every been repaired? Y (N. When?) TANK REPAIREDREPLACED LINE: REPAIREDREPLACED DRAINFIELD: REPAIREDREPLACED COMMENTS: ACCEPTANCE CONFIGURATION BY LOOKING AROUND (Y.) DO INTE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y.)

### ZIP: 1956.7 PHONE #: 529-4416 OWNEBOR RENTER? NUMBER O What kind of water system do you have? WELL? SPRING? CISTERN? PUBLIC? OTHER? If you have a well: Is it DUG or ORILLED? HOW DEEP? 100 ft. Cased? (E) N How far is the well or spring from the drain field 20 ft. Is well UP/DOWNHILL 100. OTHER Do you treat your water? Y (N)How? CL/UV DISINFECTION, SOFTENER, ION, OTHER Was the water ever tested? Y (N) When? Whatkind of segretic system of you have? (CIRETE ALL THAT APPLY) Whatkind of segretic system of you have? (CIRETE ALL THAT APPLY) CESSFOOL OLD WELL ELEVATED SAND MOUND NAME: Pick A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions. (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED) NAME: 17-14 an STREET: 14-Main St. CITY: Lobard Sedon General weather conditions. One or more sewage systems? How large is your lot? \_ Any contamination? Y / N. What (TC, FC, N, etc.) Meccion }\$ 13 ac DOOR TO DOOR NEEDS SURVEY STREET: 14 Main 54 CITY: 665mc/scort 900 3 COMMERCIAIRESIDENTIAL? No. of dwelling units? ://13 \_Study Area: ٠, disposel COMMUNITY SEWER المسعديا J

How old is your system? 2 30 4 ... Was it permitted? Y / N When? Unknown Have you every noticed any of the following near your septic system?

GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS 7016.

WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME SLUGGISH DRAINS OTHER reported

Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)

(NGROUND BED)

PRIVY

BORE HOLE SEEPAGE PIT

PIPE TO DITCH

PIPE TO SURFACE PIPE TO STEAM STORM SEWER

HOLDING TANK

OTHER

AAINA

HOLDING TANK

OLD WELL TOOASSED

INGROUND TRENCH ELEVATED SAND MOUND SEEPAGE PIT

STORM SEWER PIPE TO DITCH

COMMUNITY SEWER

BORE HOLE

PIPE TO SURFACE PIPE TO STEAM

OTHER

If you noticed any of the above, are they seasonal or year-round?

Have you ever had your system pumped out? N How often? AS 1226. If it was pumped, was it inspected for cracks of broken baffles? Y / N What part? \_\_ Last time? 1 Lyonn

TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED COMMENTS: By permit? Y / N What part?
DRAIN FIELD: REPAIRED/REPLACED

DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y) N

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.	This sample was not collected by an authorized sampler.  125285-12 Source: Keppley Marion Township  Bacteria - Facal Collidium 0 coll/100mL  Pass	Ins sample was not collected by an authorized sampler.  12525-11 Source: Uniberger Markot Township Bacleria - Fecal Coliform Cayli 10mL Pass Nitrate-Nitrogen 44.1 mg/L Bacleria - Total Coliform 0 col/100mL Pass Bacleria - Total Coliform 0 col/100mL Pass	1 hts Sample was not collected by an authorized sampler 12583-10 Source: Firestine Marion Township Bacteria - Fedal Collonn 10 col/100mL Pass Nitrate-Nitrogen 14.0 mg/L Racteria - Total Collonn 0 col/100mL Pass Pass Pass Pass Pass Pass Pass Pas	This sample was not collected by an authorized sampler.  12528-09 Source: Williams Marion Township Bacleria - Focal Collorm 0cultr0mL Pass  Nitrate-Nitrogen 18.9 mg/L Fail Razteria - Total Coliform 0 col/100mL Pass Sacteria - E.coli 0 col/100mL Pass	This sample was not collected by an authorized sampler.  125285-07 Source: Martinan Manfon Township Bacteria - Fecal Coliform 26 col/100mL Fall Nitrale-Nitrogen 13.8 mg/L Bacteria - Tolal Coliform 144.5 col/100mL Fall Bacteria - E.coli 88.5 col/100mL Fall This sample was not collected by an authorized sampler.  125285-08 Source: R Miller Martin Township Bacteria - Fecal Coliform 4.27 mg/L Bacteria - Tolal Coliform 4.27 mg/L Bacteria - E.coli 97 0 col/100mL Pass	This sample was not collected by an authorized sampler.  125285-06 Source: St. Narts Church Warnon Township Bacteria - Fecal Codiform 16.2 mg/L Bacteria - Total Codiform 118.4 col/100mL Fail Bacteria - Ecoli 45.3 col/100mL Fail
d by state and fed ster. Some parame	ampler. Pass	Pass Pass Pass Pass Pass Pass	Pass Pass Fail Pass Pass	Pass Pass Pass Pass Pass Pass	Fall Fall Fall Fall Fall Fall Fall Fall	Fail Fail Fail Fail Fail Fail
teral authorities. The MCL is the etors have no established MCL.	Sampled: 02/15/2005 0 col/100mL	Sampled: 02/15/2005 0 colf109nL 10.4 mg/L 0 colf100nL 0 colf100nL	Sampled: 02/15/2005 0 col/100mL 10.4 mg/L 0 col/100mL 0 col/100mL	Sampled: 02/15/2005 0 col/100nL 10.4 mg/L 0 col/100mL 0 col/100mL	Sampled: 02/15/2005 0 col/100mL 10.4 mg/L 0 col/100mL 0 col/100mL 0 col/100mL 0 col/100mL 10.4 mg/L 10.4 mg/L 10.4 mg/L 10.4 mg/L 10.5 col/100mL	Missimum Contaminum Levis Sunpled: 02/15/2005 0 col/100mL 10.4 mg/L 0 col/100mL 0 col/100mL
Page 2	Sampler: Chilstine K.M 02/17/2005 dnb	Sampler: Christiaw K M 02/17/2005 dnb 02/17/2005 dnb 02/17/2005 rch 02/17/2005 rch	Sampler: Christine K.M 02/17/2005 dnb: 02/17/2005 dnb 02/17/2005 rch 02/17/2005 rch	Sampler: Christiae #14 02/17/2005 dnb 02/17/2005 dnb 02/17/2005 rch 02/17/2005 rch	Sampler: Christine KA 02/17/2005 dnb 02/17/2005 dnb 02/17/2005 rch 02/17/2005 rch 02/17/2005 dnb 02/17/2005 dnb 02/17/2005 rch 02/17/2005 rch	Date Analyzed Analy Samplers: Circlestine 4 Al 02/17/2005 dnb 02/17/2005 dnb 02/17/2005 rch 02/17/2005 rch
.•	dnb	tipe & M dnb dnb dnb rch	ctine K.A. drab: drab rch rch	dnb dnb dnb rch	Since N M dnb dnb rch rch rch dnb dnb dnb	o Analyst othe 4 At dnb dnb rch rch

analyze Drinking Water (#38-338) Pure-Test is Certified by the PA DEP to

DOOR TO DOOR NEEDS SURVEY	Munic: Mellen Land Co.: College Study Area: Date: 2 1/5 105	o determine if there are any sea used in evaluating the need for E OR FILL IN AS APPROPRIA	PHONE #: 522 4.6 water system do you have: WEID well: Is it DUG of DRILLED? Is swell or spring from the drain field your water? N How? CL/UV r ever tested? ON When?	How large is your lot?  One or more sewage systems?  Lot of the large is your lot?  Lot of the large is your lot?  Lot of the large is your lot?  What kind of sewage systems?  What kind	Where does your laundry and/or sink water gold CIRCLE ALL THAT APPLY)  CEPTIC TANK CESSPOOL CESSPOOL CESSPOOL COLD WELL HOLDING TANK BORE HOLE COMMUNITY SEWER	How old is your system? 230 yr Was ti permitted? Y / N When? and find each Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS WEITNESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER.	If you noticed any of the above, are they seasonal or year-round?  Have you ever had your system pumped out (Y) N How often?  If it was pumped, was it inspected for cracks or broken baffles? Y / N What part?  Lot to system every been repaired? Y (N When;  TANK REPAIRED/REPLACED  LINE: REPAIRED/REPLACED  DO INWE HAVE YOUR FERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND(Y) N

### How old is your system? Have you every noticed any of the following near your septic system? GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY) SEPTIC TANK CESSPOOL OLD WELL HOLDING TANK PRIVY BORE HOLE Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY) CESSPOOL STORMUNITY SEWER LEVATED SAND MOUND PIDE TO STEAM PRIVY BORE HOLE PIPE TO SURFACE One or more sywage systems? COMMERCIAIRESIDE C Hand the system every been repaired? Y (NWhen? TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED If it was pumped, was it inspected for cracks or broken baffles? Y / N What part? If you noticed any of the above, are they seasonal or year-round? How far is the well or spring from the drain field 2600 ft. Is well UP/DOWNHILL /2 Do you treat your water? W/ N How? CL/UV DISINFECTION, SOFTENER/ION, OTHER Was the water ever tested? When? 2500 your formulation? Y/ N/What (TC, FC, N, etc.) What kind of water system do you have WELL? SPRING? CISTERN? PUBLIC? OTHER? If you have a well: Is it DUG or ORILLED? HOW DEEP? 4-CC ft. Cased Of N ZIP: COMMENTS: Have you ever had your system pumped out? Y NN How often? the results are intended to be used in evaluating the need for community wide solutions. (CINCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED) How large is your lot? NAME: A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and General weather conditions: Munic.: Marion OTHER. 7 PHONE #: OTHER 19,110 DIN 2 ်င္ပ DOOR TO DOOR NEEDS SURVEY アノマ STREET: No. of dwelling units? COWNER OR RENTER? NUMBER OF RESIDENTS: 3 Study Area: By permit? Y / N What part? DRAIN FIELD: REPAIRED/REPLACED PIPE TO SURFACE COMMUNITY SEWER Last time? 10,0 CITYLOOM Date: 2 / 15/ 05

do Iwe have your permission to confirm this information by looking around (y) n

				-				
DOOR TO DOOR NEEDS SURVEY	Munic.: Marion Lug Co.: 125/2 Study Area: Date: 2 1/5/02	A survey is being conducted to determine if there are sury sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  (CIRCLE OR FILL IN AS APPROPRATE, ADD COMMENTS AS NEEDED)	NUMBE C? OTHI	If you have a well: Is it DUG or DRILLED! HOW DEEP? 2.60 ft. Cased! (2) N  How far is the well or spring from the drain field 2/oc. ft. Is well UP/DOWNHILL /2.cc.  Do you treat your water? Y. N How? CLIV DISINFECTION SOFTENER, DON OTHER	Was the water ever tested(V) / N When? He S 4/- 0 82 Any contamination? Y (N) What (TC, FC, N, etc.)	How large is your lot? 2 Lace No. of Gwelling units?  One or more sewage systems?  COMMERCIALESIDENTIALS  Location 2 5 to ten fonk (E) R	What kind of sewage-system of you have? (OIRCLE ALL THAT APPLY)  CESTIC TANK  CESTOOL  NOROUND TRENCH  OLD WELL  HOLDING TANK  SEEPAGE PIT  PIPS TO SITEAM  BORR HOLE  PROVING TANK  RORR HOLE  RORR HOLE  PROVING TANK  RORR HOLE  RO	2

How old is your system? Some Was it permitted? Y / N When? Confinence of the following near your septic system?

GREEN LUSH GRASS WETHESS OR SPONGY AREAS ODORS 100000 WATER PONDING OR SUFFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER.

COMMUNITY SEWER STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE

Where does your laundry and/or sink water go! (CIRCLE ALL THAT APPLY)

(SEPTIC TANK)

CESSPOOL

OLD WELL

HOLDING TANK

BORE HOLE

OTHER

If you noticed any of the above, are they seasonal or year-round?

Have you ever had your system pumped out [V] N How often? White A Last time? Hit was pumped, was it inspected for cracks or broken baffles? Y' N What part? Un Lacina

h... the system every been repaired? Y /M When?
TANK REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS.

do i/we have your permission to confirm this information by looking around  $\widehat{\mathcal{L}}$  in

### (CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED) NAME: Lucy Vic Laceter STREET: 153 Main 57. CIT-19567 PHONE #: Has the system every been repaired? Y /(Å When? TANK REPAIRED/REPLACED LINE: REPAIR How old is your system? | Y | Was it permitted? Y / N | When? | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1 Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY) SEPTIC TANK: NGROUND BED Have you ever had your system pumped out? Y /(\$\infty\$) How often? What kind of sewage system of you have? (CIRCLE ALL THAT APPLY) Munic.: Munion If it was pumped, was it inspected for cracks or broken baffles? Y / N What part? If you noticed any of the above, are they seasonal or year-round? Do you treat your water? Y NHow? CL/UV DISINFECTION, SOFTENER, ION, OTHER Was the water ever tested? Y NW hea? What kind of water system do you have <u>WELLE</u> SPRING? CISTERN? PUBLIC? OTHER? If you have a well: Is it DUG or <u>ORITIED</u> HOW DEEP? <u>ZOO</u>ft. Cased? © N A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and One or more sewage systems? How large is your lot? \_ Any contamination? Y / N What (TC, FC, N, etc.) How far is the well or spring from the drain field 100 ft. Is well UP/DOWNHILL Leve General weather conditions: CESSPOOL PRIVY OTHER PRIVY OTHER HOLDING TANK HOLDING TANK TIEM GIO CESSPOOL d? Y /O' When? By permit? Y / N What part? LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED ပ္ပ INGROUND TRENCH ELEVATED SAND MOUND CSEEPAGE PITY INGROUND BED INGROUND TRENCH ELEVATED SAND MOUND SEEPAGE 775 BORE HOLE DOOR TO DOOR NEEDS SURVEY BORE HOLE COMMERCIAL RESIDENTIAL? No. of dwelling units? OWNER OR RENTER? NUMBER OF RESIDENTS: Study Area: STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO DITCH PIPE TO SURFACE COMMUNITY SEWER STORM SEWER PIPE TO SURFACE Last time? None CITY: Work Date: 2 1/5/05

DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND? (\*\*) N

4	
2	VEV
2	H
×	U,
3	č
DOOK	KK

General Weather conditions:
A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  (CIRCLE OR FILL IN AS APPROPRIATE, ADD CONMENTS AS NEEDED)  STREET: ADD CONMENTS AS NEEDED)  ZIP: 1815.  ZIP: 1815.  PHONE #4 557-497  PHONE #4 557-497  What kind of water system do you have? WELL? SPRING? CISTERN? PULLE? OTHER?  How far is the well or spring from the drain field 220. ft. Is well UP/DOWNHILL feee.  Do you treat your water? CO / N How? CLATY DISINFECTION SOFTENER! ION, OTHER  Was the water ever tested? O / N When?  Was the water ever tested? O / N When?  Any contamination? Y (S) What (TC, FC, N, etc.)
How large is your lot?  One or more sewage systems?  Location Systems?  What kind of sewage systems?  CERCLE ALL HALL MEPLY)  CERCLE ALL HALL MEPLY  CERCLE ALL MEPLY  COMMUNITY SEWER  CERCLE ALL MEPLY  COMMUNITY SEWER  COMMUNITY SEWER  COMMUNITY SEWER  COMMUNITY SEWER  CERCLE ALL MEPLY
Where does your launday, and/or sink water go? (CIRCLEALL THAT APPLY)  (SEPTIC TANK) (INGROIND BED) COMMUNITY SEWER CESSPOOL (INGROUND TRENCH STORM SEWER OLD WELL BLEVATED SAND MOUND PIPE TO DITCH HOLDING TANK SEEPAGE PIT PIPE TO STEAM PRIVY BORE HOLE PIPE TO SURFACE
How old is your system? Zyrs Was it permitted? N When? Conference,  Have you every noticed any of the following near your septies system?  Have you every noticed any of the following near your septies system?  WATER PONDING OR SURFACING SYSTEM OVERFLOW LOST PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME  OTHER
If you noticed any of the above, are they seasonal or year-round?
Have you ever had your system pumped out(\$\hat{Q}\$) N How olten? \(\frac{1}{2\times^2} \frac{7\times^2}{7\times^2} \frac{7\times^2}{7\times^2} \] If it was pumped, was it inspected for cracks or broken baffles(\$\hat{Q}\$) N What part?  Has the system every been repaired? Y (\$\hat{Q}\$\times^2 Mhon? \) IKREPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED
COMMENTS

DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUNDS N

### DOOR TO DOOR NEEDS SURVEY

DOOR TO DOOR NEEDS SURVEY
Munic.: Michael Co. ( Darles Study Area: Date: 2 / 15/03
to determine if there are an Eused in evaluating the nee
RENTER: NUMBER PUBLIC: OTHE Cased? Y / Number
ĬĔĮ Į
How large is your lot? 2 1/3 cc No. of dwelling units?
ESIDEN C. 72 C. X)
CESSPOOL INGROUNDTRENCH STORM SEWER OLD WELL ELEVATED SAND MOUND PIPE TO DITCH HOLDING TANK SEEPAGE PIT PIPE TO STEAM PRIVY BORE HOLE PIPE TO SURFACE
drangfor sink water go? (CIRCLE ALL THAT APPLY) TANE TOTAL TROGOUND BED INCROUND FRENCH ELEVATED SAND MOUND ROTANK SEEPAGE PIT
BORE HOLE PIP
How old is your system? A do yor Was it permitted? Y / N When? A do yor you every noticed any of the following near your septic system?  Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS  WATER PONDING OR SURFACING SYSTEM OVERFLOW  SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME
If you noticed any of the above, are they seasonal or year-round?
Have you ever had your system pumped out YN How often? (Ar Syr Last time? Lorard & syr
Has the system every been repaired? (*) N When? A C O E. By permit *> N What part? TANK REPAIRES REPLACED   LINE: REPAIRED REPLACED DRAIN FIELD: REPAIRED REPLACED COMMENTS.

do iwe have your permission to confirm this information by looking around  $\widehat{\mathcal{T}}$  in

Nitrale-Nitrogen   17.1 mg/L   Fail   10.4 mg/L   02/17/2005   ch	Huffmaster					
Bacteria - Total Coliform   109.1 col/100mL   Pail   0 col/100mL   02/17/2005   rch	Analyte	Result	Pass/Fail	Maximum Contaminant Level	Date Analyzed	Analyst
Bacteria - E.coil		17.1 mg/L	Fail	10.4 mg/L *	02/17/2005	dnb
This sample was not collected by an authorized sampler.  125283-13		109.1 col/100mL	Fail	0 col/100mL	02/17/2005	rch
125285-10   Source: PA hiouse/Liberty Square   Marion Township   Pass   0 col/100mL   02/17/2005   dnb	Bacteria - E.coli	9 col/100mL	Pass	0 col/100mL	02/17/2005	rch
Bacteria - Fecal Coliform   0 col/100mL   Pass   0 col/100mL   02/17/2005   dnb			sampler.			
Nitrate-Nitrogen   3.14 mg/L   Pass   10.4 mg/L   02/17/2005   drb		/Liberty Square Marion Township		Sampled: 02/15/2005	Sampled Christ	the K.M.
Bacteria - Total Coliform			Pass	0 cal/100mL	02/17/2005	dnb
Speciaria - E.coli   O col/100mL   Pass   O col/100mL   O col/17/2005   rch			Pass	10.4 mg/L	02/17/2005	dnb
This sample was not collected by an authorized sampler.   125285-14   Source: Bickler Marion Township   Sampled: 02/15/2005   Sampled: Christine K.M.			Pass	0 cov100mL	02/17/2005	rch
125285-14   Source: Bixler Marion Township   Sampled: 02/15/2005   Sampled: Christine K.M. Bacieria - Fecal Coliform   134 col/100mL   Fail   0 col/100mL   02/17/2005   dnb	Spotorla - E.coti	0 col/100mL	Pass	0 col/109mL	02/17/2005	rch
Bacleria - Fecal Coliform   134 col/100mL   Fail   0 col/100mL   02/17/2005   dnb			sampler.			
Nitrate-Nitrogen   13.2 mg/L   Fail   10.4 mg/L   02/17/2005   dnb		arion Township		Sampled: 02/15/2005	Sampler: Christ	ил Я эас
Bacteria - Total Coliform   >200.5 col/100mL   Fall   0 col/100mL   02/17/2005   rch			Fail	0 cal/100mL	02/17/2005	dnb
Bacieria - E.coli   129.8 col/100mL   Fail   0 col/100mL   02/17/2005   rch	~	13.2 mg/L	Fail	10.4 mg/L	02/17/2005	dnb
This sample was not collected by an authorized sampler.           125285-15 Source: Kreite Marion Township         Sampled: 02/15/2005         Sampled: Christine Kind           Bacteria - Fecal Coliform         19 col/100mL         Fail         0 col/100mL         02/17/2005         dnb           Bracteria - Focal Coliform         118.4 col/100mL         Fail         10.4 mg/L         02/17/2005         dnb           Bracteria - Focal Coliform         118.4 col/100mL         Fail         0 col/100mL         02/17/2005         rch           Bacteria - Ecoli         22.2 col/100mL         Fail         0 col/100mL         02/17/2005         rch           This sample was not collected by an authorized sampler.           1/25285-16 Source: Shedy Marion Township         Sampled: 02/15/2005         Sampler: Christine KiA           Bacteria - Fecal Coliform         0 col/100mL         Pass         0 col/100mL         02/17/2005         dnb           Nitrate-Nitrogen         1,78 mg/L         Pass         10 col/100mL         02/17/2005         dnb           Bacteria - Total Coliform         9.9 col/100mL         Fail         0 col/100mL         02/17/2005         rch           95cteria - Ecoli         0 col/100mL         Pass         0 col/100mL         02/17/2005         rch			Fall	0 col/100mL	02/17/2005	rch
125285-15   Source: Kreite Marion Township   Sampled: 02/15/2005   Sampled: Christine Kind Bacteria - Fecal Coliform   19 col/100mL   Fail   0 col/100mL   02/17/2005   dnb Nitrate-Nitrogen   13.1 mg/L   Fail   10.4 mg/L   02/17/2005   dnb Bacteria - Total Coliform   118.4 col/100mL   Fail   0 col/100mL   02/17/2005   rch Bacteria - E coli   22.2 col/100mL   Fail   0 col/100mL   02/17/2005   rch Bacteria - E coli   22.2 col/100mL   Fail   0 col/100mL   02/17/2005   rch    This sample was not collected by an authorized sampler.   Sampled: 02/15/2005   Sampler: Christine Kind Bacteria - Fecal Coliform   0 col/100mL   Pass   0 col/100mL   02/17/2005   dnb    Nitrate-Nitrogen   1,78 mg/L   Pass   10.4 mg/L   02/17/2005   dnb    Bacteria - Total Coliform   9.9 col/100mL   Fail   0 col/100mL   02/17/2005   rch    Secteria - Eccol   0 col/100mL   Pass   0 col/100mL   02/17/2005   rch	Bacleria - E.coli	129.8 col/100mL	Fall	0 col/100mL	02/17/2005	rch
Bacteria - Fecal Coliform         19 col/100mL         Fail         0 col/100mL         02/17/2005         dnb           Nitrate-Nitrogen         13.1 mg/L         Fail         10.4 mg/L         02/17/2005         dnb           Bacteria - Total Coliform         118.4 col/100mL         Fail         0 col/100mL         02/17/2005         rch           Bacteria - Ecoli         22.2 col/100mL         Fail         0 col/100mL         02/17/2005         rch           This sample was not collected by an authorized sampler.           125283-16         Source: Sheidy Marion Township         Sampled: 02/15/2005         Sampled: Christine K.M.           Sacteria - Fecal Coliform         0 col/100mL         Pass         0 col/100mL         02/17/2005         dnb           Nitrate-Nitrogen         1.78 mg/L         Pass         10.4 mg/L         02/17/2005         dnb           Bacteria - Total Coliform         9.9 col/100mL         Fail         0 col/100mL         02/17/2005         rch           Secteria - Ecoli         0 col/100mL         Pass         0 col/100mL         02/17/2005         rch			sampler.			
Nitrate-Nitrogen         13.1 mg/L         Fail         10.4 mg/L         02/17/2005         dnb           Bacieria - Total Coliform         118.4 col/100mL         Fail         0 col/100mL         02/17/2005         rch           Bacieria - E coli         22.2 col/100mL         Fail         0 col/100mL         02/17/2005         rch           This sample was not collected by an authorized sampler.           125285-16         Source: Sheidy Marion Township         Sampled: 02/15/2005         Sampled: Christine K M           Socieria - Fecal Coliform         0 col/100mL         Pass         0 col/100mL         02/17/2005         dnb           Nicrole-Nitrogen         1.78 mg/L         Pass         10.4 mg/L         02/17/2005         dnb           Bacteria - Total Coliform         9.9 col/100mL         Fail         0 col/100mL         02/17/2005         rch           Secteria - Eccoli         0 col/100mL         Pass         0 col/100mL         02/17/2005         rch	125285-15 Source: Kreitz M	arion Township		Sampled: 02/15/2005	Sampled Christ	ine Kim
Bacteria - Total Coliform         118.4 col/100mL         Fail         0 col/100mL         02/17/2005         rch           Bacteria - E coli         22.2 col/100mL         Fail         0 col/100mL         02/17/2005         rch           This sample was not collected by an authorized sampler.           1.25285-16         Source: Shedy Warion Township         Sampled: 02/15/2005         Sampled: 02/15/2005         Sampled: 02/17/2005         dnb           Sacteria - Fecal Coliforn         0 col/100mL         Pass         0 col/100mL         02/17/2005         dnb           Nitrate-Nitrogen         1.78 mg/L         Pass         10.4 mg/L         02/17/2005         dnb           Bacteria - Total Coliform         9.9 col/100mL         Fail         0 col/100mL         02/17/2005         rch           Secteria - E.coli         0 col/100mL         Pass         0 col/100mL         02/17/2005         rch	Bacteria - Fecal Coliform	19 col/100mL	Fail	D col/100mL	02/17/2005	dnb
Bacteria - E.coli   22.2 col/100mL   Fail   0 col/100mL   02/17/2005   rch	Nitrale-Nitrogen	13.1 mg/L	Fail	10.4 mg/L	02/17/2005	dnb
This sample was not collected by an authorized sampler.           125285-16 Source: Shedy Marion Township         Sampled: 02/15/2005         Sampler: Christine k /k           Bacteria - Fecal Colliorn         0 col/100mL         Pass         0 col/100mL         02/17/2005         dnb           Nitrate-Nitrogen         1.78 mg/L         Pass         10.4 mg/L         02/17/2005         dnb           Bacteria - Total Coliform         9.9 col/100mL         Fail         0 col/100mL         02/17/2005         rch           Passion - Ecoli         0 col/100mL         Pass         0 col/100mL         02/17/2005         rch	Bacteria - Total Coliform	118.4 col/100mL	Fail	0 col/100mL	02/17/2005	rch
125285-16   Source: Shedy Marion Township   Sampled: 02/15/2005   Sampler: Christine K.K.	Bacteria - E.coti	22.2 col/100mL	Fall	0 col/100mL	02/17/2005	rch
Bacteria - Fecal Coliform         0 col/100mL         Pass         0 col/100mL         02/17/2005         dnb           Nitrate-Nitrogen         1.78 mg/L         Pass         10.4 mg/L         02/17/2005         dnb           Bacteria - Total Coliform         9.9 col/100mL         Fail         0 col/100mL         02/17/2005         rch           Pascieria - E.coli         0 col/100mL         Pass         0 col/100mL         02/17/2005         rch			sampler.			
Nitrate-Nitrogen         1.78 mg/L         Pass         10.4 mg/L         02/17/2005         dnb           Bacteria - Total Coliform         9.9 col/100mL         Fail         0 col/100mL         02/17/2005         rch           Secteria - E.coli         0 col/100mL         Pass         0 col/100mL         02/17/2005         rch						in: K.A.
Bacteria - Total Coliform         9.9 col/100mL         Fail         0 col/100mL         02/17/2005         rch           Socieria - E.coli         0 col/100mL         Pass         0 col/100mL         02/17/2005         rch						
Secteria - E.coli 0 col/100mL Pass 0 col/100mL 02/17/2005 rch	•	~		10.4 mg/L	02/17/2005	dnb
Table Value of the State of the				0 col/100mL		rch
This sample was not collected by an authorized sampler.	Saciena - E.coli	0 col/100mL	Pass	0 col/100mL	02/17/2005	rch
	This sample was not c	collected by an authorized s	sampler.			

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 3

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

DOOR TO DOOR NEEDS SURVEY
Munic: Marion Jup Co.: Werks Study Area: Date: 7-1/57 US-
General weather conditions! 50°F
A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  (CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)  NAME:   STREET: 72 Main St. CITY Mornelands.
ZIP: 19567 PHONE #: 539-9514 OWNEROR RENTER? NUMBER OF RESIDENTS: 3
What kind of water system do you have? WELL'S SPRING? CISTERN? PUBLIC? OTHER?  If you have a well: Is it DUG or (DRILLED)? HOW DEEP? walknow ft. Cased? Y / N
How far is the well or spring from the drain field 100 ft. Is well UP/DOWNHILL
Do you treat your water? O / N How? CLUV DISINFECTION SOFTENER JION, OTHER
Was the water ever tested? Y N When?
Any contamination? Y / N What (TC, FC, N, etc.)
How large is your lot?
One or more sewage systems?COMMERCIAL/RESIDENTIAL?
What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)
CESTOL INGROUND BED COMMUNITY SEWER CESSPOOL INGROUND TRENCH STORM SEWER
CESSPOOL INGROUND TRENCH STORM SEWER OLD WELL ELEVATED SAND MOUND PIPE TO DITCH
HOLDING TANK SEEPAGE PIT PIPE TO STEAM
PRIVY BORE HOLE PIPE TO SURFACE
OTHER
Where does your Laundry and/or sink water go2 (CIRCLE ALL THAT APPLY)  SEPTIC TANK  CESSPOOL  OLD WELL  HOLDING TANK  PRIVY  OTHER  OTHER
How old is your system? wakeour residen Was it permitted? Y / N When? Wakeour
Have you every noticed any of the following near your septic system?    CREEN LUSH GRASS   WEINESS OR SPONGY AREAS ODORS
If you noticed any of the above, are they seasonal or year-round?
Have you ever had your system pumped out: \(\sigma\) N How often? Last time? (. m. m. thy cyc) If it was pumped, was it inspected for cracks or broken baffles \(\sigma\)/ N What part?
Has the system every been repaired? Y NWhen? By permit? Y / N What part? TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS:
do lwe have your permission to confirm this information by looking around n

If you noticed any of the above, are they seasonal or year-round?  Have you ever had your system pumped out? Y / N How often?  If it was pumped, was it inspected for cracks or broken baffles? Y / N What part?  as the system every been repaired? Y / N When?  ANK REPARED/REPLACED, LIME: REPAIRED/REPLACED  TANK REPARED/REPLACED.	How old is your system?  Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS  WATER PONDING OR SURFACING SYSTEM OVERFLOW  SIJUGGISH DRAINS WASTEWATER BACKING INTO THE HOME  OTHER	Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  SEPTIC TANK INGROUND BED CESSPOOL OLD WELL ROLDING TANK SEEPAGE PIT HOLDING TANK BORE HOLE PIPE TO STEAM PRIVY OTHER	What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  SEPTIC TANK CESSPOOL INGROUND TRENCH SELL HOLDING TANK BORE HOLE PIPE TO STEAM PRIVY DTHER	How large is your lot?  One or more sewage systems?  COMMERCIAL RESIDENTIAL?	. Is well UP ION, SOFT	ave? WELL? SPRIN	A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.    CHCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED)   CALTH   Cont.   Co	Munic.: Marirn Co.: Reds Study Area: Date: 216,705	DOOR TO DOOR NEEDS SURVEY
---	---	---	---	--	---------------------------	------------------	--	--	------------------------------

.

tunic: Marion length of the conditions:  Survey is being conducted to determ or results are intended to be used to results are intended to be used (CIRCLE OR AME: 15 5.4 miles and you have a well: Is it DUG of to you treat your water system do you to you treat your water for a pring from low far is the well or spring from low or treat your water the conditional of the contamination? Y (N) What it contamination? Y (N) What has or more sewage systems?	NEDS SURVEY	er conditions: 1 San Soudy Area: Date: 2 157 05	survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and he results are intended to be used in evaluating the need for community wide solutions.  (CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)  (AME: (75.5 ann c x c. + 2 STREET: 6.9 1/6.1 STREET: 6.9 1/6.1 STREET: ADD COMMENTS AS NEEDED)	you have a well: Is it DUG of DRILLED? HOW DEEPP content of the Cased? Y / N  you have a well: Is it DUG of DRILLED? HOW DEEPP content of the Cased? Y / N  you have a well: Is it DUG of DRILLED? HOW DEEPP content of the well or spring from the drain field \$\frac{1}{2}\$ / Oo 0. It. Is well UP/DOWNHILL. \( \leftilde{c} \) \( c	Tas the water ever tested (N When? / 1/2 or	low large is your lot? 2 /2 ac No. of dwelling units? / COMMERCIACRESIDENTIALD / COMMERCIACRESID	COMMUNITY SEWER CESSPOOL  INCROUND BED OLD WELL SEEPAGE PIT PUE TO STEAM POLDING TANK ROBE HOLD POR TO STEAM
---	-------------	---	--	--	---	--	--

Have you every noticed any of the following near you septic system?

GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS MACHER PONDING OR SUREACHIGE SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME COTHER Wasit permitted? Y / N When? 22 620 62 How old is your system?

COMMUNITY SEWER STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE

Where does you laimday and/or sink water go! (CIRCLE ALL THAT APPLY)

SEPTIC TANK
CESSPOOL
INGROUND BED
OLD WELL
HOLDING TANK
BORE HOLE
PRIVY

OLD WELL HOLDING TANK PRIVY OTHER

I you noticed any of the above, are they seasonal or year-round?

Have you ever had your system pumped out? Y (N) How often? Fit was pumped, was it inspected for cracks or broken baffles? Y / N What par?

Last time?

Has the system every been repaired? Y. (X) When?

T. Y. REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED

\( \cap{L\_1}\) LINE:

)O I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND Y

	DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND? Y / N
	Has the system every been repaired? Y / N When?  "IK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED  "OF CAMENTS: //Cefe// " CAMENTS: //Cefe//" CAMENTS: //CAMENTS: //CAMENTS: //CAMENTS: //CAMENTS: //CAMENTS: //CAMEN
	Have you ever had your system pumped out? Y / N How often?  If it was pumped, was it inspected for cracks or broken baffles? Y / N What part?  Last time?
	If you noticed any of the above, are they sensonal or year-round?
	How old is your system?  Have you every moticed any of the following near your septic system?  GREEN LUSH GRASS WETINESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER
***************************************	Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  SEPTIC TANK INGROUND BED CESSPOOL INGROUND TRENCH OLD WELL ELEVATED SAND MOUND FRIVY FRIVY BORD HOLE OTHER  GOMMUNITY SEWER STORM SEWER FROM PRIPT PRIPT O STEAM PIPE TO STEAM PIPE TO STEAM PIPE TO STEAM PIPE TO STEAM
	What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  SEPTIC TANK INGROUND BED CESSFOOL INGROUND TRENCH STORM SEWER OLD WELL HOLDING TANK SEEPAGE PIT PRIVY BORE HOLE OTHER OTHER SEPAGE HOLE PIPE TO STEAM PIPE TO SURFACE
	How large is your lot?No. of dwelling units? One or more sewage systems?COMMERCIAL/RESIDENTIAL?
	Munic: 1/10/10/10/10/10/10/10/10/10/10/10/10/10

and the second of the second o

•

	DOOR TO DOOR  NEEDS SURVEY  Munic.: Marie Co.: Bendy Area: Date: 2 1/5/05	to determine if there are sused in evaluating the sused in evaluating the sused in evaluating the ON FILL IN AS APP (1907) and the sused (WELL) and the drain field ## (1000) No Man (1000) What (TC/PC, No etc.)	How large is your lot?  One or more sewage systems?  Lizeca Alon of Segand Carden Charles Commendate Commendat	Where does your laundry and/or sink water go, CERCLE ALL THAT APPLY)  CESPTOL TANK CESSPOOL OLD WELL ELEVATED SAND MOUND PRED PRED TO STORM SEWER OLD WELL SEEPAGE PIT PRED TO STEAM PRED TO STEAM OUTHER OTHER	How old is your system? 25 yrs Was it permitted? Y / N When? Unking unit of the bollowing near your septic system? Have you every noticed any of the following near your septic system? GREEN LUSH GRASS WATER PONDING OR SURPACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER	If you noticed any of the above, are they seasonal or year-round?  Have you ever had your system pumped out(\(\frac{Y}{2}\)\) \(\text{N}\)\ How often? \(\frac{f}{g}\) \(\frac{f}{f}\) \(\frac{f}{f}\)\\  If it was pumped, was it inspected for cracks or broken ballles? \(\frac{Y}{f}\)\ \(\text{N}\)\ What part?  Althe system every been repaired? \(\frac{Y}{f}\)\ \(\frac{X}{h}\)\ hat near it in the standard out(\(\frac{Y}{f}\)\)\ \(\frac{X}{f}\)\ \(\frac{A}{f}\)\ \(
--	---	---	--	---	--	--

### How old is your system? Have you every noticed any of the following near your septic system? GREEN LUSH GRASS WETINESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY) (SEPTIC TANK) CESSPOOL INGROUND TRENCH What kind of sewage system of you have? (CIRC CESTIC TANK) CESSPOOL Was the water ever tested? N When? 4-5-45-Any contamination? Y //N What (TC, FC, N, etc.) the results are intended to be used in evaluating the need for community wide solutions. (CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED) NAME: Randall Frazer STREET: 181 Maja St CI One or more sewage systems? General weather conditions: How large is your lot? \_\_ A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and OLD WELL HOLDING TANK PRIVY OTHER PRIVY OLD WELL OTHER\_ PHONE # 597 4405 INGROUND BEDS INGROUND TRENCH ELEVATED SAND MOUND SEEPAGE FIT BORE HOLE Berks DOOR TO DOOR NEEDS SURVEY ELEVATED SAND MOUND SEEPAGE PIT BORE HOLE E ALL THAT APPLY 30.6 COMMERCIALRESIDENTIAL No. of dwelling units? 05.00 Study Area: PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE Sec STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE STORM SEWER COMMUNITY SEWER COMMUNITY SEWER ODORS いったいらいち T (A) CITY: Wondsday Date: 2 1/5/05

do Iwe have your permission to confirm this information by looking around y ) n

TANK REPAIRED/REPLACED LINE: REPAIR COMMENTS: No worker Second Line:

LINE: REPAIRED/REPLACED

By permit? Y / N What part?
DRAIN FIELD: REPAIRED/REPLACED

Last time?

If it was pumped, was it inspected for cracks or broken baffles? Y N What part?

Have you ever had your system pumped out(Y) N How often? If you noticed any of the above, are they seasonal or year-round?

DOOR TO DOOR /- NEEDS SURVEX	Munic. Marion Turp Co. Merko Study Area: Date: 2122/03	o determine if there are used in evaluating the EOR FILL IN ASAPP	PHONE #: 5284 - 57.7 7 OWNEROR RENTER? NUMBER OF R ater system do you have WELLS SPRING? CISTERN? PUBLIC? OTHER? all is it DUG «DRILLED? HOW DEEP? ft. Cassed? Y   N Conkrowell or spring from the drain field —CCO ft. is well UP/DOWNHILL —CCO ft. is well up-down —CCO	How large is your lot? = 1/20c. No. of dwelling units? / One or more sewage systems? / COMMERCIAL(RESIDENTIAL?)	What kind of segage system of you have? (CIRCLE ALL THAT APPLY)  SEPTIC TANK  OBSSPOOL  OLD WELL  SEPACE PIT  HOLDING TANK  SEPAGE PIT  PIPE TO STRAM  PRETOSTRAM   Where does your-laundry-and/or sink water go? (CIRCLE ALL THAT APPLY)  (SEPTIC TANK)  (INGROUND BED)  (OESSPOOL  OLD WELL  ELEVATED SAND MOUND PRETO DITCH HOLDING TANK  BORE HOLE  OTHER	How old is your system? 25 25 47 Was it permitted? Y / N When? Con known Have you every noticed any of the following near your septic system? GREEN LUSH GRASS WEITHESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER	If you noticed any of the above, are they seasonal or year-round?  Have you ever had your system pumped out \( \frac{\gamma}{\gamma} \) \( \text{N} \) \( \text{N what part?} \) \( \text{Last time?} \) \( \text{Last time?} \) \( \text{Last time?} \) \( \text{Last time?} \) \( \text{Last part part?} \) \( \text{Last part part?} \) \( Last part part part part part part part par	Has the system every been repaired? Y (N) Then? TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS:	DO LWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y) N	
---------------------------------	--	---	---	---	---	---	---	---	---	---

# Pure-Test Water Lab 736 East Lincoln Avenue Myerslown, PA 17067 717-886-2234

也)acer Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125419
Date Reported: 02/24/2005
Phone Number: 717-838-1351

This sample was not collected by an authorized sampler. The Maximum Contaminart Level (MCL) has been established by state is maximum quantity of a substance allowed in safe drinking water. Some	This sample was not collected by an authorized sampler. 125419-05 Scorce: Marcun Backeria - Feed Collorm O coll/100mL Pess Nitrale-Nilrogen 14.3 mg/L Backeria - Total Collorm 15.0 col/100mL Fail Factoria - E.coli O col/100mL Pass	s sample was not colle 1.15419-04 source: Mandder Sectoria - Facil Cottorn Nitrale-Mitrogen Bacteria - Total Coliforn Cotteria - Evoli	This sample was not collected by an authorized sampler.  1254 19-03 Fource (Sapolog Sactoria - Festal Collidom Outlif 10cmL Pass Mitrade-Altrogen Bacleria - Total Collidom 28.8 col/100mL Falt Sactoria - E.coli 0 col/100mL Pass	This sample was not collected by an authorized sampler. 125419-02 Source: Hidebrand Bedeleria - Focul Collorm O col/190mL Pass Nitrala-Nitrogen Becleria - Total Coliform Sacretia - Total Coliform Sacretia - Total Coliform O col/190mL Pass	Analyte 125419-01 Source: Hetrentinger Bucker's - Freat Colliform Militate-Miregan 2actoris - Tolat Colliform Sacteris - Exati
ple was not collected by an authorized sampler. The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.	ected by an authorized so 0 coll100mL 14.3 mg/L 15.0 coll100mL 0 coll100mL	sample was not collected by an authorized sampler.  19-04 Source: Resider 0 col/100mL Pass  Fill Colform 1/2 myl. Pass  ia-Total Colform >200.5 col/100mL Fall  ia-E.colf 0 col/100mL Pass	octed by an authorized sa ocidional 9.54 mg/L 28.8 col/100mL	octed by an authorized s: 0 col/190mL 3.54 mg/L 3.1 col/100mL 0 col/167mi	Result  0 cal/190mL  2.79 mg/L  0 cal/100mL  0 cal/100mL
mpler. by state and fed er. Some parame	Pess Fail Fail Pass	Pass Pass Pass Pass Pass Fall Pass	Pass Pass Fall Pass	ampler. Pass Pass Fail Pass	Pass/Fail Pass Pass Pass Pass
eral authorities. The MCL is the lers have no established MCL.	Sampled: 02/22/2005 0 col/1900;nL 10.4 mg/L 0 col/190mL 0 col/190mL	Sampled: 02/22/2005 Ü col/100/ml. 10.4 mg/L O col/100/ml. O col/100/ml.	Sampled: 02/22/2005 0 col/150mL 10,4 mg/L 0 col/100mL 0 col/100mL	Samplect: 02/22/2005 0 col/103ml. 10.4 mg/L 0 col/100ml. 0 col/100ml.	Maximum Contaminant Level Sampled: 02/22/2005 0 col/100nL 10.4 mg/L 0 col/100nL 0 col/100nL
Page l	Sampton: Christians K.A. 02/24/2005 dnb 02/23/2005 dnb 02/24/2005 dnb 02/24/2005 dnb	Sampker: Christins K.H 02/24/2005 dnb 02/23/2005 dnb 02/24/2005 dnb 02/24/2005 dnb	Sampler: Christin- K.u 02/24/2005 dnb 02/23/2005 dnb 02/24/2005 dnb 02/24/2005 dnb	Sumpler: Charling (.x 02/24/2005 dnb 02/23/2005 dnb 02/24/2005 dnb 02/24/2005 dnb	Date Analyzed Analy Sabiplact: Climbrant R in Sabiplact Simbrant R in Ozizzyzoo5 dnb Ozizzyzoo5 dnb Ozizzyzoo5 dnb
	une K. W drub drub drub drub drub	dnb dnb dnb dnb dnb	stin X A. dnb dnb dnb dnb	mine K.x. dnb dnb dnb	d Analyst  turr K A  dnb  dnb  dnb  dnb  dnb

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Has the system every recurrenaited N When? TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS: DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND N
If you noticed any of the above, are they seasonal or year-round?  Have you ever had your system pumped out? Y (W) How often? Leafe an alcohol Last time? Unknown!  If it was pumped, was it inspected for cracks or broken haffled? Y (N) When they have the specific time? Unknown!
How old is your system?   Was it permitted? N When?  Have you every noticed any of the following near your septice system?  GREEN LUSH GRASS WEINESS OR SPONGY AREAS ODORS  WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER
Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  CSEPTIC TANK:  CESSPOOL  CESSPOOL  OLD WELL  HOLDING TANK  PRIVY  BORE HOLE  OTHER  BORE HOLE  OTHER  PRIVY  BORE HOLE  OTHER
What kind of sewage system of you have? (FIGCLE ALL THAT APPLY)  (SEPTIC TANK)  CESSPOOL  OLD WELL  HOLDING TANK  PRIVY  DOTHER  DOTHER  DOTHER  DOTHER  HOLD WELL  BLEVATED SAND MOUND  PRIVY  BORD HOLE  FIFE TO STEAM  PIPE TO SURFACE  PIPE TO SURFACE
How large is your lot? 2 / 1.24 No. of dwelling units? One or more sewage systems? 2 / 1/24 COMMERCIAL (ESIDENTIAL)
Any contamination? Y / N What (TC, FC, N, etc.) 404047
field 100 ft. Is well UP/DOWNHILL 16/10 /
What kind of water system do you have? WELL? SPRING? CISTERN? FUBLIC? OTHER?  What kind of water system do you have? WELL? SPRING? CISTERN? FUBLIC? OTHER?  If you have a well: Is it DUG or DRILLED? HOW DEEP? unknown ft. Cased? Y'   N Cakero we
esults are intended to be used in evaluating the need for community wide solutions.  (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS ITE: 11.2.1.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4
A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and
Munic: Marrion County (100: 172 1/2) County Study Area: Date: 2 1 221 05
NEEDS SURVEY

R TO DOOR	Study
DOOR NEEDSS	Betho

					•••••••		***********
Munic: Maried Les Co.: 12, 140  General weather conditions:  General weather conditions:  A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  NAME: James Kepples Fill. IN AS APPROPERTY. ADD COMMENTS AS NEEDED)  STREET. J. Main STREET. The COMMENTS AS NEEDED)  STREET. J. Main STREET. COMMENTS AS NEEDED)  STREET. J. Main STREET. COMMENTS OTHER? CITY: Main STREET.	How large is your lot? 475 ac. No. of dwelling units? / One or more sewage systems? COMMERCIAL/RESIDENTIAL?	What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  SEPTIC TANK  CESSPOOL  OLD WELL  SEEPAGE PIT  HOLDING TANK  BORE HOLE  OTHER	Where does your laundry and or sink water gold CIRCLE ALL THAT APPLY)  SEPTIC TANK CESSPOOL OLD WELL SEEPAGE PIT PRETO STEAM PIPE TO SUFFACE PRICY POTHER	How old is your system? 10 4.5 Was it permitted? (1) N When? (1) Known Have you every noticed any of the following near your septic system? GREEN LUSH GRASS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER	If you noticed any of the above, are they seasonal or year-round?	Have you ever had your system pumped out? (**) N How often? (**) How often? (**) If it was pumped, was it inspected for cracks or broken baffles? Y'((**) What part? (**) What part? Has the system every been repaired? Y (**) When? (**) WREPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED (**) WMENTS:	do iwe have your permission to confirm this information by looking around $(Y)$ n

	Has the system every been repaired? Y / N When?  NK REPAIRED/REPLACED. LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED  AMENTS: Call left.
	Have you ever had your system pumped out? Y / N How often? Last time?  Hit was pumped, was it inspected for cracks or broken baffles? Y / N What part?
••••••	If you noticed any of the above, are they seasonal or year-round?
	How old is your system?  Have you every policed any of the following near your septic system?  GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS  WATER PONDING OR SURFACING SYSTEM OVERFLOW  SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME  OTHER
,	Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  SEPTIC TANK INGROUND BED CESSPOOL INGROUND TRENCH OLD WELL HOLDING TANK SEPFAGE PIT PRIVY BORE HOLE OTHER OTHER  BORE HOLE OTHER
********	What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  SEPTIC TANK INGROUND BED COMMUNITY SEWER CESSPOOL INGROUND TERNOH STORM SEWER OLD WELL ELEVATED SAND MOUND PIPE TO DITCH HOLDING TANK SEEFACE PIT PIPE TO STEAM PRIVY BORE HOLE PIPE TO SURFACE OTHER
. '	How large is your lot?No. of dwelling units?  One or more sewage systems?COMMERCIAL/RESIDENTIAL?
	Munic.: Macion Co: Weeler are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  (CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS INTEEDED)  NAME:  PHONE #:  What kind of water system do you have? WELL? SPRING? CISTERN? PUBLIC? OTHER?  If you have a well: Is it DUG or DRILLED? HOW DEEP?  Any contamination? Y / N When?  Was the water ever tested? Y / N When?  Any contamination? Y / N What (TC, FC, N, etc.)

DO YWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND? Y / N

	٠ د د
-	f
Ç,	
O.K.	
DOOR TO DOOK NEEDS SURVEY	
DOOR SEDS S	0
N	/
	١
	1
	,

If you noticed any of the above, are they seasonal or year-round?  Have you ever had your system pumped out? Y (M) How othen?
The Marie and the Country of the National Asset Country

do iwe have your permission to confirm this information by looking around  $\widehat{\mathcal{CL}}$  N

	DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y) N
	Has the system every been repaired? Y / N When?  TK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED  COMMENTS:
÷	Have you ever had your system pumped out(\( \frac{\mathcal{Y}}{\mathcal{Y}} \) N How often? \( \frac{\mathcal{Y}}{\mathcal{X}} \) What part? Last time? \( \frac{\mathcal{Y}}{\mathcal{Y}} \) \( \frac{\mathcal{Y}}{\mathcal{Y}} \) What part?
	If you noticed any of the above, are they seasonal or year-round?
	How old is your system? 73043 Was it permitted? Y/N When? 1/n 41041 Have you every moticed any of the following near your septic system? GREEN LUSH GRASS WEINESS OR SPONGY AREAS ODORS WATER PONDING OR SUBFACING SYSTEM OVERPLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER
	Where does your laundey and/or sink water go?_(CIRGLE_ALL_THAT APPLY)  CESSFOOL  OLD WELL  HOLDING TANK  PRIVY  BORE HOLE  OTHER  OTHER
	What kind of scarage system of you have? (CIRCLE ALL THAT APPLY)  SEPTIC TANK  UESSPOOL  OLD WELL  HOLDING TANK  PRIVY  OTHER  PRIVY  BORE HOLE  OTHER  WEAL  BORE HOLE  OTHER  COMMUNITY SEWER  STORM S
-,	How large is your lot? //3 & No. of dwelling units? / One or more sewage systems? / COMMERCIAL RESIDENTIAL?
	OW DEEP? 300 ft. Cased?(X) N 100 ft. Is well UP/DOWNHILL / SINFECTION (SOFTENER, ION, OTH 2 7 7 9
	Y-2475 OWNER OR RENTER? NUMBER OF THE SPRING? CISTERN? PUBLIC? OTHER
	ng conducted to determine if there are any ser intended to be used in evaluating the need for (CIRCLE OR FILL IN AS APPROPRIA
	Munic: Marion Lyp Co.: (Sarko Study Aren: Date: 2/22/05
	DOOR TO DOOR

DOOR TO DOOR NEEDS SURVEX
Munic.: Merion Wy Co.: Certes Study Area: Date: 2122105
to determine if there are any sevensed in evaluating the need for B OR FILL IN AS APPROPRIA
ER OF RESI
Do you treat your water? (2) N How? CL/UV DISINFECTION(SOFTENER), 10N, Ultier Was the water ever tested (19) N When? Any contamination? Y (N What (TC, FC, N, etc.)
How large is your lot? 2/5/5 2.5 2. No. of dwelling units? 2. One or more sewage systems? 2. COMMERCIAL(RESIDENTIAL)
What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  (SEFTIC TANK)  CESSPOOL  OLD WELL  SEPRICE ALL THAT APPLY)  CRESPOOL  ELEVATED SAND MOUND PRE ODITCH  SEEPAGE PIT  PIPE TO SURFACE  PRIVY  POTHER
Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  COMMUNITY SEWER  NGEROUND TRENCH  SLESTOOL  SLEYATED SAND MOUND  PIPE TO STEAM  FOLDING TANK  SEEPAGE PIT  PIPE TO SURFACE  PIPE TO SURFACE  PIPE TO SURFACE  OTHER
How old is your system? 6-7 yrs Was it permitted?(2) N When? Unknown  Have you every noticed any of the following near your septie system?  Have you every noticed any of the following near your septie system?  GREEN LUSH GRASS WATENESSO RS SPONGY AREAS ODORS Long WATEN POYNDING OR SURTENESSOR SYSTEM OVERFLOW  SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME
If you noticed any of the above, are they seasonal or year-round?  Have you ever had your system pumped out? (Y) N How often? 3 1-1046 104 Last time? 1 97 62 64  If it was pumped, was it inspected for cracks or broken baffles? (Y) W What part?
Has the system every been repaired? Y (LYWhen?  TANK REPAIRED/REPLACED  LINE: REPAIRED/REPLACED  COMMENTS:
do iwe have your permission to confirm this information by looking around; $\mathscr{G}_{i}$ in

This sample was not collected by an authorized sampler.	čacleria - E.coli	Coliform:		Bacteria - Fedal Coliforn	125419-11 Source: Percy's Custom Drawes	collection and elemes start	F. Cria - E.coli	Bacteria - Total Coliform	Nitrate-Nitrogen	Bacteria - Fedal Colliorm 0 &	inis sample was not colle	outcomes - Francis	Postoria - Tead Company	Probate Total Collings	Charles a com comorna	Post-total - Found Collings	This sample was not colle	\$800/16 - 6.53#	Booker Full Conjorn	Minate-ratiogen	Societia - Fecal Collions	125419-08 Source: Alleyre	This sample was not colle	Bacteria - E.ooli	Eactoria - Total Coldomi	Mikiglo-Mikingen	becteria - Fecal Colitorin	125419-07 Source: Weaco Business	This sample was not colle	Icleria - E.coli	Bacteria - Total Coliform	Nitrato-Mitrogen	Bacteria - Fecal Coliform	Analyte 125419-06 Source: Ludwig
ted by an authorized samp	0 col/100ml ` P	m.		700mL	125419-11 Source: Percey's Custom Draws	tod by an authority		<u> </u>	5.89 mg/L	1/100mL	inis sample was not collected by an authorized sampler.	ה פמע זנומחור			and the second		This sample was not collected by an authorized sampler.	0 col/100mL			0 col/100niL		This sample was not collected by an authorized sampler.	0 col/100mL	0 col/100mL	<1 mg/L	0 col/100mL		This sample was not collected by an authorized sampler	22.2 col/100mL	>200,5 col/100mL	9.15 ng/L	>200 col/100mL	Result
ler.	Pass	Done Done	5	D See	ler.	ass		Fall	Pass	Pass	oler.	Pass	Pass	Fass	Pass		pier.	Pass	Pass	Pass	Pagg		pler.	Pass	Pass	Pass	Pass		pier.	Fail		Pass	Fai	Pass/Fail
	0 col/100mL		·	1: 02/22/2005		O CONTROPPE	O cold Cont	D col/1 00ml	10,4 mg/L	Sampled: 02/22/2005 0 col/100mL		0 col/100mL	0 col/100mL	10.4 mg/L	0 col/100mL	Sampled: 07/22/2005		0 cal/100mL	0 cal/100mL	10.4 nig/L	ปี col/100ml	Sampled: 02/22/2005		0 col/100mL	0 col/100mL	10.4 mg/L		Sampled: 02/21/2005		0 col/100mL	0 col/100mL	10.4 mg/L	0 col/100mL	Maximum Contaminant Level
	02/24/2005	02/23/2005	C007#7/70	Sempler: Christine Ka		02/24/2005	000214200	DODG NOOR	02/23/2005	Տարքվու: Հիկլչան (Հ.) 02/24/2005 - dob		02/24/2005	02/24/2005	02/23/2005	02/24/2005	Sampler: Christine K.A.		02/24/2005	02/24/2005	02/23/2005	02/24/2005	Sample: Chalcher K.F		02/24/2005	02/24/2005	02/23/2005	02/24/2005	Sandler Original Ass		02/24/2005	02/24/2005	02/23/2005	02/24/2005 dnh	Date Analyzed
	dn d	a B	dup	Time Kan		dnb	<u> </u>	<u>}</u>	<u>f</u>	dob		dnb	dn d	фb	dab	stine K.H		dnb	흉	율	ab .	i i i i i i i i i i i i i i i i i i i		을 (	<u>.</u>	G :	<del>g</del>	が行うれた		dnb i	€ 8	9 1	<u></u>	ed Analyst

The Maximum Contaminant Level (MCL) has been established by stale and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 2

Has the system every been repaired? Y (N)When?
TANK REPAIRED/REPLACED LINE; REPAIRED/REPLACED DRAIN FIELD; REPAIRED/REPLACED
COMMENTS:

do I/we have your permission to confirm this information by looking around (y)/ n

Have you ever had your system pumped out(Y)/ N How often? //e / //
If it was pumped, was it inspected for cracks or broken baffles(Y)/ N What part?

Last time? Branks esa

If you noticed any of the above, are they seasonal or year-round?

analyze Drinking Water (#38-338) Pure-Test is Certified by the PA DEP to

my of the following near your septic system? ISH GRASS WETNESS OR SPONGY AREAS OF INDING OR SURFACING SYSTEM OVERPLOW IDRAINS WASTEWATER BACKING INTO THE H
Where does your laundry and/or sink water go? (CIBCLE ALL THAT APPLY)  (SEPTIC TANK)  (CESSPOOL  (INGROUND BEB)  (COMMUNITY SEWER  (INGROUND TRENCH  STORM SEWER  PIPE TO STEAM  PIPE TO SURFACE  OTHER  (A) STORM SEWER  STORM SE
What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  (SEPTIC TANK)  CESSFOUL  OLD WELL  HOLDING TANK  PRIVY  FIRTY  BORE HOLE  OTHER  What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  (SIGNOUND TRENCH  STORM SEWER  STORM SEWER  STORM SEWER  STORM SEWER  PIPE TO STEAM  PIPE TO SURFACE
How large is your lot? 7.5 dc. No. of dwelling units? 4 bud cross in duelling One or more sewage systems? 7 COMMERCIAL RESIDENTIAL?
Munic: Macion Co: Pet Study Area: Date: 2 / 22/ 05 General weather conditions: Co: 40'-2  A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)  NAME: 44 Weaver Add Co STREET: 420 9 Large Weaver City: Line 18 dent 18 de

## Pure-Test Water Lab

736 East Lincoln Avenue Myerstown, PA 17067 717-865-2234

Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125769
Date Reported: 03/15/2005
Phone Number: 717-838-1351

This sample was collected by an authorized sampler.

The Maxmum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maxmum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Page 1

ZIP: 1976.7 PHONE #: 529 - 5112 (OWNER OR RENTER? NUMBER OF RESIDENTS: 3 What kind of water system do you have WELL?) SPRING? CISTERN? PUBLIC? OTHER?

If you have a well: Is it DUG or DRILLED? HOW DEEP? 2200 ft. Cased? (2) N Date: 3/10/05 Has the system every been repaired? Y (N)When?
TANK REPAIRED/REPLACED LINE: KEPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED
COMMENTS: A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and do ime have your permission to confirm this information by looking around:  $ilde{\mathcal{C}}$  in tiche CITY Wance COMMUNITY SEWER STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE COMMUNITY SEWER Was it permitted? Y / N When? Un known STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE しいこと andyl Last time? the results are intended to be used in evaluating the need for community wide solutions.
(CRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED) How old is your system? A you was it permitted? Y /N When? Lot /k.

Have you every noticed any of the following near your septic system?

Have you every noticed any of the following near your septic system?

GREEN LUSH GRASS WEINESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW WATER PONDING OR SURFACING NATOTHE HOME SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME How far is the well or spring from the drain field /OO It. Is worth Down Hill.
Do you treat your water (Y) N How? CL/UV DISINFECTION SOFTENER TON, OTHER STREET: 1113 Wm. Phys Bleet COMMERCIALRESIDENTIAL Have you ever had your system pumped out (3) N How often? / neight 1. If it was pumped, was it inspected for cracks or broken balfles (3)! N What part? Where does your launday and/or sink water go, CHRCES-ALL THAT APPLY)

SEPTIC TANK
CESSPOOL
OLD WELL
HOLDING TANK
SEEPAGE PIT
FRIVY INGROUND BED THEROOF BLEVATED SAND MOUND SEEPAGE PIT BORE HOLE Study Area: No. of dwelling units? What kind of sexsecratem of you have? (CIECLE ALL THAT APPLY)

SEPTIC TANK

CESSPOOL

CESSPOOL DOOR TO DOOR NEEDS SURVEY 81-10 If you noticed any of the above, are they seasonal or year-round? Was the water ever tested Y (N When?
Any contamination? Y (N What (TC, FC, N, etc.) 1/4 ax ္ပိ HOLDING TANK PRIVY General weather conditions: OLD WEL OTHER OTHER OTHER Munic: Marion

## Pure-Test Water Lab 736 East Lincoin Avenue Anyerstown, PA 17067 717-866-2234

Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125769
Date Reported: 03/15/2005
Phone Number: 717-838-1351

Bacteria - Total Coliform Bacteria - E.coli Bacteria - Fecal Coliform Analyte 125769-03 Source: Hughes Result 1 col/100mL 7.50 mg/L 9.9 col/100mL 2.0 col/100mL Fall Page Pass/Fail Marimum Contominant Lovel Date Analyzed Analyst 0 col/100mL 10.4 mg/L 0 col/100mL 0 col/100mL Sampled: 03/10/2005 03/11/2005 03/11/2005 03/11/2005 03/11/2005 Sampter: Olefshira hapor 8888

This sample was collected by an authorized sampler.

		Pure-Test is Certified by the PA DEP to	maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.	The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the
			(	Page 1
DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y) N	Has the system every been repaired? Y / (When? By permit? Y / N What part? TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD; REPAIRED/REPLACED COMMENTS:	If it was pumped, was it inspected for cracks or broken baffles? (B) N What part?	Warrange over head more system numbed out VV N How often? 1000 Urs Last time? 3 1 0 5	If you noticed any of the above, are they seasonal or year-round?

How large is your let?  How large is your let?  SEPTIC TANK OLD WELL HOLDING TANK PHRY OTHER OTHER  Where does your-letterity radyor sink water go? (CIRCLE ALL THAT APPLY) CESSTOOL CESSTOOL OTHER OLD WELL HOLDING TANK ELEVATED SAND MOUND FIRENCH GESSTOOL GESTIC TANK FILTY OTHER OTH	Munic: Marion The Co.: De No. Survex Study Area: Date: 3/0/05  General weather conditions: Clear General weather conditions: Clear General weather conditions: CREAT GROWNERS are intended to be used in evaluating the need for community wide solutions. CRICLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)  NAME: Scalf Show Fer STREET: GG Clear Community wide solutions. CITY: Constant Street Grown STREET: GG Clear Community wide solutions. CITY: Community wide solutions. CITY: COMMENTS AS NEEDED COMMENTS AS NEEDED STREET: GG Clear Community wide solutions. CITY: COMMENT AS NEEDED STREET: GG Clear Community wide solutions. CITY: Community wide solutions. CITY: Community of the community wide solutions. CITY: Community of the community wide solutions. CITY: Community of the comm
--	--

4	
DOOR	ļ
5	
E.	(
DOOR TO	ĺ

DOOR TO DOOR
Munic.: Mecion han Co.: Rich Study Area: Date: 2 122 165 General weather conditions: Cloudy Form
are my sewage problems in this area the need for community wide solutions PPROPRIATE, ADD COMMENTS AS TREET.  THE CONNER ON RENTER: 1  SPRING: CISTERN: PUBLIC!  OWN DEEP: AS A CASECH!
How far is the well or spring from the drain field 37-50 ft. Is well UP/DOWNHILL /e_cc/ Do you treat your water(Y) N How' CLOV DISINFECTION SOFTENER, TON, OTHER Was the water ever tested(Y) N When? Any contamination? Y (Y) What (TC, FC, N, etc.)
How large is your lot? / M. No. of dwelling units?   + access 127 Stack.  One or more sewage systems?   COMMERCIAL/RESIDENTIAL?
What kind of sowage existem of you have? (CIRCLE ALL THAT APPLY)  SECTION TANK  CESSPOOL - A LOLD WELL  HOLD WELL  PRIVY
Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  SEPTIC TANK CESSPOOL OLD WELL HOLDING TANK SEEPAGE PIT PRETO STEAM
How old is your system? 7.57.3 Was it permitted? Y / N When? 2.7 k.10 a.m.  Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS  WATER PONDING OR SURFACING SYSTEM OVERFLOW  SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME  OTHER
If you noticed any of the above, are they seasonal or year-round?
Have you ever had your system pumped out? Y (W) How often? If it was pumped, was it inspected for cracks or broken ballles? Y / N What part?
Has the system every been repaired? Y (XWhon?  T 'K REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD; REPAIRED/REPLACED  C. AMENTS:
DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (X) N

CLEST OLL  CLEVATED SAND MOUND  FIRE TO DITCH  HOLDING TANK  PRIVY  OTHER  CHEVAGE PIT  PRET TO SURFACE  OTHER  Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  SEPTIC TANK  SEPTIC TANK  SEPTIC TANK  OLESSPOOL  OLESSPOOL  OLESSPOOL  HOLDING TANK  PRIVY  OTHER  OTHER  OTHER  HOLDING TANK  PRIVY  OTHER  HOLDING TANK  PRIVY  OTHER  How old is your system?  OTHER  WAS TENEACH  How of the following near your septic system?  GREEN LUSH GRASS  WATER SOR SPONGY AREAS  WATER PONDING OR SURFACING  WASTEWATER BACKING INTO THE HOME  OTHER  How of the above, are they seasonal or year-round?  Have you ever had your system pumped out? Y (N) How often?  Last time?  Last time?	Munic: Marien Lange Co.: 178/143 Study Arca: Date: 2 / 22/25  General weather conditions: Co.: 178/143 Study Arca: Date: 2 / 22/25  A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions. (CIRCLE QR FILLIN AS APPROPRIATE; ADD COMMENTS AS NEEDED)  NAME: 16 Marie 18 Ma
--	--

,	•		
¢	4		
	DOOK TO DOOK	7	
6	)   	CCTTD	
5		COL	7
		•	

NEEDS SURVEX  Needs Survey  Study Area: Date: 2 /22 /UP-	A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  The control of FILL IN SAPROPERATE: ADD COMMENTS, ASYNEDBED TO NAME:  The control of the control of Stand STREET: ADD COMMENTS, ASYNEBED STREET: ADD COMMENTS, ASYNEBED STREET: ADD COMMENTS, ASYNEBER OF RESIDENTS: IN The least of water system do you have? WELL? SPRING? CISTERN? PUBLIC? OTHER? AND STREET: ADD COMMENT STREET STR	How large is your lot?    Commercine or more sewage systems?   Commercine or more sewage systems?	ANK SEEPAGE FOR SEEPAGE AND THAT APP)  NED THAT APP)  NOROUND BED. K 2  NOROUND TRENCH  SLEVATED SAND MOUND  TANK BORE HOLE  W. Y. Y. Y. N.	HY IN When CANAGE CONTROL CANAGE CAN AND AND CONTROL CAN CANAGE C	If you noticed any of the above, are they seasonal or year-round?  Have you ever had your system pumped out (X) N How often! (22. 12. 12. 12st time? (Y) What part?  If it was pumped, was it inspected for cracks or broken baffles(X) N What part?  H-c the system every been repaired? Y (M) Whon!  IK REPAIRED/REPLACED  COMMENTS: (U) (A) W. 24 Ma. 4. ct  DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND(X) N

ED/REPLACED DRAIN FIELD: RI M THIS INFORMATION BY LOOKIN
numped out(V) N How often? 3. d for cracks or broken baffles(V) N red? Y (W)When?
If you noticed any of the above, are they seasonal or year-round?
How old is your system? 16 yr Was it permitted Y)N When? 4 nown Have you every noticed any of the following near your septic system? GREEN LUSH GRASS WETINESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER
Where does your launday and/or sink water go? (CIRCLE ALL THAT APPLY)  (SEPTIC TANK)  (SEPTIC TANK)  (SEPTIC TANK)  (SESTION TANK)  (CINGROUND BED)  (COMMUNITY SEWER  STORM SEWER  OLD WELL  HOLDING TANK  SEEPAGE PIT  PRIVY  BORE HOLE  OTHER  PIPE TO SURFACE
What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  (SEPTIC TANK)  (INGROUND BED)  (COMMUNITY SEWER  (INGROUND TRENCH  STORM SEWER  FIPE TO STRAM  PRIVY  BORE HOLE  OTHER
How large is your lot? ? S Common No. of dwelling units? / One or more sewage systems? / Willow COMMERCIATRESIDENTIAL?
If you have a well: Is it DUG or MAILLED! HOW DEEP? / A O IT. Cased?(Y) N  How far is the well or spring from the drain field / So It. Is well UP/DOWNHILL / Do you treat your water(Y) N How? CL/UV DISINFECTION SOFTENER JION, OTHER  Was the water ever tested?(Y) N When? & 10 10 10 10 10 10 10 10 10 10 10 10 10
the need for community wide solutions. PPROPRIATE: ADD COMMENTS AS PPROPRIET: ACOS Contal (Mour) / 1  OWNER OR RENTER? N
A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and
Munic: Macien Lie, p. Co.: (1) e. 120 Study Area: Date: 2-122105
DOOR TO DOOR NEEDS SURVEY

NEDOS SINOR Y  NEDOS SINOR AND SOL
--

### Pure-Test Water Lab 736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

## Water Analysis Report

Palmyra PA 17078 Light-Heigel & Associates Inc 430 E Main Street

Lab Number: 125604

General weather conditions:

Jungy ် က

3000

\_Study Area:

Date: 03/03/05

DOOR TO DOOR NEEDS SURVEY

Munic: Klarion

Date Reported: 03/08/2005 Phone Number: 717-838-1351

Mitrale-Mitrogen Bacteria - E.coli Bacteria - Total Coliform Bacteria - Fecal Collium 125604-02 Source: Not! 1.19 mg/L 1.0 col/100mL 0 col/100mL Pass Pass/Fail 0 col/100mL 0 col/100mL 10.4 mg/L 0 cot/100mL Maximum Contaminant Lovel Sampled: 03/03/2005 Date Analyzed Analyst 03/04/2005 03/04/2005 03/04/2005 03/04/2005 Sampler: Christina Major 五豆 是豆

This sample was collected by an authorized sampler.

What kind of sewage system of you have? (CIBCLE ALL THAT APPLY)

SEPTIC TANK

INGROUND TRENCH

CESSPOOL

INGROUND TRENCH

ELEVATED SAND MOUND SEEPAGE PIT BORE HOLE

COMMUNITY SEWER STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE

OTHER PRIVY OLD WELL HOLDING TANK One or more sewage systems? How large is your lot? 3.5 ac

COMMERCIAICRESIDENTIALY No. of dwelling units? Do you treat your water? Y (N)How? CL/UV DISINFECTION, SOFTENER, ION, OTHER Was the water ever tested? When? 3004

Any contamination? Y (N)What (TC, FC, N, etc.)

How far is the well or spring from the drain field 2 ,00 ft. Is well UP/DOWNHILL

NAME: 13 Cane 1 Rd CITY: Wantshorz
ZIP: 1975 PHONE #: 532 7-9739 OWNESOR RENTER? NUMBER OF RESIDENTS: 2
What kind of water system do you have? WELL? SPRING? CISTERN? PUBLIC? OTHER?
What kind of water system do you have? WELL? SPRING? CISTERN? PUBLIC? OTHER?
If you have a well: Is it DUG of DRILLED? HOW DEED? On known ft. Cased? N

NAME: Break

the results are intended to be used in evaluating the need for community wide solutions.

A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and

(CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)

		09 09			
DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND Y	Has the system every been repaired? Y / When? TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS:	Have you ever had your system pumped out (Y) N How often? 3/12 4/2 Last time? 2/20 2.  Hit was pumped, was it inspected for cracks or broken baffles (Y) N What part? 7/2 1/2	If you noticed any of the above, are they seasonal or year-round?	How old is your system? 7 20 Y/S Was it permitted? Y/N When? Value of the following near your septic system? Have you every noticed any of the following near your septic system? GREEN LUSH GRASS WETINESS OR SPONGY AREAS ODORS WATER FONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME None of servery of the control of	Where does your launder and for sink water gg2. (CIRCLE ALL THAT APPLY)  (SEPTIC TANK)  (INGROUND BED)  COMMUNITY SEWER  CESSPOOL  CESSPOOL  CESSPOOL  CHOROUND TRENCH  STORM SEWER  OLD WELL  HOLDING TANK  SEBPAGE PIT  PRIVY  BORE HOLE  OTHER  OTHER  OTHER

The Maximum Contaminant Level (MCL) has been established by state and lederal authorities. The MCL is the maximum quantity of a substance allowed in sale drinking water. Some parameters have no established MCL.

analyze Drinking Water (#38-338)

# Pure-Test Water Lab 736 East Uncoln Avenue hypezlown, PA 17007 717-286-2234

### Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125604 Date Reported: 03/08/2005 Phone Number: 717-838-1351

i Moximum Contaminant Level Dale Analyzed Analyst Sampled: 03/03/2005 Sampler: Christina halen geol/100mL 03/04/2005 rdh 03/04/2005 rdh 03/04/2005 rdh 03/04/2005 rdh 05/04/2001 03/04/2005 rdh 05/01/00mL 10.4 mg/L 0 col/100niL 0 col/100mL Pass/Fail Pass Pass Pass <1 nig/L t col/100mL 0 col/100mL 0 col/100mL Result 125604-10 Seurce: Fisher Bacterla - Fecal Coliform Nitrata-Nitrogen Backeria - Total Coliform Racieria - E.coli

This sample was collected by an authorized sampler.

The Maximum Conteminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL, maximum quantity of a substance allowed in safe drinking water. Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Page 1

DOOR TO DOOR NEEDS SURVEY

Ļ.

	Munic: Marion Ly Co.: Bridge Area: Date: 3/3/05
	to determine if there are any seve ed to seed to seed in evaluating the need for EDLI IN AS APPROPRIE.
	WNEROR RENTER! NUMBER CISTERN! PUBLIC! OTHE
	W DEEP? 720 200 ft. Is well UP SINFECTION SOFT
	int (IC, r C, 14, etc.)
	How large is your fol:COMMERCIAL RESIDENTIAL?
	What kind of sewage existen of you have? (CIRCLE ALL THAT APPLY)  SEPTIO TANK  CESSPOOL  CESSPOOL  CESSPOOL  CESPOOL  CE
, in the second	Where does your laundry and or sink water go, CCRCLE ALL THAT APPLY)  Where does your laundry and or independent of the center o
	mi - 20 y - 20 y - 3 Was it permitted ( 1) IN When: ed any of the following near your septic system? LUSH GRASS WEINESS OR SPONGY STRAS ( PONDING OR SURFACING SYSTEM OVERFLOW PONDING OR SURFACING SYSTEM OVERFLOW ISH DRAINS WASTEWATER BACKING INTO THE
	OTHER TE was noticed any of the above, are they seasonal or year-round?
•	N
	Y / N What part? ELD: REPAIRED/REPLAC
	DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND(Y) N

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

33

General weather conditions:

750 Becks

30.0

Study Area:

Date: 03/03/05

DOOR TO DOOR NEEDS SURVEY

Munic.:

Marion

This sample was collected by an authorized sampler. Fracteria - E.coll Socieria - Total Colitoro Baoteria - Fecal Coliforni Nitrate-Mitrogen 125604-03 Source: Brubaker 1.07 mg/L 0 col/100mL 0 col/100mL Pass Pass 10.4 mg/L 0 coi/100mL 0 coi/100mL 03/04/2005 03/04/2005 03/04/2005 ed Analysi retina slajai 로 글 달 로

How far is the well or spring from the drain field 150 ft. Is well UPDOWNHILL)

Do you treat your water? (2) N How? CL/UV DISINFECTION SOFTENER, ION, OTHER

Was the water ever tested? (2) N When? 3 you age.

Any continuous of the water water of the second of the secon

Any contamination? Y (NWhat (TC, FC, N, etc.)

the results are intended to be used in evaluating the need for community wide solutions.

(CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)

NAME: 1-16 ro 16 100 or ne STREET: 15 16 100 REPORTER? NUMBER OF RESIDENTS; 2

ZIP: 1956-7 PHONE #: 589-1907 COMNER OR RENTER? NUMBER OF RESIDENTS; 2

A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and

ZIP://9.576.7 PHONE #: \_\_\$894-\_1560\_7 COWNEROR RENTER? NUMBER OF What kind of water system do you have (WELL)? SPRING? CISTERN? PUBLIC? OTHER?

What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)

SEPTIC TANK
CESSPOOL
INGROUND TRENCH

PRIVY

BORE HOLE SEEPAGE PIT

INGROUND TRENCH ELEVATED SAND MOUND

STORM SEWER PIPE TO DITCH PIPE TO STEAM

PIPE TO SURFACE

COMMUNITY SEWER

HOLDING TANK

One or more sewage systems? How large is your lot?

3

COMMERCIAIGRESIDENTIAL? No. of dwelling units?

				2
03/04/2005	0 col/100mL	Pass	0 col/100mL	000
Sampler: Or	Sampled: 03/03/2005			
Dale Analyzı	Maximum Contaminant Level	Pass/Fail	<b>≒</b>	Result
/1/-838-	Fhone Number: /1/-33e-1			
03/08/2005	Date Reported: 03/08/2005			
25604	Lab Number: 125604			
	oxf	Water Analysis Report	Water A	
		Myerstown, PA 17067 717-866-2234	Myer 7	
		The state of the s		

Page 1 Has the system every been repaired? Y (NWhen?
TANK REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED
COMMENTS: 45/11 14 49 44 56 46 3 Have you ever had your system pumped out Y/N How often? / per / 2 x 1 If it was pumped, was it inspected for cracks or broken baffles Y/N What part? How old is your system? — JS Y-A Was it permitted? Y N When?

Have you every noticed any of the following near your septic system?

GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS
WATER PONDING OR SURFACING SYSTEM OVERFLOW
SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME
OTHER Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)

(SEPTIC TANK)

CINGROUND BED.

CLESSPOOL

OLD WELL

HOLDING TANK

SEEPAGE PIT

I DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND? Y / N If you noticed any of the above, are they seasonal or year-round? OTHER. OTHER HOLDING TANK PRIVY BORE HOLE per /0x3 Last time? シュたいいりょ STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURPACE COMMUNITY SEWER 14 250

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Pure-Test is Certified by the PA DEP to

analyze Drinking Water (#38-338)

736 East Lincoln Avenue Myerslown, PA 17067 717-866-2234

### Water Analysis Report

일		
ŭ		
cial		
l & Associates I	ي.	8
ĸ	ĕ	707
급	Sir	_
3	Main	Ā
1t-Heige	2 3 (	,
E E	8	ala E
J	4	ሏ

Lab Number: 125604 Date Reported: 03/08/2005 Phone Number: 717-838-1351 Maximum Contaminant Level Sampled: 03/03/2005 10.4 mg/L 0 col/100mL 0 col/100mL 0 col/100mL Pass/Fail Pass Pass Pass 0 col/100mL 0 col/100mL 6 col/100ml 7.14 mg/L

125604-04 Source; Boone

acteria - Feosi Coliform

Date Analyzed Analyst Semplon: Christina Author 둳 를 한 된

03/04/2005 03/04/2005 03/04/2005

This sample was collected by an authorized sampler. virrane-Nitrogan Sactoria - Total Coliform Sactoria - E.coli

NAME: 10 cente 12 central STREET: 19 That Califord CITY: Managard TIP: 1956.7 PHONE #: 537-4719 CONNED OR RESIDENTS: 2.
What kind of water system do you have? (WELL?) SPRING? CISTERN? PUBLIC? OTHER? How have it is it DUG or (MILLED) HOW DEEP? 1500 ft. Cased? (E) N Date: 3/3/05 A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and COMMUNITY SEWER COMMUNITY SEWER STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE the results are intended to be used in evaluating the need for community wide solutions.
(CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED) How far is the well or spring from the drain field 6.0. ft. Is well (B) DOWNHILL.
Do you treat your water? Y. ((S) How? CL/UV DISINFECTION, SOFTENER, ION, OTHER.
Was the water ever tested?((S)) N When?

Any contamination?((S)) N What (TO, FO(R)etc.) COMMERCIALRESIDENTIAL? ţ Where does your launday and/or sink water go? (CIRCLE ALL THAT APPLY)

CESSPOOL

OLD WELL

HOLDING TANK

BORE HOLE

PRIVY INGROUND TRENCH ELEVATED SAND MOUND SEEPAGE PIT BORE HOLE Study Area: What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)

SEPTIC TANK

CESSPOOL

OLD WELL

HOLDING TANK

BORE HOLE No. of dwelling units? DOOR TO DOOR NEEDS SURVEY 30°E 3 4 One or more sewage systems? How large is your lot? General weather conditions: OTHER Munic.: Marion

The Maximum Contammant Level (MCL) has been established by state and foderal authorities. The MCL, is the maximum quantity of a substance allowed in safe dishking water. Some parameters have no established MCL.

Page 1

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

How old is your system?  Have you every noticed any of the following near your septice system?  Have you every noticed any of the following near your septice system?  GREEN LUSH GRASS  WETNESS OR SYONGY AREAS  GREEN LUSH GRASS OR SUFFECTION  SLUGGISH DRAINS  WASTEWATER BACKING INTO THE HOME  OTHER	If you noticed any of the above, are they seasonal or year-round?	Have you ever had your system pumped out YN How alten? 34.54. Last time? If it was pumped, was it inspected for cracks or broken ballles WINGWhat part?	Has the system every been repaired? Y (NYhen?  TANK REPAIRED/REPLACED  LINE: REPAIRED/REPLACED  TANK REPAIRED/REPLACED  LINE: REPAIRED/REPLACED  LINE: REPAIRED/REPLACED  TO SERVE THE STANK REPAIRED/REPLACED  TO SERVE THE SERVE THE STANK REPAIRED/REPLACED  TO SERVE THE STANK REPAIRED/REPLACED  TO SERVE THE S	COMMENTS: (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c
--	---	--	--	--

Wasitpermitted? Y (B) When?

OTHER

### Water Analysis Report

Palmyra PA 17078 Light-Heigel & Associates Inc 430 E Main Street

> Date Reported: 03/08/2005 Lab Number: 125604

> > Минис.:

ç

Study Area:

Date: 3 /43/05

DOOR TO DOOR NEEDS SURVEY

General weather conditions: Marion

Phone Number: 717-838-1351

Sepanii/N-eas ail-This sample was collected by an authorized sampler. Sacteria - Tolal Coliform Bocteria - Fecal Collom 125604-05 Sourcet Brown 5.21 mg/L 2.0 col/100mL O col/100mL 73.8 cal/100mL Pass Pass 티 Pass/Fail 0 col/100mL 0 col/t 00mL 10.4 mg/L 0 col/100mL Maximum Contaminant Level Sampled: 03/03/2005 Sample: Christina Kajor Date Analyzed Analyst 03/04/2005 03/04/2005 03/04/2005 03/04/2005 ₫. ま 3

ft. Is well UP/DOWNHILL Colored

CISTERN? PUBLIC?

OTHER?

If you have a well: Is it DUG or DRILLED? HOW DEEP? # 35 ft. Cased W/N

What kind of water system do you have WELD SPRING?

PHONE #: .589 9692

OWNEROR RENTER? NUMBER OF RESIDENTS:

NAME: Con Surgery Street 14 (2) (CIRCLE OR FILLIN AS APPROPRIATE; ADD COMMENTS AS NEEDED) the results are intended to be used in evaluating the need for community wide solutions

A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and

Any contamination? Y / What (TC, FC, N, etc.)

One or more sewage systems? How large is your lot? 3-18 ac

COMMERCIAICRESIDENTIAL? No. of dwelling units?

How old is your system? 15.5 4.5 Was it permitted? Y / N When? 15.4 Have you every noticed any of the following near your septic system? GREEN LUSH GRASS WEINESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME Has the system every been repaired? Y (WWhen? TANK REPAIRED/REPLACED LINE: REPAIR. COMMENTS: \( \lambda \cdot \frac{1}{2} \). do I/we have your fermission to confirm this information by looking around  $\widehat{(Y)}$  / n If it was pumped, was it inspected for cracks or broken baffles? Y) N What part? If you noticed any of the above, are they seasonal or year-round? Where does your-laundry-and/or sink water go? ICIRCLE AIL THAT APPLY)
(SEPTIC TANK)
(NIGROUND BED) Have you ever had your system pumped out? Y N How often? What kind of servage system of you have? (CIRCLE ALL THAT APPLY)
(SEPTIC TANK)
(INGROUND BED) CESSPOOL OLD WELL HOLDING TANK OTHER PRIVY PRIVY OTHER HOLDING TANK: LINE: REPAIRED/REPLACED Was it permitted? Y / N When? Unknow-ELEVATED SAND MOUND SEEPAGE PIT BORE HOLE INGROUND BED INGROUND TRENCH ELEVATED SAND MOUND NGROUND TRENCH BORE HOLE SEEPAGE PIT ~ 6 month \_By permit? Y / N What part?

DRAIN FIELD: REPAIRED/REPLACED STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO STEAM PIPE TO DITCH STORM SEWER COMMUNITY SEWER PIPE TO SURFACE COMMUNITY SEWER PIPE TO SURFACE Last time? 2 month ago

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL:

analyze Drinking Water (#38-338) Pure-Test is Certified by the PA DEP to

736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Phone Number: 717-838-1351 Lab Number: 125604 Date Reported: 03/08/2005

Date Analyzed Analyst Sampler: Christina Major 윰 된 달 ចូ 03/04/2005 03/04/2005 03/04/2005 03/04/2005 Maximum Contaminant Level Sampled: 03/03/2005 0 ∞1/100mL 0 col/100mL 0 cal/100mL 10.4 mg/L PassiFail Fail Fail >200.5 col/100mL 23 col/100mL 15 col/100mL 5.25 mg/L Result 125604-07 Source: Sonon sacteria - Fecal Coliform 3acleria - Total Coliform 3acteria - E.coli ingle-Nitrogen nalyte

This sample was collected by an authorized sampler.

How large is your lot? Lac One or more sewage systems? OTHER OTHER Page 1 The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in sele drinking water. Some parameters have ne established MCL.

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

the results are intended to be used in evaluating the need for community wide solutions.

CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)

CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)

STREET: 3 February COMMENTS AS STREET: A COMMENT OF THE COMMENTS: I STREET AS A COMMENT OF THE COMMENTS: I STREET STRING: CIFER?

What kind of water system do you have WELLES SPRING: CIFERN? PUBLIC: OTHER?

If you have a well: Is it DUG or DRILLED? HOW DEEP? 2.00 ft. Cased? N

How far is the well or spring from the drain field ASO ft. Is well UP DOWNHILL 50/ Has the system every been repaired? Y (N)When?
TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED
COMMENTS: 1/5 / 1/2 Have you ever had your system pumped out(V) N How often? (72.6 ) Last time? 5 47.8 0 94. If it was pumped, was it inspected for aracks or broken ballies? Y / N What part? do iwe have your permission to confirm this information by looking around? Y  $\prime$  N A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and Date: 3 /3 COMMUNITY SEWER COMMUNITY SEWER STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE Was it permitted? Y / N When? 22 420 How old is your system? A for the following near your septic system?

Have you every noticed any of the following near your septic system?

GREEN LUSH GRASS
WETINESS OR SPONGY AREAS
WATER PONDING OR SURFACING
SYSTEM OVERFLOW
WATER PONDING OR SURFACING
SYSTEM OVERFLOW Do you treat your water? YN How? CLUV DISINFECTION SOFTENED ION, OTHER.

Was the water ever tested? YN When? (10, FC, N, etc.)

Any contamination? Y (M.What (TC, FC, N, etc.) COMMERCIALGRESIDENTIAL Where does your laundry and/or sink water go2.(GREGLE ALL THAT APPLY)
CESPTIC TANK
OESSPOOL
OLD WELL
HOLDING TANK
BORE HOLE Study Area: What kind of sewings system of you have? (CINCLE ALL THAI APPLY)

SETIC TANK

CESSPOOL

OLD WELL

HOLDING TANK

BORE HOLE No. of dwelling units? DOOR TO DOOR NEEDS SURVEY If you noticed any of the above, are they seasonal or year-round? poch 8 General weather conditions: <sup>(</sup> Munic: Marion

736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

### Water Analysis Report

Date Reported: 03/08/2005 Phone Number: 717-838-1351 Lab Number: 125604

Munic.: Marion

. .

30,0

Study Area:

Date:

3 13 105

DOOR TO DOOR NEEDS SURVEY

General weather conditions!

Bacteria - Total Coliforn Vacieria - E.coil Nitrate Nitrogen Sactoria - Facal Colliona Analyte Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078 12,5604-02 Source: Noti 0 col/100ml 1.19 mg/L 0.col/100mL 1.0 cal/100mt Pass Pass Pass/Fail 0 col/100mL 0 col/100mL Maximum Contaminant Level Date Analyzed Analyst 0 colitatimaL 10.4 mg/L Sampled: 03/03/2005 03/04/2005 Sampler: Christina Major 03/04/2005 03/04/2005 로로돌로

This sample was collected by an authorized sampler.

Was the water ever tested?(Y) N When? 2004.
Any contamination?(S) N What (TC,FC, N, etc.)

1000

How large is your lot?

One or more sewage systems?

COMMERCIAL RESIDENTIAL? No. of dwelling units? If you have a well: Is it DUG or DRILLED? HOW DEEP? 60 ft. Cased(V) N
How far is the well or spring from the drain field 650 ft. Is well UPDOWNHILL

Do you treat your water? Y. (W) How? CL/UV DISINFECTION, SOFTENER, ION, OTHER

NAME: A H CAAL STREET: 4 Shady Cakin Circle CII
ZIP: 1976-7 PHONE #: 357-5-9-0 WINDEROR RENTER? NUMBER OF Whatkind of water system do you have? WELLS SPRING? CISTERN? PUBLIC? OTHER?

OWNER OR RENTER? NUMBER OF RESIDENTS: Z

A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.

(CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)

NAME: STREET: 4 Shady Colin Circle CITY: Worneldo

							•	· · · · ·	
Has the system every been repaired? Y / When?  TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED  COMMENTS:	Have you ever had your system pumped out Y N How often? / 4509 Last time?  If it was pumped, was it inspected for cracks or broken baffles(Y) N What part?	they sea	y of the following near H GRASS WET IDING OR SURFACI DRAINS WAS	How old is your system? 220 was to permitted? Y/N When? 1/2 km was	OLD WELL ELEVATED SAND MOUND FIPE TO DITCH HOLDING TANK SEEPAGE FIT FIPE TO SURFACE FRIVY BORE HOLE FIPE TO SURFACE OTHER	and/or sink water go? (CIRCLE ALL THAT APPLY) NE  INGROUND BED INGROUND TRENCH	PANK SEEPAGE PIT BORE HOLE	What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  (SEPTIC TANK? (INGROUND BED) COMMUNITY SEWER CESSPOOL NGROUND TEENCH STORM SEWER OLD WELL ELEVATED SAND MOUND PIPE TO DITCH	

The Maximum Contaminant, Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page !

### Water Analysis Report

Light-Heigel & Associates Inc 130 E Main Street Palmyra PA 17078

Lab Number: 125604 Date Reported: 03/08/2005 Phone Number: 717-838-1351

Date Analyzed Analyst xympiecr christians Avyar 03/04/2005 rch 03/04/2005 dnb 03/04/2005 rch 03/04/2005 rch
Pass/Fail         Reaximum Contaminant Lovei         Date Analyzed         <
Pass/Fail Fass Pass Fail Pass
Result 0 colf/30mL 3.88 ng/L 4.2 col/100mL 0 culf/100mL
nalyte 125604-08 Source: Cassier sirate-Netrogen Brate-Netrogen acteria - Closi Coliform acteria - E-poil

his sample was collected by an authorized sampler.

Page 1 The Maximum Contaminant Levot (MCL) has been established by state and fodoral authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

do i/we have your permission to confirm this information by looking around  $\widehat{\mathcal{A}}$  in

Water Analysis Report

Palmyra PA 17078 Light-Heigel & Associates Inc 430 E Main Street

Lab Number: 125604
Date Reported: 03/15/2005
Phone Number: 717-838-1351

General weather conditions: Munic: Marion

Car

Barks

300° E

Study Area:

Date: 31.3/05

DOOR TO DOOR NEEDS SURVEY

Sectoria - E.coli Saiderla - Total Collicini Racteria - Fecal Colfiorm Nitrate-Mitrogen 125604-10 Source: Hepter <1 mg/L 0 colr100mL Result 0 col/100mL 0 col/100mt Pass Pass Pass/Fall Maximum Contaminant Level Date Analyzed Analyst Sampled: 03/03/2005 0 col/100mL 10.4 mg/L 0 col/100mL 0 col/100mL 03/04/2005 03/04/2005 03/04/2005 Sampler: Chostins Major 03/04/2005

ह ह ह ह

A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.

(CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMENTS AS NEEDED)

NAME: 1966 1 276 STREET: 16 Short 1267 CITY: 16 or 
This sample was collected by an authorized sampler.

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)	roun' Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the Page I rearnly of a substance allowed in safe drinking water. Some parameters have no established MCL.
Has the s	Have you

The Maximum

DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND Y) N	Has the system every been repaired? Y / N When? (1/2/2/2004) By permit? Y / N What part? IANK REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS:	Have you ever had your system pumped out? Y (N) How often? Wist Costlen! Last time?  If it was pumped, was it inspected for cracks or broken baffles? Y / N What part?	If you noticed any of the above, are they seasonal or year-round?	How old is your system?  7 / 0 / C Was it permitted? Y / N When?  Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS,  WATER PONDING OR SURFACING SYSTEM OVERFLOW  SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME  OTHER	Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  SEPTIC TANK INGROUND BED COMMUNITY SEWER CESSPOOL INGROUND TRENCH STORM SEWER OLD WELL ELEVATED SAND MOUND PIPE TO DITCH SEEPAGE PIT PRIVY BORE HOLE OTHER 1/11/21/21 OTHER 1/11/21/21 OTHER 1/11/21/21	What kind of sowage system of you have? (CIRCLE ALL THAT APPLY)  (SEPTIC TANK)  CESSPOOL  OLD WELL  HOLDING TANK  PRIVY  BORE HOLE  OTHER  OTHER  OTHER  OTHER  CERCTON BEIL  BORE HOLE  DEPTO SURFACE  OTHER	How large is your lot? / A & No. of dwelling units? / One or more sewage systems? / COMMERCIALÆESIDENTIALS	What kind of water system do you have? (WELL)? SPRING? CISTERN? PUBLIC? OTHER? If you have a well: Is it DUG or DRILLED? HOW DEEP? > 100 ft. Cased(Y) N How far is the well or spring from the drain field 100 ft. Is well UP/DOWNHILL 2002 to 2007 Do you treat your water? Y 1(N)How? CL/UV DISINFECTION, SOFTENER, ION, OTHER Was the water ever tested? Y NOWhen? 400 when? 41/4

736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

### Water Analysis Report

Light-Heigel & Associates Inc Palmyra PA 17078 430 E Main Street

165.2 col/100mL 0 col/130mL 0 col/Hütimit 4.56 mg/L Result 125604-06 Source: Gehr acteria - Fecal Coliform issle-Mimosen nalyte.

Bacteria - Total Coliform Sociona - E.colf

Lab Number: 125604 Date Reported: 03/08/2005 Phone Number: 717-838-1351

Date Analyzed Analyst Samplent Christina Malan 듐 ភ្ ភ្ 듄 03/04/2005 03/04/2005 03/04/2005 03/04/2005 Maximum Contaminant Level Sampled: 03/03/2005 0 col/100mL 0 col/100mL 0 col/100ml. 10.4 mg/L Pass/Fail Pass Fail Pass

rhis sample was collected by an authorized sampler.

Date: 3 / 32/05 A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.

(CIRCLE OR FILL IN AS APPROPRIATE: ADD COMMENTS AS NEEDED) STREET: 4055 Carred Winger Physostry Chineleds COMMUNITY SEWER COMMUNITY SEWER PIPE TO STEAM PIPE TO SURFACE STORM SEWER PIPE TO DITCH PIPE TO STEAM What kind of water system do you have? (WELL?) SPRING? CISTERN? PUBLIC? OTHER?
If you have a well: Is it DUG or ORILLED? HOW DEEP? 400 ft. Cased(Y) N STORM SEWER PIPE TO DITCH How far is the well or spring from the drain field J J ft. Is well UP DOWNHILL /evel. Do you treat your water (Y) N How? CLANDISINFECTION SOFTENER, TON, OTHER No. of dwelling units? COMMERCIAL RESIDENTIAL? Where does your laundry and/or sink water go? ICIRCLE ALL THAT APPLY)

(SEPTIC TANK)

(CESSFOOL

(CESSFOOL Ų, INGROLIND BED>
DIGROUND TRENCH
ELEVATED SAND MOUND
SEEPAGE PIT
BORE HOLE Study Area: ELEVATED SAND MOUND SEEPAGE PIT BORE HOLE Whatkind of sowage system of you have? (CINCLE ALL THAT APPLY)

(SEPTIC TANK)

(NGROUND BED)

(PESSPOOL guartel DOOR TO DOOR NEEDS SURVEY Any contamination? Y (N) What (TC, FC, N, etc.) Co. Serts ZP: 18367 PHONE #: 539-4-570 1.2 arrs Kesturant Was the water ever tested (1) / N When? HOLDING TANK One or more sewage systems? General weather conditions: OLDWELL How large is your lot? OTHER NAME: 11/5587 Munic:

OTHER

How old is your system?

Have you every noticed any of the following near your septic system?

GRENLINSH GRASS
WEINIES OR SPONGY AREAS
WATER PONDING OR SURFACING)
SYSTEM OVERFLOW

WATER PONDING OR SURFACING)
SLOGGISH DRAINS
WASTEWATER BACKING INTO THE HOME

Parisolii

4

351

Was it permitted? (V) N When?

PIPE TO SURFACE

OLD WELL HOLDING TANK

If you noticed any of the above, are they seasonal or year-round?  $\, . \,$ 

3/2/05 \_\_\_Lasttime? Hit was pumped, was it inspected for cracks or broken baffles? Y / N Whatpart? Hout Have you ever had your system pumped out(Y) N How often?

Has the system every been repaired? Y / N When?
TANK REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS: DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y) N

Page 1

The Maximum Contaminant Loval (MCL) has been oslablished by state and federal authorities. The MCL is the maximum quantity of a substance allowed in sofe drinking water. Some parameters have no established MCL.

Pure-Test is Certified by the PADEP to

analyze Drinking Water (#38-338)

Water Analysis Aeport

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125604
Date Reported: 03/08/2005
Phone Number: 717-838-1351

Munic: Marion

::02 Cer

\_Study Area:

Date: 3 1/0 / 05

C/ear

DOOR TO DOOR NEEDS SURVEY

General weather conditions:

A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.

(CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED)

This sample was collected by an authorized sampler. Bacteria - E.coli Ecoteria - Total Coliform Nitrate-Nitrogen Exclario - Fessi Colforn Analyte 125604-01 Source: Risser's Restaurant <1 mg/L 0 col/100mL Result 0 col/100mL 0 col/100mL Pass Pass Pass Pass/Fail Maximum Contaminant Levol Date Analyzed Analyst 0 cal/100mL 0 col/100mL 0 col/100rnL 10.4 mg/L Sampled: 03/03/2005 03/04/2005 Sanyant: Christina Alajoi 03/04/2005 03/04/2005 03/04/2005 글 글 물 글

DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y) N	Has the system every been repaired? Y (N When?  TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED  COMMENTS: 044044	Have you ever had your system pumped out (Y) N How often? 3-4-3 Last time? 24-450 Hit was pumped, was it inspected for cracks or broken baffles? Y'(N) What part?	If you noticed any of the above, are they seasonal or year-round?	How old is your system?  Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW 75.76.  SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER	Where does your launding and/or sink water go? (CHRCLE ALL THAT APPLY)  SEPTIC TANK  NGROUND TRENCH  CESSPOOL  OLD WELL  HOLDING TANK  PRIVY  BORE HOLE  OTHER  OTHER  OTHER	What kind of sewage xxxxem of you have? (CIRCLE ALL THAT APPLY)  (SECTIC TANK)  CESSPOOL  INGROUND BED  INGROUND TRENCH  FRIVY  FRIVY  BORE HOLE  OTHER  OTHER  COMMUNITY SEWER  STORM SEWE	How large is your lot?  No. of dwelling units?  One or more sewage systems?  COMMERCIAIGESIDENTIALS	What kind of water system do you have (VELL) SPRING? CISTERN? PUBLIC? OTHER?  What kind of water system do you have (VELL) SPRING? CISTERN? PUBLIC? OTHER?  If you have a well: Is it DUG or DRILLED? HOW DEEP? CALCACT. Cased? Y / N  How far is the well or spring from the drain field SO ft. Is well UP/DOWNHILL /ecc.  Do you treat your water? Y / N How? CL/UV DISINFECTION, SOFTENER, ION, OTHER  Was the water ever tested? Y / N What?  Was the water ever tested? Y / N What (TC, FC, N, etc.)	(CIRCLE OR FILL IN AS APPROPRIATE; ADD COMMEN

The Maximum Gontaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

DOOR TO DOOR NEEDS SURVEY	Munic: Marion Jup Co.: Banks Study Area: Date: 3 113 105	o determine if there are any s used in evaluating the need i 3 OR FILL IN AS APPROPR	NAME: Meruin (Staken STREET: See Canger of State of RESIDENTS: A 27 Canger of RESIDENTS: A 27 PHONE #: 559 9459 Canger of RESIDENTS: A What kind of water system do you have? (Well's STRING? CISTERN? PUBLIC? OTHER? If you have a well. Is it. DUG of DRILLED? HOW DEEP? 200 R. Cased(Y) N	How far is the well or spring from the drain field 300 ft. Is well(DP)DOWNHILL  Do you treat your water? Y (C) How? CLAUV DISINFECTION, SOFTENER, ION, OTHER  Was the water ever tested? Y N When?	Any contamination: I (IV) nat (IV) IV (IV)	How large is your lot? 100 000 COMMERCIALRESIDENTIALS Farm One or more sewage systems? 2 COMMERCIALRESIDENTIALS	What kind of semege-system of you have? (CIRCLE ALL THAT APPLY)  (SEPTIO TANK)  CESSPOOL  OLD WELL  LOLD WELL  SEEPAGE PIT  PORTON SEWER  STORM SEWER  CLEXATED SAND MOUNTY  SORE HOLE  PORTON STEAM  PIPE TO STEAM  PORTON STEAM	Vor sink water go? (CIRCLE ALL THAT APPLY)		ANTHO
------------------------------	--	--	--	--	--	---	---	--	--	-------

### 

Water Analysis Report

Palmyra PA 17078 Light-Heigel & Associates Inc 430 E Main Street

Lab Number: 125769

General weather conditions: Munic: Marion

Cleac

Co: 1/2/2

\_Study Area:

Date: 3/13/05

DOOR TO DOOR NEEDS SURVEY

Date Reported: 03/15/2005 Phone Number: 717-838-1351

Bacteria - Total Coliform 55cleria - E.coli Bacteria - Focal Coliforni Nitrate-Nitrogen 125769-01 Source: Brubaker Result 8.7 col/100mL 0 col/100mL 14.7 mg/L 0 col/100mL 를 를 10.4 mg/L 0 col/100mL Maximum Contaminant Level Date Analyzed Analyst 0 col/100mL 0 col/100mL Sampled: 03/10/2005

03/11/2005 03/11/2005

888 g

What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)

(SEPTIC TANK)

INGROUND TRENCH

INGROUND TRENCH

HOLDING TANK OTHER

OLD WELL

INGROUND TRENCH
CELEVATED SAND MOUND
SEEPAGE PIT
BORE HOLE

COMMUNITY SEWER
STORM SEWER
PIPE TO DITCH
PIPE TO STEAM

One or more sewage systems? How large is your lot? 1.5 ac

No. of dwelling units? /

Was the water ever tested (5) / N When?

How far is the well or spring from the drain field 150 ft. Is well DEDOWNHILL UP DO you treat your water? (Y) N How? CLUV DISINFECTION SOFTENER ION, OTHER Whatkind of water system do you have WELLY SPRING? CISTERN? PUBLIC? If you have a well: Is it DUG or DRILLED? HOW DEEP? & A.S. ft. Cased? Y) I

ft. Is well OPDOWNHILL UP

ft. Cased?(Y) N

03/11/2005 03/11/2005

Sampler: Christian Hejor

NAME:

ME: Acmes

PHONE #: 587 1497

the results are intended to be used in evaluating the need for community wide solutions.
(CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED)

STREET: 6/9/000

OWNER OR RENTER! NUMBER OF RESIDENTS:

CITY://

OTHER?

A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and

This sample was collected by an authorized sampler.

		-	·	·	
do I/we have your permission to confirm this information by looking around? (🗘) n	Hus the system every been repaired? Y / When? TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS:	Have you ever had your system pumped out (Y) N How often? 24 (T) Last time? /7-250 If it was pumped, was it inspected for cracks or broken baffles? Y (W) What part?	If you noticed any of the above, are they seasonal or year-round?	How old is your system? Green Was it permitted? Y)/ N When? Chhoch Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS WATER PONDING OR SURFACING SYSTEM OVERFLOW WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER OTHER	Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  CESSPOOL  INGROUND TRENCH  OLD WELL  HOLDING TANK  ELEVATED SAND MOUND  PRIVY  BORE HOLE  OTHER  OTHER

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

analyze Drinking Water (#38-338) Pure-Test is Certified by the PA DEP to

Water Analysis Keport

Jight-Heigel & Associates Inc 30 E Main Street almyra PA 17078

Lab Number: 125769 Date Reported: 03/15/2005 Phone Number: 717-838-1351

Eunyater Christian Alagor 03/11/2005 dnb 03/11/2005 dnb 03/11/2005 dnb Maximum Contaminant Level Date Analyzed Analyst Sampled: 03/10/2005 0 cel/100ml. 10.4 mg/L 0 cel/100mL 0 cel/100mL Pass/Fall Pass Pass Pass 0 col/160mL 6.35 mg/L 32.4 col/100mL 0 col/100mL halyte source: Standard acteria - Total Coliform acteria - E.roli cteria - Fecal Coliform rste-Nitrogen

his sample was collected by an authorized sampler.

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL. Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Page 1

DOOR TO DOOK NEEDS SURVEY
unic.: Marion Fro Co.: Fiz. Lo Study Area: Date: 31/2/03
to determine if there are any severe to eused in evaluating the need for IE OR FILL IN AS APPROPRIA
IN. ASSETT PHONE #: SET S-GO, CONNEEDOR RENTER! NUMBER OF RESIDENTS. 3  Fratking feater system do you have: CHELLED? HOW DEEP? S-GO R. Cased D/N  fyou have a well: Is it DUG or DELLED? HOW DEEP? S-GO R. Cased D/N  fyou have a well: St pring from the drain field / S-O R. Is well DOWNHILL  for far is the well or spring from the drain field / S-O R. Is well DOWNHILL  for you treat your water? Y CD How? CL/UV DISINFECTION, SOFTENER, ION, OTHER
Vas the water ever tested(V) / N When? S y est.
How large is your lot? /-/? CL No. of dwelling units? / COMMERCIACRESIDENTIAL?
What kind of seware system of you have? (CIRCLE ALL THATAPPLY)  SEPTIO TANK  CESSFOOL  OLD WELL  SERFAGE PIT  PIPE TO SURFACE  BORE HOLE  OTHER
Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  CSECTIC TANK  CESSPOOL  OLD WELL  SEPRAGE PIT  PIPE TO SURFACE  PRIVY  BORE HOLE  OTHER
How old is your system? 14. x
If you noticed any of the above, are they seasonal or year-round?
Have you ever had your system pumped out? Y (N) How often?  If it was pumped, was it inspected for cracks or broken balfles? Y (N) What part?
Has the system every been repaired? Y (A) When? TANK REPAIRED/REPLACED LINE-KEPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS.
DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND(Y) N

### Bater Analysis Aeport

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Analyte

Result

Lab Number: 125769
Date Reported: 03/15/2005
Phone Number: 717-838-1351

Bacteria - Total Coliform Bacteria - E.coli Sacterra - Fecal Coliform Mitrale-Mitragen 125769-04 Source: Willer 0 col/100mL 1,08 mg/L 6,4 col/100mL 0 col/100mL Pass Pass Sampted: 03/10/2005 0 col/102mL 10.4 mg/L 0 col/100mL 0 col/100mL

Pass/Fail Maulinum Contantinant Level Date Analyzed Analyst Sangton Christian Raval 03/11/2005 dnb 03/11/2005 dnb 03/11/2005 03/11/2005 3 3 3 3

This sample was collected by an authorized sampler.

Page 1

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL

2		NEEDS STIRVEY
×	1	9
	,	ŧ.
_	٠	_
-	4	
_	١.	×
٠.	,	,
۰	4	-
•		57
Υ	5	v
_	ì	11
_	•	×
c	5	۶,
7	ζ	Ċ
۲	4	7
		12
		フ
	٠	-

NEEDSSURVEX		
Munic. Marior Jugs Co. Bello Shudy Area: Date: 3 10 105		
to determine used in e	an en	
TIP: 1952 7 I PHONE #: 599 5 74-3 (OWNEDOUR RENIER) NUMBER OF RESIDENCE What kind of water system do you have WELLY, SPRING? CISTERNY PUBLIC? OTHER?  If you have a well: Is it DUG or ORILLED? How DEEP? 1/1/L/104-1/1. Cased? N  How far is the well or spring from the drain field 2/40 ft. Is well UP/DOWN HILL  Do you treat your water? N How? CL/IV DISINFECTION, SOFTENER, ION, OTHER  Was the water ever tested? N When? (1/1/C2) = -7.		
Any contamination? Y (M. What (TC, FC, N. etc.)  How large is your lot?  One or more sewage systems?  COMMERCIA (RESIDENTIAL)		
What kind of segret system of you have? (OIRCLE ALL THAT APPLY)  CESTIC TANK CESSPOOL OLD WELL COMMUNITY SEWER CESSPOOL OLD WELL PRE TO DITCH PREY PREY PREY PREY PREY PREY PREY PREY		
Where does your laundry and/or sink water go? (CERCLE ALL THAT APPLY)  CESSPOOL  OLD WELL  SEPAGE PIT  PIPE TO SURFACE  BORE HOLD  OTHER	1.	
How old is your system? — — Was it permitted (Y) N When? (Araceury Have you every noticed any of the following near your septie system?  Have you every noticed any of the following near your septie system?  GREAS ODORS And CAPATHESS OR SPONGY AREAS ODORS And CAPATHE WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER		
If you noticed any of the above, are they seasonal or year-round?		
What part?  By permit Y DRAIN FIEL		
Į		

DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND Y N

do Iwe have your permission to confirm this information by looking around $\widehat{\mathcal{S}}_I$ n	Have you ever had your system pumped out Y/N How often? 4/Last time? 4	If you noticed any of the above, are they seasonal or year-round?	How old is your system? 25 yes Was it permitted? Y / N When? Un known than order you every noticed any of the following near your septic system?  Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS WETINESS OR SPONGY AREAS ODORS  WATER FONDING OR SURFACING SYSTEM OVERFLOW 7676  SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME  OTHER	Where does your lawnedst and/or sink water got. (CIRCLE ALL THAT APPLY)  CESSPOOL  OLD WELL  HOLDING TANK  PRIVY  BORE HOLE  OTHER  COMMUNITY SEWER  COMMUNITY	What kind of sewage system of you have? (CIRCLE-ALL.THAT APPLY)  CESSFIC TANK  CESSFOOL  CESSFOOL  CLOWELL  HOLDING TANK  PRIVY  BORE HOLE  OTHER  COMMUNITY SEWER  COMMUNITY SEWER  STORM SEWER  STORM SEWER  PIPE TO STEAM  PIPE TO SURFACE  OTHER	How large is your lot?	the results are intended to be used in evaluating the need for community wide solutions.  CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED)  NAME:   IP. 1656.7  PHONE #:   STREET:   COWNEDOR RENTER? NUMBER OF RESIDENTS.   What kind of water system do you have [VELL?] SPRING? CISTERN? PUBLIC? OTHER?  What kind of water system do you have [VELL?] SPRING? CISTERN? PUBLIC? OTHER?  Whyou have a well: is it DUG or TRILLED?—HOW DEEP?   Who far is the well or spring from the drain field 1,000 ft. Is well DOWNHILL  How far is the well or spring from the drain field 1,000 ft. Is well DOWNHILL  Do you treat your water (Y) N How? CLUV DISINFECTION SOFTENERHON, OTHER  Was the water ever tested? (Y) N When? (100 C. N. &cc.)  Any contamination (Y) N What (100 C. N. &cc.)
---	--	---	---	---	--	------------------------	--

736 East Lincoln Avenue Myerstown, PA 17067 717-866-2234

### Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Munic.: Marien lega

. ()

アナベン

Study Area:

Date: 3 //2

DOOR TO DOOR NEEDS SURVEY

Lab Number: 125769
Date Reported: 03/15/2005
Phone Number: 717-838-1351

This sample was collected by an authorized sampler. Eacteria - E.coli Bacteria - Total Coliform Nitrate-Nitrogen Sacieda - Fecal Coliform 125769-06 Source: Impena 8.50 mg/L 1.0 col/100mL Rosult 0 col/100mL 6 col/100mL 5 200 Page Pass/Fail 0 col/100mL 0 col/100mL Maximum Contaminant Lovel Dale Analyzed Analyst 0 col/100mL 10.4 mg/L Sampled: 03/10/2005 03/11/2005 03/11/2005 03/11/2005 Sumples: Christian Major ま 윰

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page I

### Water Analysis Report

es Inc		
Light-Heigel & Associates	430 E Main Street	Palmyra PA 17078

Lab Number: 125769 Date Reported: 03/15/2005 Phone Number: 717-838-1351

Pass/Fail Maximus/ Contaminant Level Date Analyzed Analyst Semalar 12/10/2005	Pass         0 colf/100nL         03/11/2005         dnb           Pass         0 colf/100nL         03/11/2005         dnb           Pass         0 colf/100nL         03/11/2005         dnb           Pass         0 colf/100nL         03/11/2005         dnb
Resuit	0 cal/100nil. 8.50 mg/l. 0 cal/100nil. 0 cal/100mil.
Analyte	123/09-u7 Source: Darkes Bacteria - Fecal Coliform Witnete-Nitrogen Bacteria - Estal Coliform Bacteria - Estal

This sample was collected by an authorized sampler.

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

do iwe have tour permission to confirm this information by looking around  $\widehat{\mathcal{Y}}_I$  in

NEEDS SURVEY
Munic: Marion Jung Co.: (Serto Study Area: Date: 3/13/95)
to determine if there eused in evaluating the feed of FILL IN AS ALL is of FILL IN AS ALL is of the feed of CRILLED! HG of CRILLED! HG of CRILLED! HG of Wheat (TC. FC, IV, et is wheat (TC. FC, IV, et is is in the death field.)
How large is your lot? / S & No. of dwelling units? / COMMERCIALRESIDENTIAL?
What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)  CSEPTIC TANK CESSPOOL CESSPOOL OLD WELL CLEVATED SAND MOUND PIPE TO DITCH SEEPAGE PIT PROVY BORE HOLE OTHER
Where does your hundry and or sink water god (CIRCLE ALL THAT APPLY)  SEPTIC TANK O TO T
How old is your system? A following near your septice system? When? Chknoco Have you every noticed any of the following near your septice system?  Have you every noticed any of the following near your septice system?  GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS ANCE of WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER.
If you noticed any of the above, are they seasonal or year-round?
Have you ever had your system pumped out Y) / N How often? Oct / y Last time? / y Ged If it was pumped, was it inspected for cracks or broken baffles Y / N What part?
Has the system every been repaired? Y (N)When?  TANK REPAIRED/REPLACED  LINE: REPAIRED/REPLACED  COMMENTS:

Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125769

Date Reported: 03/15/2005

Phone Number: 717-838-1351

Bacteria - Fecal Coliform Nitrate-Nitrogen Bacteria - Total Coliform Bacteria - E.coli Analyto 125769-08 Source: Ressler >200 col/100mL 10,7 mg/L >200.5 col/100mL >200.5 col/100mL Result 
 Pass/Fail
 Maximum Contaninant Lovel
 Date Analyzed
 Analyst

 Sampled: 03/10/2005
 Stanyker: Strig ino Maker

 Fail
 0 col/100mL
 03/11/2005
 dnb

 Fail
 10.4 mg/L
 03/11/2005
 dnb

 Fail
 0 col/100mL
 03/11/2005
 dnb

 Gol/100mL
 03/11/2005
 dnb
 0 col/100mL 10.4 mg/L 0 col/100mL 0 col/100mL

This sample was collected by an authorized sampler.

	OTHER OTHER
Page 1	If you noticed any of the above, are they seasonal or year-round?
	Have you ever had your system pumped out (5)/ N How often? d-3 - Last time? d y - 9 se If it was pumped, was it inspected for cracks or broken baffles (5)/ N What part?
	Has the system every been repaired? Y /(X)When?  TANK REPARED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACEI  COLUMNIC.
	DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND?

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

				•		, c						
Has the system every been repaired? Y / (W) When?  Has the system every been repaired? Y / (W) When?  THE TARREST ACED TO THE TARREST ACED TO THE AIM PIETLE REPAIRED/REPLACED	Have you ever had your system pumped out \( \mathbb{O} \) N How often? \( \frac{d-3}{d-3} \) Last time? \( \frac{2}{d} \) \( \frac{d-3}{d} \) Hit was pumped, was it in spected for cracks or broken baffles \( \mathbb{O} \) N What part?	If you noticed any of the above, are they seasonal or year-round?	any of the following near your septic system? ISH GRASS WETINESS OR SPONGY AREA DIDING OR SURFACING SYSTEM OVERI DRAINS WASTEWATER BACKING IN	How old is your system? > 25 a. Was it permitted? Y/N When? Un Knowy	Where does your lawndry and or sink water go. (CHRCLE ALL-THAT APPLY)  SEPTIC TANK INGROUND BED COMMUNITY SEWER FREYSTOOL STORM SEWER STORM SEWER STORM SEWER FREYY BORE HOLE OTHER  OTHER	What kind of segrage dystem of you have? (CIRCLE ALL THAT APPLY)  (SEPTIC TANK)  (SEPTIC TANK)  (CIRCUND BED)  (CESSPOOL  (CESSPOOL  (CESSPOOL  (CESSPOOL  (CESSPOOL  (CESSPOOL  (CIRCUND BED)  (COMMUNITY SEWER   How large is your lot?  / S & No. of dwelling mits?  One or more sewage systems?  COMMERCIAL RESIDENTIAL?	Do you treat your water (**) N How? CL/UV DISINFECTION SOFTENER DON, OTHER  Was the water ever tested? ** N When? 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ER OF RES	to determine if there are any sewage pro e used in evaluating the need for commou E OR FILL IN AS APPROPRIATE; AD	Munic: Marion log Co.: Berles Study Area: Date: 31/5/05 General weather conditions: C/car	LOCAL IC LOCAL	

# Pure-Test Water Lab 736 East Lincoln Avenue Information, PA 77067 717-866-2234

Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125769 Date Reported: 03/15/2005 Phone Number: 717-838-1351

walyzed Analyst cer chriction Major /2005 dnb /2005 dnb /2005 dnb
Maximum Contaminant Level   Dale Analyzed Analyst Sampled: 03/19/2005   Sampled: 03/11/2005   dnb   10.4 mg/L   03/11/2005   dnb   0.60/100mL   03/11/2005   dnb   0.60/100mL   03/11/2005   dnb   0.60/100mL   0.6
Pass/Fail Mcc Pass Poc Pass 10: Pass Oct
Result  0 col/100mL  4.32 mg/L  0 col/100mL  0 col/100mL
Analyte 125769-09 Source: Hook Escleria - Focal Coliform elitrate-Mrogen 2cuberia - Total Coliforn Rectaria - E.ool

This sample was collected by an authorized sampler.

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

### 型drer Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125769
Date Reported: 03/15/2005
Phone Number: 717-838-1351

Bacteria - Total Coliform Sacteria - Eucoli	Mithatte-Milliogen	Sauteria - Fecal Celsform	125769-10 Source: Lutz	Analyte	
1.0 col/100mL 0 col/100mL	<1 mg/L	0 col/100mL		Result	
Page Page	Pass	Pass		Pass/Fail	
ii 0 col/100mL iss 0 col/100miL	10.4 mg/L	0 cal/100mL	Sampled: 03/10/2005	Maximum Contaminant Level	
03/11/2005 dnb 03/11/2005 dnb	03/11/2005	03/11/2005	Sargiero d'un	Date Analyzed Analy	
d da	ф	фb	EGNA ANY	d Analyst	

This sample was collected by an authorized sampler.

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

-	
٠,	
5	
ñ	

do Iwe have your permission to contirm this information by looking around X) n

(as the system every been repaired? Y / When?  ANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED  OMMENTS:	(ave you ever had your system pumped out? (S) N How often? Syriat Last time? 24 cost	you noticed any of the above, are they seasonal or year-round?	Tow old is your system? 17 4.2 4.5 Was it permitted (C): N. When? 1.1 1.4 1.0 1.1 1.5 When? 1.1 1.4 1.0 1.1 1.5 When? 1.1 1.4 1.5 1.5 When? 1.1 1.4 1.5 1.5 When? 1.1 1.4 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	Where does your handly and/or sink water 1907 (CHRCLE-ALL THAT APPLY)  CESSPOOL  OLD WELL  HOLDING TANK  PRIVY  PRIVY  BORE HOLE  OTHER  OTHER	Whatkind of sewage system of you have? (CIRCLE ALL THAT APPLY)  SETTIC TANK)  CESTIC TANK  (INGROUND BED)  COMMUNITY SEWER  STORM SEWER  PRET TO DITCH  PRET TO STEAM  PRIVY  BORE HOLE  OTHER	How large is your lot? 1 (6.7 A. No. of dwelling units? 1  One or more sewage systems? COMMERCIAL(RESIDENTIAL?)	Munic.: Marien Ton Co.: Cerbs Surver (Sudy Area: Date: 3/0/05  General weather conditions: Clear Community wide solutions.  CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENUS AS NEEDED)  NAME: Malley PHONE #: 557 - 50 9 4 COWNEROR FUBLIC? OTHER?  If you have a well: 1s it DUG & DEILLED? HOW DEEP? Unknown it. Cased? New York what wour water (Y) N How? CLUDINFECTION SOFTENERDION, OTHER  Was the water eysted? Y N When?  Was the water eysted? Y N When?  Any contamination Y N What (TO FOX) etc.)	DOOR TO DOOR
---	--	--	---	--	--	---	---	--------------

Water Analysis Report

Light-Heigol & Associates Inc 430 E Main Street Polmyra PA 17078

Lab Number: 125769 Date Reported: 03/15/2005 Phone Number: 717-838-1351

Date: 3 1/2 PS

Study Area: \_\_

Co: Checks

40.

General weather conditions: Munic: Macion

DOOR TO DOOR NEEDS SURVEY

Date Analyzed Analyst Science: Chessive Wise 03/11/2005 drb 03/11/2005 drb 03/11/2005 drb
Maximum Contaminant Level sampled: 03/10/2005 0 col/10/mt. 10.4 mg/L. 0 col/10/mt. 0 col/10/mt. 0 col/10/mt.
Pass/Fail Pass Pass Pass
Result  0 cost tone 6 cost tone 0 cost tone 0 cost tone
Analyte 123769-11 Sevree: R Miler Nikadera - Fecal Colform Nikade-Nikoga Sectera - Total Coliferm Sectera - Ecoli

This sample was collected by an authorized sampler.

17078	i.	Phone Number:	717-838-1351	Analyst	General weather conductors.  A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and A survey is being conducted to determine if there are any sewage problems in this descriptions.
Result	rassirai		Seature: Chestrica Water	o italya	CORCLE OR FILL IN AS APPROPRIATE, AND COMPANY CONTY. REMANDED TO STORY OF STATE OF S
	Pags	0 col/100nL 10 4 mod	03/11/2005	dnb dnb	
s.eu mg/L Cellerm 0 col/(03mL	Pass	o col/100ml.	03/11/2005	qup	TERN? PUBLIC! OTHER!
	Pass	0 cal/100mL	03/11/2005	qup	If you have a well: Is it DUG or ORILLED HOW DEEP? Lead 11 PRINOWNHILL / e.e.
le was collected by an authorized sampler.	ed sampler.		-		OFTENER, ION, OT
				-	How large is your lot? 2 4 acc No. of dwelling units? One or more sewage systems? One or more sewage systems?
					What kind of sgwage systim of you have? (CIRCHE ALL THAT APPLY)  SEPTIC TANK  CESSPOOL  OLD WELL  SELVATED SAND MOUND  PIPE TO DITCH  BORE HOLE  PRE TO SURFACE
					adry and or sink water go, CCHRCLE ALL THAT APPLY) LIANK SOL RICKGROUND BED INGROUND TRENCH FIRST FROM MOUND
					OLD WELL SEEPAGE PIT PIPE TO STEAM HOLDING TANK BORE HOLE PRIVY OTHER
					How old is your system?  Have you every noticed any of the following near your septic system?  Have you every noticed any of the following near your septic system?  Have you every noticed any of the following near your septic system?  Have you every noticed any of the following near your septic system?  Washes on the following near your septic system?  Washes your system?
					they sea
The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.	the destablished by state and I destablished by state para	federal authorilies. The MCL is the imeters have no established MCL.	Page 1		Hyou noticed any of the above, are easy.  Have you ever had your system pumped out? Y (W) How often?  Have you ever had your system pumped out? Y (W) How often?
Pure-1 est 1s analyze Drir	Pure-lestis Certileo by the FA DCF to analyze Drinking Water (#38-338)	38)			If it was pumped, was it inspected to the second of the se
					COMMENTS: DOIWE HAVEYOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND BY N

## Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

DOOR TO DOOR NEEDS SURVEY

Lab Number: 125921 Date Reported: 03/22/2005 Phone Number: 717-838-1351

Nitrate-Nifrogen Bacteria - Total Coliform Bacteria - E.coli Encteria - Fecal Coliform 125921-09 Source: Stouchsburg Nursery 11.4 mg/L 22.2 col/100mL 0 col/100mL Result 0 col/100raL Pass Fail Fail Pass PassiFail Maximum Contaminant Level Date Analyz 10.4 mg/L 0 col/100mL 0 col/100mL 0 col/100mL Sampled: 03/17/2005 03/18/2005 03/18/2005 03/18/2005 Sampter: Chr 03/18/2005

This sample was collected by an authorized sampler.

Page I					2005 838-1351 Analyzed Analyst er: Christens Major 72005 dnb 72005 dnb 72005 dnb	
Have you ever had your system pumped out? YNHow often?  Have you ever had your system pumped out? YNHow often?  Hit was pumped, was it inspected for cracks or broken baffles? Y/N What part?  Has the system every been repaired? Y/N When?  TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS.  COMMENTS.  DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND(Y))N	How old is your system? 17 7 652 Was it permitted? Y) N When? 10 10 10 10 10 10 10 10 10 10 10 10 10	Where does your launder-andler, sink water go? JCHRCLE ALL-THAT APPLY)  CESPTIC TANK CESSPOOL INGROUND BED COMMUNITY SEWER CESSPOOL INGROUND TRENCH COLD WELL BLEVATED SAND MOUND PIPE TO SITCH PRIVY BORE HOLE OTHER OTHER OTHER	What kind of sewage system of you have? (CIRCLE ALL THACL PPLY)  (SEPTIC TANK)  INGROUND BED  CESSPOOL  OLD WELL  HOLDING TANK  BEFPAGE PIT  PRIVY  BORE HOLE  OTHER  OTHER	How large is your lot? / /a No. of dwalling units? One or more sewage systems? / COMMERCIAL/RESIDENTIAL?	his area. This is a solutions. ENTS AS NEEDE  S UBLIC? OTHE S NHILL NHILL NHILL NHILL	Maria

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

## Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125921 Date Reported: 03/22/2005 Phone Number: 717-838-1351

Maximum Contaminant Level Date Analyzed Analyst Sampled: 03/17/2005 Sampler: Circsthin Notice 03/18/2005 03/18/2005 03/18/2005 03/18/2005 Sampled: 03/17/2005 0 col/100mL 10.4 mg/L 0 col/100mL 0 col/100mL Pass/Fail Fail Fail Pess 1 col/100mL 15.9 mg/L 4.2 col/100mL 0 col/100mL Result Analyte 125921-10 Source: Shea Nirale-Nirogen Bacteria - Total Coliform Bacteria - E.coli Bacteria - Fecal Coliform

e e e e

This sample was collected by an authorized sampler.

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

### Was the water ever tested (Y) N When? 2 Any contamination? Y) N What (TC, PC, N, etc.) What kind of water system do you have EELLY SPRING? CISTERN? PUBLIC? OTHER? If you have a well: Is it DUG of DRILLED! HOW DEEP? 340 ft. Cased(V) N How far is the well or spring from the drain field 20 d ft. Is well (IP) DOWNHILL Do you treat your water(Y) N How? CLUV DISINFECTION SOFTENER, ION, OTHER What kind of sexwage system of you have? (CIRCLE ALL THAT APPLY) SEPTIC TANK INGROLIND BED the results are intended to be used in evaluating the need for community wide solutions. CHRCLE OR FILLIN AS APPROPRIATE, ADD COMMENTS AS NEEDED) NAME: Frank Frank Community Frank CIT A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and Munic: Marion How old is your system? Have you every noticed any of the following near your septic system? GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS WASTER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME Where does your launday and/or sink water go? (CIECLE ALL-THAT APPLY) SEPTIC TANK CESSPOOL NGROUND TRENCH General weather conditions: One or more sewage systems? How large is your lot? \_ Has the system every been repaired? Y / N When? TANK REPAIRED/REPLACED LINE: REPAIR If you noticed any of the above, are they seasonal or year-round? do I/we have your permission to confirm this information by looking around(x) n COMMENTS: If it was pumped, was it inspected for cracks or broken bassles? Y / N What part? Have you ever had your system pumped out? Y/N) How often? 19567 PHONE #: 589 4-652 HOLDING TANK PRIVY PRIVY OTHER OTHER. HOLDING TANK TIEW CIT 27 Y / N When? By permit? Y / N What part? LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED Co.: (1301/60 DOOR TO DOOR NEEDS SURVEY 1000 ELEVATED SAND MOUND SEEPAGE PIT BORE HOLE BORE HOLE SEEPAGE PIT ELEVATED SAND MOUND COMMERCIAIRESIDENTIAL No. of dwelling units? OWNER OF RENTER? NUMBER OF RESIDENTS. Study Area: PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE PIPE TO DITCH PIPE TO STEAM STORM SEWER COMMUNITY SEWER PIPE TO SURFACE STORM SEWER COMMUNITY SEWER Last time?

736 East Lincoln Avenue Myerstown, PA 17057 717-866-2234

Water Analysis Report

Lab Number: 125921 Date Reported: 03/22/2005 Phone Number: 717-838-1351 Maximum Contaminant Level Sampled: 03/17/2005 10.4 mg/L 0 col/100mL 0 col/100mL 0 col/100mL Pass/Fail Pass Pass Pass 1.43 mg/L 0 col/100mL 0 col/100mL 0 col:100mL Result 125921-07 Source: E.E. Beamesderfor Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078 Bacteria - Total Coliforni Sacteria - E.coli Bacteria - Fecal Coliform Mitrate-Nitrogen

Analyst

Date Analyzed

Sympton: Christina Alabai

6666

03/18/2005 03/18/2005 03/18/2005 03/18/2005

This sample was collected by an authorized sampler.

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338) DO I/WE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND(Y) N

COMMENTS

3117 105 ars What kind of water system do you have WELL? SPRING? CISTERN? PUBLIC? OTHER?

How far is the well: Is it DUG or CIRILED? HOW DEEprin known it. Cased YN N

Do you treat was a well. A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and Has the system every been repaired? Y/N/When?

TANK REPAIRED. REPAIRED. REPAIRED. TANK REPAIRED. COMMUNITY SEWER COMMUNITY SEWER Was it permitted N When? Chkao --Date How far is the well or spring from the drain field aloca ft. Is well UPDOWNHILL an language to you treat your water (1) N How? CLAUV DISINFECTION SOFTENER ION, OTHER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE PIPE TO SURFACE the results are intended to be used in evaluating the need for community wide solutions.

(GROIF OR FILLIN AS APPROPRIATE, ADD COMMENTS AS NEEDED)

STREET, (33) (1) (1) (1) ODORS STORM SEWER PIPE TO DITCH PIPE TO STEAM Last time? STORM SEWER PACING SYSTEM OVERFLOW ASTEWATER BACKING INTO THE HOME COMMERCIAKRESIDENTIAL? If it was pumped, was it inspected for cracks or broken baffles? Y What part? Where does your jainday-endor sink water go? (CIRCLE ALL THAT APPLY)

(SEPTIC TANK)

(TENSPOOL Have you every noticed any of thefollowing near your septic system?
GREEN LUSH GRASS WETNESS OR SPONGY AREAS
WATER PONDING OR SURFACING SYSTEM OVERPLC
SLUGGISH DRAINS WASTEWATER BACKING INTO Study Area: What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)

SETIC TANK
CESSPOOL
CESSPOOL
ELEVATED SAND MOUND
HOLDING TANK
BORE HOLE ELEVATED SAND MOUND SEEPAGE PIT BORE HOLE No. of dwelling units? DOOR TO DOOR NEEDS SURVEY Have you ever had your system pumped out? N How often? If you noticed any of the above, are they seasonal or year-round? Was the water ever tested (I) N When? 41620 401 Any contamination? Y (NWhat (TC.FC, N, etc.) ပ္ပိ How large is your lot? 10 ac-OLD WELL HOLDING TANK PRIVY One or more sewage systems? General weather conditions: How old is your system? OTHER OTHER Munic. Murica

### Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125921

Date Reported: 03/22/2005 Phone Number: 717-838-1351

Nitrale-Nitrogen Bacteria - Total Cottorra Bacteria - Elcofi Bactoria - Fecol Coliforn 125921-06 Source: Bond 12.2 mg/L ປີ cc//100mL ປີ co//100mL 0 col/109mL Pass Fail Pass 10.4 mg/L 0 col/100mL 0 col/100mL Maximum Contaminant Lovel Date Analyzed Analyst 0 col/100mL Sampled: 03/17/2005 03/18/2005 03/18/2005 Sampler: Christina Waçer 03/18/2005 03/18/2005

This sample was collected by an authorized sampler.

	analyze Urinking Water (#38-338)	Pure-Test is Certified by the PA DEP to	The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.
			Page 1
DO IWE HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND(Y)	Has the system every been repaired? Y / N When?  TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS:	If it was pumped, was it inspected for cracks or broken baffles? Y / N What part?	Have you ever had your system pumped out? Y DHow often?Last time?

If you noticed any of the above, are they seasonal or year-round?

How old is your system? 14 1 272 Was it permitted? N When? 2, 4 2, 6 10 Was it permitted? N When? 2, 4 2, 6 10 Was it permitted? N When? 4, 4 2, 6 10 Was it permitted? N When? 4, 4 2, 6 10 Was it permitted? N When? 4, 4 2, 6 10 Was it permitted? N Was it permitted?

ODORS por copie 79

OLD WELL HOLDING TANK PRIVY OTHER

Water Analysis Report

Maximura Contaminant Level Sampled: 03/17/2005 0 col/100mL 10.4 mg/L 0 col/100mL 0 col/100mL Pass/Fail Pass Pass Pass 9,38 mg/L 0 col/130tnL 0 col/100mL 0 col/10GrnL Result 125921-05 Source: Deamesderfor Sacteria - Fecal Coliform Light-Heigel & Associates Inc 430 E Main Street Palinyra PA 17078 Mitrate-Nitrogen Becteria - Total Coliform Bactoria - E.coli

Date Analyzed Analyst Samples: Carridge Motor

Lab Number: 125921 Date Reported: 03/22/2005 Phone Number: 717-838-1351

**\$ \$ \$** 

03/18/2005 03/18/2005 03/18/2005 03/18/2005

This sample was collected by an authorized sampler.

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

Has the system every been repaired? Y / N When?

TANK REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED
COMMENTS.

Have you ever had your system pumped out? Y / N How often? Conference?

If it was pumped, was it inspected for cracks or broken baffles? Y / N What part?

do uwe have your permission to confirm this information by looking arounds (Y) n

DOOR TO DOOR NEEDS SURVEY
Munic: Marion hap Co. 12.12 Study Area: Date: 3 1/7/05
General weather conditions!
onducted to determine if there are any sewage problems in tals area. This is a nded to be used in evaluating the need for community wide solutions. (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDE
NAME: Merian Fire Co. STREET: 85 - Hais St. CITY: Mondal of
IONE #: 5-55 522 CONNEROR RENIER NUMBER OF RESERVENCE OF SECURITY
If you have a well: Is it DUG @ DRILLED? HOW DEEP? On four ft. Cased(Y) N
Do you treat your water? Y / N How? CL/UV DISINFECTION, SOFTENER, ION, OTHER CALAGOS,  Was the water ever tested? Y / N When?  On Luck. 9
FC, N, etc.)
How large is your lot? 2. a.c. No. of dwelling units? One or more sewage systems? COMMERCIAL BESIDENTIAL!
What kind of sewage existent of you have? (OIRCLE ALL THAT APPLY)  SEPTIC TANK CESSPOOL OLD WELL SEEPAGE PIT PRINTY PRINTY BORE HOLE PRINTY PRINTY PRINTY POTHER  OTHER
dy zarboz sink water go? (CIRCLE ALL THAT APPLY) TANK TANK
INGROUND TRENCH ELEVATED SAND MOUND KK SEEPAGE PIT
PRIVY BORE HOLE PRE TO SURFACE OTHER
How old is your system? 21/21 21 Was it permitted? Y / N When? 21/22 21
Have you every noticed any of the following near your sepace system: GREEN LUSH GRASS WETNESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME
OTHER.
If you noticed any of the above, are they seasonal or year-round:

## Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125921
Date Reported: 03/22/2005
Phone Number: 717-838-1351

General weather conditions: Munic: Marion

44

ဂ္ဂ

Derks

Study Area:

Date: 3/17/05

DOOR TO DOOR NEEDS SURVEY

Bacionia - Fedal Coliform Nicrote-Nitrogen Sactoria - Yotal Coliform Sactoria - Ecofi This sample was collected by an authorized sampler. 125921-04 Source: Harion Fire Company 0 col/100mL 2.52 mg/L 0 col/100mL Result 0 col/100mL Pass Pass Pass Pass/Fail 0 cal/100mL 10.4 mg/L 0 col/100mL 0 col/100mL Sampled: 03/17/2005

03/18/2005 03/18/2005 03/18/2005 03/18/2005 Sumpler: Christian Major 5

trialyzed Analyst vs. Charvelles wayon 2005 and 2005 and 2005 and 2005 and 2005 and	A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS, AS NEEDED)  NAME: (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS, AS NEEDED)  NAME: (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS, AS NEEDED)  NAME: (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS, AS NEEDED)  NAME: (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS, AS NEEDED)  CITY: (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS, OITY: (CITY:
,	Jac
•	What kind of same recovery steme of you have? (CIRGHE ALL THAT APPLY)  SEPTIC TANK  CESSFOOL  OLD WELL  HOLDING TANK  PRIVY  BORE HOLE  OTHER  COMMUNITY SEWER  INGROUND TEENCH STORM SEWER PIPE TO STEAM PIPE TO SURFACE OTHER
	Where does your laundry and/or sink water go? (CIRCLE-ALLTHAT APPLY)  SEPTIC TANK  SEPTIC TANK  CESSPOOL  OLD WELL  HOLDING TANK  PRIVY  BORE HOLE  OTHER  OTHER
	How old is your system?  Have you every sorticed any of the following near your septic system?  Have you every sorticed any of the following near your septic system?  WETNESS OR SPONGY AREAS  WATER PONDING OR SURFACING  WASTEWATER BACKING INTO THE HOME  OTHER  OTHER
Page 1	If you noticed my of the above, are they seasonal or year-round?  Have you ever had your system pumped out? Y (N) How often?  If it was pumped, was it inspected for cracks or broken baffles? Y / N What part?
	Has the system every been repaired? Y / N When?  TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED  COMMENTS:  COMMENTS:
	DO IME HAVE YOUR PERMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y. // N

The Maumum Contaminant Level (MCL) has been established by state and federal authorities, The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

736 East Lincoln Avenue Myerstown, PA, 17067 717-866-2234

Water Analysis Report

Date Reported: 03/22/2005 Phone Number: 717-838-1351 Lab Number: 125921

Date: 31/7/05

١.

DOOR TO DOOR NEEDS SURVEY

Sumprort Christian Major Date Analyzed Analyst 03/18/2005 03/18/2005 03/18/2005 03/18/2005 Maximum Contaminant Level Sampled: 03/17/2005 10.4 mg/L 0 col/100m/L 0 col/100mL 0 col/100mL Pass(Fail Pass Pass Pass 8.79 mg/L 0 col/100m/L 0 countingment 0 col/100mL Result Light-Heigel & Associates Inc 430 E Main Street 125921-03 Source: Rissmiller Bacterla - Fecal Coliform isacteria - Total Colitoria Palmyra PA 17078

This sample was collected by an authorized sampler.

Minate-Mitrogen Racterla - E.coli

Has the system every been repaired? (I) N When? Address By permit(C) N What part? Address TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS: STREET, 200 C. L. K.d. CHARER OF RESIDENTS. COWNER, OR RENTERS. A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and Last time? 5 yr ofe COMMUNITY SEWER COMMUNITY SEWER Was it permitted? Y / N When? Unker 6 Wh STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE STORM SEWER PIPE TO DITCH PIPE TO STEAM PIPE TO SURFACE What kind of water system do you have WELLS SPRING? CISTERN? PUBLIC! OTHER?

If you have a well: Is it DUG & DRILLED? HOW DEEP? Go Q. C. cased(Y) N

How far is the well or spring from the drain field & CO. C. f. is well the DOWNHILL

Do you treat your water (Y) N How? CLAY DISINFECTION, SOFTENER, JON, OTHER A survey is being conducted to determine in uncertainty wide solutions.
the results are intended to be used in evaluating the need for community wide solutions.
(CHROLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED) WASTEWATER BACKING INTO THE HOME ODORS, COMMERCIAL RESIDENTIAL SYSTEM OVERFLOW Hit was pumped, was it inspected for cracks or broken baffles(Y) N What part? ELEVATED SAND MOUND SEEPAGE PIT BORE HOLE How old is your system? 2 (2 Was it permitted? Y / N Wh
Have you every noticed any of the following near your septic system?
GREEN LUSH GRASS WEINESS OR SPONGY AREAS
WATER PONDING OR SURFACING SYSTEM OVERFLO'
SLUGGISH DRAINS WASTEWATER BACKING INTO Where does your laundry and or sink water ge? ICTECLE ALL THAT APPLY)

SEPTIC TANK INGROUND BED

CESSPOOL What kind of sewage-system of you have? (OIRCLE ALL TRAT APPLY)

SEPTIC TANK
CESSFOOL
OLD WELL
HOLDING TANK
BORE HOLE Study Area: No. of dyselling unite? Have you ever had your system pumped out? (Y) N How often? If you noticed any of the above, are they seasonal or year-round? 7 Any contamination? N What (TO) FOX) etc.) NAME: (4-15c (46/0 ZIP: 1956.7 PHONE#: 537 2261 Was the water ever tested (W) N When? ပ္ပ 3 How large is your lot? 0,85 HOLDING TANK PRIVY One or more sewage systems? General weather conditions: OLD WEL OTHER 음 윧 육육

The Maximum Contaminant Level (MCL) has been established by state and federal authorities. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Page 1

analyze Drinking Water (#38-338)

DO I/WE HAVE YOUR PEKMISSION TO CONFIRM THIS INFORMATION BY LOOKING AROUND (Y) N

Pure-Test is Certified by the PA DEP to

## Water Analysis Report

Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Lab Number: 125921 Date Reported: 03/22/2005 Phone Number: 717-838-1351

General weather conditions: Munica Marion

DOOR TO DOOR NEEDS SURVEY

`,

\_Study Area:

Date: 3/12/05

Saciorla - E.coli Kitrate-Nitrogen Bactoria - Total Coliforn ಾcteris - Fecal Collforn 125921-02 Source: Dolp 6,32 mg/L 0 cpl/100mL Result 0 col/100mL 0 col/100mL 0 col/100mL 10.4 mg/L 0 col/100mL 0 col/100mL Maximum Contaminant Lovel Date Analyzed : Analyst Sampled: 03/17/2005 03/18/2005 dnb 03/18/2005 dnb 03/18/2005 dnb 03/18/2005 dnb Symples: Christina Abrier

A survey is being conducted to determine if there are any sewage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.

(CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS, AS NEEDED)

NAME: Lennis Kine Strict IN STREET: 855 Canal CITY: Lendis CIT

How far is the well or spring from the drain field 100 ft. Is well INDOWNHILL Do you treat your water (Y) N How? CHUYDISINFECTION SOFTENER, ION, OTHER Was the water ever tested (Y) N When? I mix Get Any contamination? Y (W What (TC, FC, N, etc.)

This sample was collected by an authorized sampler.

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

do lwe have your permission to confirm this diformation by looking around y

One or more sewage systems? COMMERCIA (RESIDENTIAL?)
What kind of sewage system of you have? (CIRCLE ALL THAT APPLY)
ANK SEEPAGE PIT BORE HOLE
TERMINE OF CONCUENTS OF THE PLY
OLD WELL  HOLDING TANK  SEFFAGE FIF  PIPE TO SURPACE  OTHER  OTHER
How old is your system? 1 4 Was it permitted? YIN When? 2002
Have you every noticed any of the following near your septic system?  GREEN LUSH GRASS TETNESS OR SPONGY AREAS ODORS WATER PONDING OR SURFACING SYSTEM OVERFLOW SLUGGISH DRAINS WASTEWATER BACKING INTO THE HOME OTHER_
If you noticed any of the above, are they seasonal or year-round?
Have you ever had your system pumped out? Y (W)How often? Last time?  If it was pumped, was it inspected for cracks or broken baffles? Y / N What part?
Has the system every been repaired? Y / N When? TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS:

Water Analysis Report

Lab Number: 125921 Date Reported: 03/22/2005 Phone Number: 717-838-1351

Pass/Fail Result Light-Heigel & Associates Inc 430 E Main Street Palmyra PA 17078

Maximum Contaminant Lavel ... Date Analyzed Analyst Samples: Christina Mayor 03/18/2005 03/18/2005 03/18/2005 03/18/2005 Sampled: 03/17/2005 10.4 mg/L: 0 col/100mL 0 col/100mL 0 col/130ml. Pass Pass Pass 6.29 mg/L 0 col/100mL 0 col/100mL 0 col/100mL 125921-01 Source: Kiline Sacteria - Fedal Coliform Bacteria - Total Coliforn Altrate-Nitrogen Bacteria - E.colt

퉏 **a** a a

This sample was collected by an authorized sampler.

The Madmum Contaminant Level (MCL) has been catabilished by state and federal authorilles. The MCL is the maximum quantity of a substance allowed in safe drinking water. Some parameters have no established MCL.

Pure-Test is Certified by the PA DEP to analyze Drinking Water (#38-338)

DOOR TO DOOR NEEDS SURVEX	Munic. Warten Two Co.: Recko Study Area: Date: 3/17 05	A survey is being conducted to determine if there are any servage problems in this area. This is a general survey and the results are intended to be used in evaluating the need for community wide solutions.  (CIRCLE OR FILL IN AS APPROPRIATE, ADD COMMENTS AS NEEDED)  NAME: Lie Ha earles.  STREED: 9-1 Control CITY Monder COTY MONDER.	The 14% 677 PHOND #: 287 - 5/21   CONNECON ACENTER OF THE PROPERTY OF THE PARTY OF	Was the water ever tested? (C) N When? Y C, N, etc.)  Any contamination? Y (M) What (TC, FC, N, etc.)	1	What had of sewage system of you have (GIRCIE ALL THAT APPLY)  CESSPOOL  OLD WELL  SEERAGE FIT  HOLDING TANK  BORE HOLE  PIPE TO STRAM   Where does your laundry and/or sink water go? (CIRCLE ALL THAT APPLY)  SEPTICTARE CESSPOOL INGROUND BED STORM SEWER STEROOL BLEVATED SAND MOUND PIPE TO DITCH HOLDING TANK BORE HOLE OTHER	
------------------------------	--	--	---	---	---	--	--

Page 1

Has the system every been repaired? Y /MWhen?
TANK REPAIRED/REPLACED LINE: REPAIRED/REPLACED DRAIN FIELD: REPAIRED/REPLACED COMMENTS: doing have your permission to confirm this information by looking around  $\widehat{\mathcal{L}}^{1}$  in Last time? 12 C How old is your system?

Have you every noticed any of the following near your septic system?

Have you every noticed any of the following near your septic system?

Have you every noticed any of the following near your septic system?

WATER PONDING OR SURFACING

SYSTEM OVERFLOW

ACAC

SLUGGISH DRAINS

WASTEWATER BACKING INTO THE HOME
OTHER. Have you ever had your system pumped out (Y) N How often?
If it was pumped, was it inspected for cracks or broken baffles!(Y) N What part?. If you noticed any of the above, are they seasonal or year-round?

Appendix C: OLDS Management

### OLDS CONSIDERATIONS AND

### MANAGEMENT RESPONSIBILITIES

### OLDS - SEWAGE MANAGEMENT SYSTEM

The adoption of the 537 Plan Update with OLDS Management Program will transfer the responsibility of maintaining the individual on-lot systems from property owners to a public or the local agency. The purpose of the adopting an OLDS Management Program should develop better site investigation requirements, improved system design, construction, inspection and operation monitoring and management. All of the above improved practices and techniques will increase the life expectancy of onlot systems presently in use and new systems.

The local agency's/Township's responsibilities in addition to planning, permitting and inspection of the permitted facilities is the improved management involving the abandonment of sites, annual inspection of the all on-lot systems in the Township, septic tank pumping and repairs when necessary. Also, the implementation of the OLDS Management will require that landowners grant an easement to the Township/local agency allowing access to the property for inspections.

The Marion Township OLDS Planning Area basically covers the entire Township excluding the properties that will be connected to the public sewer after the existing OLDS facilities are properly abandoned and the dwellings on the lots are not utilizing a on-lot system. An Ordinance will be required to establish the Township's Authority over OLDS facilities. The cost of inspection, pumping and any repairs will the Owner's responsibility.

### CONTINUED USE OF ON-LOT SEWAGE DISPOSAL SYSTEMS

The treatment of wastewater on a property where sewage is generated is referred to as an on-lot system. Typically treatment occurs in two stages: primary and secondary treatment. Primary treatment occurs in either a septic tank or an aerobic tank. Secondary treatment takes place after the liquids are discharged from the tank. Soil absorption or some other means may be used as secondary treatment.

The suitability of installing additional on-lot systems in Marion Township requires detailed planning and site investigation. Regular pumping of the tanks and disposal of the contents at an approved facility is required at the frequency specified here in. The regular pumping must be provided by the system user/owner and reports of pumping and disposal site shall be submitted to the Township/local agency.

Tanks in the Northwest Planning Area will be pumped in  $\underline{\underline{Year 1}}$  of the Implementation Schedule.

Tanks in the East Planning Area will be pumped in Year 2 of the Implementation Schedule.

Tanks in the South Planning Area will be pumped in Year 3 of the Implementation Schedule.

Continue pumping at the minimum prescribed interval after the first pumping as required by the Township Sewage Enforcement Officer.

Types of systems to be installed and continued in use will vary depending on the type and quantity of flow, use of the building, site investigation results and background water supply characteristics for the area. Within Marion Township, "NO" industrial wastewater shall be discharge into an OLDS system.

### TYPES OF ON-LOT SYSTEMS IN USE

ESM - Elevated Sand Mounds with multiple septic and/or aerobic treatment tanks

Conventional Absorption Beds - and ESM's with single septic and/or aerobic treatment tanks

ESM and Conventional Trenches -

### TYPES OF ON-LOT SYSTEMS FOR FUTURE USE

Same as above, plus:

**IRSIS** 

**Drip Irrigation** 

Approved ALTERNATE Technologies:

Approved Experimental Technologies

Note: Small Flow Treatment Facilities area prohibited unless otherwise approved by the Department

### O & M RESPONSIBILITIES OF THE TOWNSHIP SEWAGE ENFORCEMENT OFFICER

- 1. Verify and provide suitable approved disposal site for septage from the OLDS Management Activities.
- 2. Set the schedule for the regular pumping and disposal of the OLDS systems in the three SA's.
- 3. Perform required monitoring and enforcement of the OLDS regulations and specified in PA DEP Title 25; Chapters 71, 72 & 73.
- Perform coordinated standard inspection of OLDS systems, water sampling for continued monitoring of water supplies with high nitrate concentrations, maintain the records of regular pumping of the tanks.

### SOURCES OF SEPTAGE AND SLUDGES

Depending on the use of dwelling and the characteristics of the wastewater to be disposed from
the facility, commercial facilities will be required dispose of the non-sanitary wastewater with
pretreatment of waste water before it is disposed into the OLDS removing hazardous material and

other substances detrimental to the safe and efficient operation of the OLDS and the sewer public sewer system.

- 2. The estimated quantities of sludge and holding tank wastes from existing commercial facilities along US 422, is 16,000 gal.
- 3. The estimated septage from residential and family farms via the implementation of the OLDS pumping of the 355 dwellings is 150,000 gal. to be accomplished over 3 years after implementation of the Plan.
- 4. Septage disposal shall be recorded by the Township via the submission of receipts of hauling by the pumping/hauling contractor.
- 5. Disposal of holing tank and trap wastes shall be recorded by the Township via the hauler submitting approved manifests to the Township within 3 calendar days after each disposal. The manifest shall describe the contents, the quality wastes as required by the Township, the quantity, and the approved point of disposal.

### USE OF SMALL FLOW DISPOSAL SYSTEMS

The use of <u>Small Flow Treatment</u> systems with direct discharges into the streams and the Waters of the Commonwealth within Marion Township is prohibited unless otherwise approved by the Department. The development and use of direct discharge systems into the wild and scenic rivers/streams within the Township are not consistent with the protected use of the streams.

### USE OF COMMUNITY LAND DISPOSAL SYSTEMS

The development and use of community land disposal system shall be limited to the areas and soils of the Township that are outside the limestone geology and karst topography areas as shown on Map 4 unless otherwise approve by the Department. Site investigation and design shall completed under the supervison of a registered geologist.

### USE OF HOLDING, RETAINING AND PRETREATMENT TANKS FOR DISPOSAL SYSTEMS

Pretreatment standards for the discharge of non-sanitary wastewater into OLDS and the public sewer, shall be as required by the Authority with jurisdiction for the sewer planning area. For the Phase IA public sewer area the Authority with jurisdiction shall be Marion Township and Tulpehocken Township and their and Agents. For Phase IB and 2 planning areas the authority with jurisdiction shall be Marion Township and Womelsdorf Sewer Authority and their and Agents. For the OLDS Planning Area the authority with jurisdiction shall be Marion Township/local agency and the Sewage Enforcement Officer.

Applications for the pretreatment and disposal of the non-sanitary wastewater shall be prepared under the supervision of a registered engineer and operated under the supervision and certified wastewater plant operator.

Holding and retaining tanks shall comply with the requirements of the Township Holding Tank Ordinance.

### REPAIR AND REPLACEMENT OF MALFUNTIONIGN ON-LOT DISPOSAL SYSTEMS

All repairs of malfunctioning systems shall be based upon the permits issued by the Township Sewage Enforcement Officer and in strict compliance with the permits and Department regulations. The continued use and disposal of sanitary wastewater into OLDS systems not in compliance with the Department's regulations shall be corrected with the installation of an approved systems complying with the Department's regulations for on-lot /individual systems.

### **MALFUNCTIONS -**

- 1. Where malfunctions have not been corrected the Marion Township 537 Plan allows a civil penalty of no less that \$ 300.00 and no more that \$ 2,4500 to be charged to violators for each violation of the Plan and the PA Act.
- 2. Identify malfunction.
- 3. Investigate malfunction.
  - a. Observe the site.
- 4. Gather Background Information
- 5. Inspect the malfunctioning system.
  - a. Building Sewer
  - b. Treatment Tanks
  - c. Distribution Methods
  - d. Disposal Methods
- 6. Verify the Source of the Discharge
- 7. Review Application for repair
- 8. Issue Pennit for the repair
- 9. Inspect the repair correcting the malfunction

#### ORDINANCE NO. 2004 -

AN ORDINANCE OF THE BOARD OF SUPERVISORS OF MARION TOWNSHIP, BERKS COUNTY, PENNSYLVANIA, TO ESTABLISH PROCEDURES FOR THE USE AND MAINTENANCE OF EXISTING AND NEW HOLDING TANKS DESIGNED TO RETAIN SEWAGE FROM NON-RESIDENTIAL USES ON EXISTING PARCELS WITH SEWAGE FLOWS OF LESS THAN 800 GPD AND ALSO TO ESTABLISH PROCEDURES FOR THE USE AND MAINTENANCE OF EXISTING AND NEW HOLDING TANKS ON RESIDENTIAL PROPERTIES WITH MALFUNCTIONING SYSTEMS WHICH DO NOT MEET THE REQUIREMENTS FOR OTHER ON-LOT SYSTEMS AND PROVIDING PENALTIES FOR VIOLATIONS THEREOF.

WHEREAS, the purpose of this Ordinance is necessary for the protection, benefit and preservation of the health, safety and welfare of the residents of Marion Township.

NOW, THEREFORE, BE IT ENACTED AND ORDAINED by the Board of Supervisors of Marion Township, Berks County, Pennsylvania, and it is hereby Enacted and Ordained by the authority of the same as follows:

#### **SECTION ONE:** Definitions

Holding Tank - A watertight receptacle, whether permanent or temporary, which receives and retains sewage conveyed by a water carrying system and is designed and constructed to facilitate the ultimate disposal of the sewage to an approved site. Tank must be placed underground and must be in conformance with all provisions of the Pennsylvania Code, Title 25, Chapter 73, Section 73.62 Standards of Holding Tanks, as amended.

Holding Tank Permit - A written approval as issued by the Sewage Enforcement Officer of the Township authorizing the installation and utilization of a Holding Tank.

Owner - Any person vested with ownership, legal or equitable, sole or partial, of any property located in the Township.

Person - The term includes an individual; association; public or private corporation for-profit or not-for-profit; partnership; firm; trust; estate; department; board; bureau or agency of the United

States or Commonwealth; political subdivision; municipality; district; authority; or other legal entity which is recognized by law as the subject of rights and duties. The term includes the members of an association, partnership, or firm and the officers of a local agency or municipality, public or private corporation for-profit or not-for-profit.

Sewage - Any substance that contains any of the waste products or excrement or other discharge from the bodies of human beings or animals and noxious or deleterious substance 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.

Sewage Enforcement Officer - An official appointed by the Township to review permit applications and sewage facilities planning modules and to issue permits as authorized by the Sewage Facilities Act to conduct investigations and inspections that are necessary to implement the said act and regulations thereunder.

Township - Marion Township, Berks County, Pennsylvania.

#### **SECTION TWO:** Applicability

This Ordinance establishes procedures for the use and maintenance of existing and new Holding Tanks designed to retain sewage from non-residential uses on existing parcels with sewage flows of less than 800 GPD and to establish procedures for the use and maintenance of existing and new Holding Tanks on the residential properties with malfunctioning systems which do not me the requirements for on-lot systems.

### SECTION THREE: Responsibilities of the Township

The Township shall receive, review and retain pumping receipts from every Owner of a Holding Tank Permit. Pumping receipts shall be submitted to the Township on the first days of January, April, July and November for all pumping performed in the three month period immediately preceding the submittal date.

A. The Township shall complete and retain annual inspection reports from each Owner of a Holding Tank Permit. Inspection fees, as adopted by resolution of the Township, shall be paid by the Owner.

### SECTION FOUR: Duties of the Property Owner

The Owner of the property that utilizes a Holding Tank shall:

A. Prior to the issuance of the Holding Tank Permit, enter into a agreement with a licensed hauler approved by the Township, evidencing the hauler's agreement to collect, transport and dispose of the contents of the Holding Tank at a dumping site approved by the Department of Environmental Protection of the

Commonwealth of Pennsylvania. The Owner and not the Township shall have the responsibility to ensure the proper hauling and disposal of the Sewage from a Holding Tank; and

- B. Obtain a permit from the Sewage Enforcement Officer for permission to install a Holding Tank. Prior to and as a condition of issuance of the permit, the property Owner shall submit a plot plan showing the location of the tank, pay the applicable permit fee and shall pay an additional sum as prescribed by resolution as security for the compliance by the property Owner with the provisions of the Ordinance; and
- C. Maintain the Holding Tank in conformance with this or any Ordinance of the Township, the provisions of any applicable law and the rules and regulations of the Township or any administrative agency of the Commonwealth of Pennsylvania; and
- D. Permit the Township and/or it's agent to inspect the Holding Tank on an annual basis; and
- E. Permit the Township and/or a licensed hauler approved by the Township to collect, transport and dispose of the contents therein; and
- F. Pay within thirty (30) days any charge, rate or assessment which is fixed by the Township; and
- G. Fill or remove any Holding Tank which remained unused for a period of four (4) consecutive years by filling said tank with dirt or similar material; or fill or remove any Holding Tank within thirty (30) days after connection to another approved system.

#### SECTION FIVE: Violation

A violation of this Ordinance shall by action brought before a District Justice in the same manner provided for the enforcement of summery offenses under the Pennsylvania Rules of Criminal Procedure and shall result in a fine of not less than one hundred dollars (\$100) nor more than one thousand dollars (\$1,000) per violation and may result in imprisonment to the extent allowed by law for the punishment of summary offensives. A separate offense shall arise for each day, or portion thereof, in which a violation is found to exist or for each section of this Ordinance which is found to be violated.

#### SECTION SIX: Severability

If any sentence, clause, section or part of this Ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not

Ordinance. It is hereby declared as t	provisions, sentences, clauses, sections or parts of this he intent of the Board of Supervisors of Marion Township adopted had such constitutional, illegal, invalid sentence, en included therein.
SECTION SIX:	Repealer

<u>S</u>	ECTION SIX:	Repea	ler					
All Ordinances	or parts of Ordinance	es incon	sistent he	rewith	are he	reby repe	aled.	
<u>S</u>	ECTION SEVEN:	Effect	ive date					
This Ordinance	shall become effecti	ve five	days after	the da	ite of it	s enactme	ent.	-
Iby the Board of duly assembled.	OULY ENACTED A Supervisors of Mari	ND OR on Tow	nship, Be BOARI	rks Co OF S	unty, F UPER	Pennsylva VISORS (	nia, in publ	
			PENNS	YLVA	NIA		,	
		•			-			
		-						
ATTEST:								

(Municipality Seal)

#### MARION TOWNSHIP BERKS COUNTY, PENNSYLVANIA ORDINANCE NO.

#### AN ORDINANCE OF THE BOARD OF SUPERVISORS OF MARION TOWNSHIP GOVERNING MUNICIPAL MANAGEMENT OF ON-LOT SUBSURFACE SEWAGE DISPOSAL SYSTEMS (OLDS)

	AND NOW, this	day of	,	it is hereby ordained that
Chapte	r of the Code of	of Ordinances of Ma	arion Township	o, is amended by adding thereto
Part	governing the mar	agement of on-lot	subsurface sew	age disposal systems (OLDS), as
follows	<b>3:</b>			

### 101. Title: Introduction and Purpose.

- 1. This section may be cited as the OLDS (On-Lot Disposal System) Management Program for Marion Township, Berks County, PA.
- 2. As mandated by the municipal codes, the Clean Streams Law (35 P.S. 691.1 to 691.1001), and the Pennsylvania Sewage Facilities Act (Act of January 24, 1966, P.L. 1535 as amended, 35 P.S. 750.1 et seq., known as Act 537), municipalities have the power and the duty to provide for adequate sewage treatment facilities and for the protection of the public health by preventing the discharge of untreated or inadequately treated sewage. The Official Sewage Facilities Plan for Marion Township indicates that it is necessary to formulate and implement a sewage management program to effectively prevent and abate water pollution and hazards to the public health caused by improper treatment and disposal of sewage.
- 3. The purpose of this Part \_\_\_\_\_ is to provide for the inspection, maintenance and rehabilitation of on-lot sewage disposal systems; to further permit the Township to intervene in situations which are public nuisances or hazards to the public health; and to establish penalties and appeal procedures necessary for the proper administration of a sewage management program.

### 102. Terms and Definitions.

- 1. General Terms. In the interpretation of this Part, the singular shall include the plural, and the masculine shall include the feminine and the neuter.
- 2. Specific Terms. For the purposes of this Part, the terms used shall be construed to have the following meanings:
  - ACT The Pennsylvania Sewage Facilities Act, Act of January 24, 1966, P.L. (1965) 1535, No. 537, as amended, 35 P.S. Section 750.1 et seq.

ALTERNATIVE SYSTEM – A system for the disposal of domestic waste-waters not operating below ground level but located on or near the site of the building or buildings being served (e.g., composting toilets, gray water recycling systems, incinerating toilets, spray irrigation and black water recycling systems, etc.)

AUTHORIZED AGENT - A licensed sewage enforcement officer, professional engineer or sanitarian, plumbing inspector, soils scientist, or any other qualified or licensed person who is delegated to function within the specified limits as the agent of the Board of Supervisors of Marion Township to carry out the provisions of this Part.

BOARD - The Board of Supervisors of the Township of Marion, Berks County, Pennsylvania.

CODES ENFORCEMENT OFFICER (hereinafter called CEO) – An individual employed by the Township to administer and enforce this and other ordinances in the Township.

COMMUNITY SEWAGE SYSTEM - Any system, whether publicly or privately owned, for the collection of sewage publicly, or industrial wastes of a liquid nature from two or more lots or uses, or two or more equivalent dwelling units, and the treatment and/or disposal of the sewage or industrial waste on one or more of the lots or at any other site and which shall comply with all applicable regulations of the DEP.

DEP – The Department of Environmental Protection of the Commonwealth of Pennsylvania or any successor agency.

DEVELOPER – Shall be defined as any person, partnership or corporation which erects or contracts to erect a building on property owned by it with the intent to sell the building to some other party upon its full or partial completion, or upon the conveyance of property on which the building is to be built.

EQUIVALENT DWELLING UNIT (EDU) – For the purpose of determining the number of lots in a subdivision or land development, that part of a multiple family dwelling, commercial, industrial establishment with sewage flows equal to four hundred (400) gallons per day.

IMPROVED PROPERTY – Any property within the Township upon which there is erected a structure intended for continuous or periodic habitation, occupancy or use by human beings or animals and from which structure sewage shall or may be discharged.

INDIVIDUAL SEWAGE SYSTEM - Any system of piping, tanks, or other facilities serving a single lot and collecting and disposing of sewage in whole or in part into the soil or any waters of the Commonwealth of Pennsylvania or by means of conveyance to another site for final disposal.

LAND DEVELOPMENT - A land development as defined in the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247, as amended, 53 P.S. Section 10101 et seq.

LOT - A designated parcel, tract, or area of land established by a plat or otherwise as permitted by law and to be used, developed or built upon as a unit.

MALFUNCTION – The condition, which occurs when an on-lot sewage disposal system causes pollution to the ground or surface waters, contamination of private or public drinking water supplies, nuisance problems or hazard to public health. Indications of malfunctioning systems include, but are not limited to, foul odors, lush grass growing over the system, backup of wastewater in the attached buildings, soggy ground over the system, surfacing sewage effluent flowing over the ground and occurring at any time of the year.

MANAGEMENT PROGRAM – The management program shall encompass the entire area of Marion Township serviced by sewage facilities or any other alternative system, which discharges into the soils of the Township. All systems shall be operated under the jurisdiction of the Marion Township Board of Supervisors regulating the subsurface disposal and/or alternate systems, and other applicable laws of the Commonwealth of Pennsylvania.

OFFICIAL PLAN – A comprehensive plan for the provision of adequate sewage disposal systems adopted by the Township and approved by the DEP in accordance with the Act and with applicable DEP regulations.

ON-LOT SEWAGE DISPOSAL SYSTEM - Any system disposing of sewage in whole or in part into the soil or any waters of the Commonwealth of Pennsylvania or by means of conveyance to another site for final disposal, and which is located upon the lot which it serves.

OWNER – Any person, corporation, partnership, etc. holding deed/title to lands within Marion Township.

PERSON – Any individual, association, partnership, public or private corporation whether for profit or not-for-profit, trust, estate, or other legally recognized entity. Whenever the term "person" is used in connection with any clause providing for the imposition of a fine or penalty or the ordering of action to comply with the terms of this Part, the term "person" shall include the members of an association, partnership or firm and the officers of any public or private corporation, whether for profit or not-for-profit.

PLANNING MODULE FOR LAND DEVELOPMENT – A revision to, or exception to the revision of, the Township Official Plan submitted in connection with the request for approval of a subdivision or land development in accordance with DEP regulations.

PUMPER/HAULER – Any person, company, partnership or corporation, which engages in cleaning community or individual sewage systems and transports the septage cleaned from these systems.

PUMPERS REPORT/RECEIPT – Form, which shall be used by all, licensed Pumper/Haulers to report each pumping of on-lot sewage disposal systems in the Township.

REHABILITATION – Work done to modify, alter, repair, enlarge or replace an existing on-lot sewage disposal system.

REPLACEMENT AREA – An area designated as the future location of an individual onlot sewage system that shall be installed should the initial individual on-lot system installed or to be installed fail or otherwise become inoperable and which shall meet all the regulations of the DEP and all applicable Township ordinances for an individual onlot sewage system, and shall be protected from encroachment by an easement recorded on the Final Plan as filed with the Berks County Recorder of Deeds.

SEPTAGE – The residual scum and sludge pumped from septic systems.

SEWAGE – Any substance that contains any of the waste products or excrement or other discharge from the bodies of human beings or any noxious or deleterious substance 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.

SEWAGE ENFORCEMENT OFFICER (hereinafter called SEO) – A person appointed by the Board to administer the provisions of this Part and authorized by the DEP in accordance with "Chapter 71, Administration of Sewage Facilities Program" of "Title 25, Rules and Regulations"; to perform percolation tests, site and soil evaluation, and issue sewage permits for on-lot disposal systems.

SEWAGE FACILITES – Any method of sewage collection, conveyance, treatment, and disposal, which will prevent the discharge of, untreated or inadequately treated sewage into the waters of this Commonwealth or otherwise provide for the safe and sanitary treatment of sewage.

SINGLE AND SEPARATE OWNERSHIP – The ownership of a lot by one or more persons which ownership is separate and distinct from that of any abutting or adjoining lot.

SUBDIVISION – A subdivision as defined by the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247, as amended, 53 P.S. Section 10101 et seq.

TOWNSHIP - Marion Township, Berks County, Pennsylvania.

ZOINING HEARING BOARD - The appointed Board and its designated agents.

All other definitions of words and terms used in this Part shall have the same meaning as set forth in "Chapter 73, Standards for Sewage Disposal Facilities" of "Title 25, Rules and Regulations, Department of Environmental Protection."

### 103. Applicability.

From the effective date of this Part, its provisions shall apply to all persons owning any property in the Township serviced by an on-lot sewage disposal system and to all persons installing or rehabilitating on-lot sewage disposal systems.

### 104. Sewage Permit Regulations.

- 1. 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 system is to be installed without first obtaining a permit indicating that the site and the plans and specifications of such system are in compliance with the provisions of the Pennsylvania Sewage Facilities Act (hereinafter called "Act 537" or "Act") and the standards adopted pursuant to that Act.
- 2. 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 the municipal SEO. If seventy-two (72) hours have elapsed, excepting Sundays and Holidays, since the SEO 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 SEO.
- 3. The Township may require applicants for sewage permits to notify the Township's certified SEO 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 Act 537 may be scheduled and performed by the Township's certified SEO at the cost of the applicant.
- 4. No zoning, building or occupancy permit shall be issued by the Township or its CEO for a new building which will contain sewage generating facilities until a valid sewage permit has been obtained from the Township's certified SEO.
- 5. No zoning, 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 the Township's CEO and the structure's owner receive from the Township's SEO either a permit for alteration or a replacement of the existing sewage disposal system or written notification that such a permit will not be required. In accordance with Chapter 73 regulations, the certified SEO shall determine whether the proposed alteration or conversion of the structure will result in increased sewage flows.

- 6. Sewage permits may be issued only by a certified SEO employed by the Township for that express purpose. The DEP shall be notified by the Township as to the identity of its currently employed certified SEO.
- 7. No sewage permit may be issued unless proof is provided that the lot of record has existed since May 15, 1972, or that Act 537 planning approval has been provided by the Township.

### 105. Ground Markers.

Any person who shall install new or rehabilitated systems 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 SEO. 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.

### 106. Replacement Areas.

#### 1. Requirements

- A. After the effective date of this Part, a Replacement Area for an individual on-lot sewage system shall be required for all lots or lots to be created which are not serviced or to be serviced by a community sewage system, or for which a valid permit for installation of an individual on-lot sewage system has not been issued. Lots existing prior to the effective date of this Part shall be exempt from the requirements of this Section.
- B. The Replacement Area provided shall comply with the Act and with all regulations issued by the DEP as incorporated into this Part concerning individual on-lot sewage systems, including isolation distances, and with the terms of this Part and any other applicable Township ordinances.

#### 2. Identification of Replacement Area

A. Each Applicant who shall submit a plan for the subdivision or development of land or who shall apply for a permit for the installation of an individual on-lot sewage system, or who shall request approval of a Planning Module for Land Development or the adoption of a revision, exception to revision, or supplement to the Official Plan shall demonstrate to the satisfaction of the SEO that a suitable area exists on the lot or on each lot to be created for an initial individual on-lot system and for the Replacement Area. The SEO shall perform or observe all tests required for the location of an individual on-lot sewage system to confirm the suitability of the Replacement Area. Allowance of open land for the Replacement Area without testing performed or observed by the SEO shall not constitute compliance with the requirements of this Section.

- B. The location of the initial individual on-lot sewage system and the Replacement Area as confirmed by the SEO shall be identified on the plot plans and diagrams submitted as part of the permit application.
- C. If the application has been submitted as a part of an application for subdivision or land development approval or as part of a request that the Township approve a Planning Module for Land Development or amend its Official Plan, or a request for an exception to the revision of the Official Plan, the location of each initial individual on-lot sewage system and each Replacement Area shall be noted upon the plans. If the application is for subdivision or land development approval, a note constituting a permanent easement shall be added to the plans stating that no improvements shall be constructed upon the Replacement Area, and the deed to be recorded for each lot created as part of the subdivision or land development shall contain language reflecting this limitation.
- D. Any revisions to a permit or plan affecting a Replacement Area, which previously has been approved pursuant to the provisions of this Ordinance, shall be reviewed for approval by the Board or its Authorized Agent.

#### 3. Construction Restrictions

- A. The easement for the Replacement Area noted upon the Plan and recorded with the Berks County Recorder of Deeds shall state that no permanent or temporary improvements of any character, other than shallow-rooted plant matter, shall be constructed upon the Replacement Area.
- B. This provision shall be enforced by the Township unless the person who desires to construct such improvements shall demonstrate to the satisfaction of the SEO that an alternate Replacement Area, which complies with all applicable regulations of the DEP, this ordinance and all other applicable Township ordinances, exists upon the lot. If such an alternate Replacement Area shall be identified, the alternate Replacement Area may be considered to be the Replacement Area required by this ordinance and shall be designated as the Replacement Area. The newly designated Replacement Area shall thereafter be considered the Replacement Area for the purposes of this Part.

#### 4. Relief from Replacement Area Requirements:

A. If any lot held in single and separate ownership as of the effective date of this Part does not contain land suitable for a Replacement Area, the applicant submitting a Land Development Plan or a Planning Module for Land Development or desiring to install an individual on-lot sewage system may request that the Board grant an exception to the requirement of providing a Replacement Area. The applicant for such an exception shall present credible evidence to the Board demonstrating (a) that the lot was held in single and separate ownership on the effective date of this Part; (b)

- the size of the lot; (c) inability of the applicant to acquire adjacent land or the unsuitability of adjacent land which might be able to be acquired; and (d) the testing conducted to determine that the lot is not suitable to provide a Replacement Area.
- B. At all times the burden to present credible evidence and the burden of persuasion shall be upon the Applicant for an exception from the terms of this Part. In no case shall any lot be exempted from the requirements of paragraph 104 of this Part.

### 107. Inspections.

- 1. Any on-lot sewage disposal system may be inspected by the Township's Authorized Agent at any reasonable time as of the effective date of this Part.
- 2. The 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 wastewater generated in the structure. A copy of the inspection report shall be furnished to the Owner and current resident which shall include all of the following information which is reasonably available to the individual or agency responsible for pumping the septic tank; date of inspection; name and address of system owner; description and diagram of the location of the system including location of access hatches, risers, and markers; sizes of tanks and disposal fields; current occupant's name and number of users; indication of any system malfunction observed; results of any and all soils and water tests; and any remedial action required.
- 3. The Township's Authorized Agent shall have the right to enter upon land for the purposes of inspections described above. In the event that access to inspect the property is denied, the following steps shall be taken:
  - A. The matter will be officially referred to the Board for action.
  - B. The Board may schedule a review at the next scheduled meeting of the Board, or, if the situation threatens the health or safety of the residents of the Township, the Board may commence an immediate procedure to obtain a search warrant from the District Justice.
  - C. Upon receipt of a search warrant to inspect the property, the Authorized Agent of the Township shall be accompanied by an officer of the Township or State Police, and the inspection shall be completed in accordance with this Section.
- 4. A schedule of routine inspections may be established by the Township, if necessary, to assure the proper function of the systems in the Township.
- 5. Upon written notification from a Township resident presented to a Township official, or its Authorized Agent, OLDS systems known to be, or alleged to be, malfunctioning shall

be inspected by the Authorized Agent at a time mutually agreed upon by the Authorized Agent and the owner of the OLDS, but in no case, no later than 30 days from receipt of the written notification. Should said inspections reveal that the system is malfunctioning, the Township shall take action to require the correction of the malfunction. If total correction is not technically or financially feasible in the opinion of the Township and a representative of the DEP, action by the Owner to mitigate the malfunction shall be required.

6. There may arise geographic areas within the Township where numerous on-lot sewage disposal systems are malfunctioning. A resolution of these area-wide problems may necessitate detailed planning and a Township sponsored revision to that area's Act 537 Official Sewage Facilities Plan. When a DEP authorized Official Sewage Facilities Plan Revision has been undertaken by the Township, mandatory repair or replacement of individual malfunctioning sewage disposal systems within the study area may be delayed, at the direction of the Township, pending the outcome of the plan revision process. However, the Township may compel immediate corrective action whenever a malfunction, as determined by Township officials and the Pennsylvania DEP, represents a serious public health or environmental threat.

### 108. Operation.

- 1. Only normal domestic wastes shall be discharged into any on-lot sewage disposal system. The following shall not be discharged into the system:
  - A. Industrial waste.
  - B. Automobile oil and other non-domestic oil.
  - C. Toxic or hazardous substances or chemicals, including but not limited to, pesticides, disinfectants, acids, paints, paint thinners, herbicides, gasoline and other solvents.
  - D. Clean surface or ground water, including water from roof or cellar drains, springs, basement sump pumps and French drains.

### 109. Maintenance.

- 1. Any person owning a building served by an on-lot sewage disposal system shall have the septic tank pumped by a qualified Pumper/Hauler after the effective date of this Part based on the following schedule:
  - A. Properties located in Marion Township, identified as follows:

SA – NORTHWEST; Map-3

Within one (1) year of the effective date of this Part.

B. Properties located in Marion Township, identified as follows:

SA - EAST; Map-3

Within two (2) years of the effective date of this Part.

C. Properties located in Marion Township, identified as follows:

SA - South; Map-3

Within three (3) years of the effective date of this Part.

Thereafter that person shall have the tank pumped at least once every four (4) years. Receipts from the Pumper/Hauler shall be submitted to the Township as required in paragraph 109.6

- 2. Any person providing a receipt or other written evidence showing that their tank had been pumped within three (3) years of the first year anniversary of the effective date of this Part, then the Township may delay that person's initial required pumping to conform to the general four (4) year frequency requirement.
- 3. The Township may allow septic tanks to be pumped out at less frequent intervals when the owner can demonstrate to the Township that the system can operate properly without the need for pumping out for a period longer than four (4) years, but in no case shall such period extend beyond six (6) months prior to the date when the next required pumping is to be completed. The request must be in writing with all supporting documents attached. The Township, in making its determination, shall take into account the information submitted by the applicant, the sewerage permit issued by the Township SEO upon installation or rehabilitation of the system and supporting documentation, reports of inspection and maintenance of the system, and other relevant information, and may conduct an on-site inspection. The applicant shall bear the cost of any inspection, surface or subsurface, and soil or wastes sampling conducted for the purposes of evaluating the request. The applicant shall receive a decision within sixty (60) days of accumulation of all necessary information by the Township.
- 4. The required pumping frequency may be increased at the discretion of the 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.
- 5. Each time a septic tank or other subsurface waste disposal system tank is pumped out, the Township, its Authorized Agent, or a private septage Pumper/Hauler, whichever provides the service, shall provide to the owner of the sub-surface waste disposal system a signed Pumpers Report/Receipt containing at a minimum the following information:

- A. Date of pumping.
- B. Name and address of system owner.
- C. Address of tank's location, if different from owner's.
- D. Description and diagram of the location of the tank, including the location of any markers, risers, and access hatches and size of the tank.
- E. The date existing system was installed.
- F. Last date of pump out.
- G. List of other maintenance performed.
- H. Any indications of system malfunction observed.
- I. Amount of septage or other solid or semi-solid material removed.
- J. List of recommendations.
- K. Destination of the septage (name of the treatment facility).
- 6. Upon completion of each required pumping, the Township, its Authorized Agent, or a private septage waste hauler, shall fill out and submit a Pumper Report/Receipt, copies of which shall be provided by the Township to all licensed Pumpers/Haulers. The Township's Authorized Agent, or a private septage Pumper/Hauler shall provide one copy of the Pumper's Report/Receipt to the Owner and one copy to the Township. Copies must be received at the Township's business office within thirty (30) days of the date of pumping. The Pumper's Report/Receipt will include verification that the baffles in the septic tank have been inspected and found to be in good working order.
- 7. Any person owning a building served by an alternative system or 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 exceed those for those required for septic tanks.
- 8. 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 in paragraph 109.1

9. The Township may require additional maintenance activity 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 lines, removal of obstructing roots or trees, the diversion of surface water away from the disposal area, etc.

### 110. System Rehabilitation.

- 1. No person shall operate and 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 of Pennsylvania unless a permit to discharge has been obtained from the DEP.
- 2. The Township shall issue a written notice of violation to any person who is the owner of a property in the Township 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.
- 3. Within seven (7) days of notification by the Township that a malfunction has been identified, the owner shall make application to the Township's certified SEO 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 seasonal or unique conditions mandate a longer period, in which case the Township shall set an extended completion date.
- 4. The Township's certified SEO 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, other alternatives as appropriate for the specific site.
- 5. In lieu of, or in combination with, the remedies described in paragraph 110.4, the SEO 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 and appliances. Wastewater generation in the structure may also be reduced by requiring changes in water usage patterns in the structure served. The use of laundry facilities may be limited to one load per day or discontinued altogether, etc.
- 6. In the event that the rehabilitation measures in paragraph 110.5 are not feasible or do not prove effective, the Township may require the owner to apply for a permit to construct a

- holding tank in accordance with the Township's ordinances. Upon receipt of said permit, the owner shall complete construction of the system within thirty (30) days.
- 7. Should none of the remedies described above prove totally effective in eliminating the malfunction of an existing on-lot sewage disposal system, the 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 that it feels necessary.

### 111. Liens.

The Township, upon written notice from the SEO 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 Part, shall have the authority to perform or contract to have performed, the work required by the SEO. The owner shall be charged for the work performed and, if necessary, a lien shall be entered therefor in accordance with the law.

### 112. <u>Disposal of Septage</u>.

- 1. All septage Pumper/Haulers operating within the Township shall be included on an approved list with the Township and shall comply with all reporting requirements established by the Township.
- 2. All septage originating within the municipal sewage management area shall be disposed of at sites or facilities approved by the DEP. Approved sites or facilities shall include the following: septage treatment facilities, wastewater treatment facilities (WWTF), composting sites, and approved farm lands.
- 3. 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, 35 P.S., paragraphs 6018.101 6018.1003), and Regulations adopted pursuant to such Act.
  - A. Any septage Pumper/Hauler 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 dollars (\$1,000.00), 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.
  - B. 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.

- 4. Upon the discontinuance of the use of any tank for sewage disposal purposes, whether by mandatory or voluntary connection to a community sewage system or abandonment for any other reason, the owner thereof shall have the tank pumped and flushed by a Pumper/Hauler and, at the owner's option, either physically removed from the premises or filled with soil and/or stone.
- 5. When the owner elects to have the tank filled with stone as permitted above, said tank may then be used for the discharge of storm water, sump pump discharge, or other effluent not qualifying for discharge into the community sewage system, providing said discharge is otherwise permitted by applicable law.

#### 113. Administration.

- 1. The Township shall fully utilize those powers it possesses through enabling statutes and ordinances to effect the purposes of this Part.
- 2. The Township shall employ qualified individuals to carry out the provisions of this Part. Those employees shall include a certified SEO, a CEO, a secretary, administrator or other persons as required. The Township may also contract with private qualified persons or firms as necessary to carry out the provisions of this Part.
- 3. All permits, records, reports, files and other written material relating to the installation, operation and maintenance and malfunction of on-lot sewage disposal systems shall become the property of the Township. Existing and future records shall be available for public inspection upon written request. All records pertaining to sewage permits, building permits, occupancy permits and all other aspects of the Township's OLDS Management Program shall be made available, upon request, for inspection by representatives of the DEP.
- 4. The Board shall establish all administrative procedures necessary to properly carry out the provisions of this Part.
- 5. The Board may establish a fee schedule, and subsequently collect fees, to cover the cost to the Township of administering this program.

### 114. Appeals.

- 1. Appeals from decisions of the Township or its Authorized Agent under this Part shall be made to the Zoning Hearing Board in writing within thirty (30) days from the date of the decision in question.
- 2. The appellant shall be entitled to a hearing before the Zoning Hearing Board at its next regularly scheduled meeting, if the 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 subsequent meeting. The Township

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.

3. A decision shall be rendered in writing within forty-five (45) days of the date of the hearing. If a decision is not rendered within forty-five (45) days, the relief sought by the appellant shall be deemed granted.

### 115. Penalties.

Any person, other than a Pumper/Hauler, 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 of not less than five hundred dollars (\$500.00) and costs, and not more than five thousand dollars (\$5,000.00) 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.

### 116. Repealer.

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

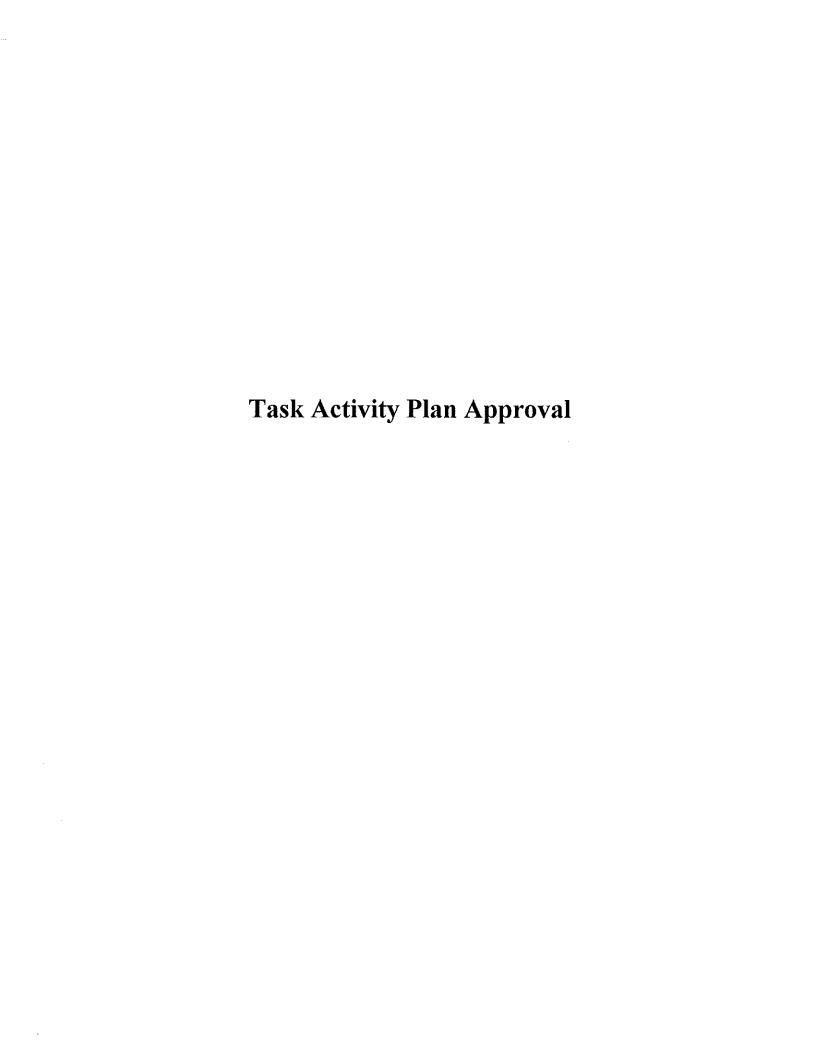
		BOARD OF SUPERVISORS
ATTEST:	Secretary	By: Chairman

# MARION TOWNSHIP, BERKS COUNTY SEPTIC TANK PUMPER'S REPORT

1. 2. 3. 4.	Date of Pumping / / Treatment System: Septic System Type: Sand Mou Property Owner's Name:	nd, In Ground.		
	Address:			
5.	Address of Tank Location (if different than #4)	City	State	Zip Code
6.	the tank. Attach a diagram, to s	City ank, including the location of cale if possible, of your tank,	showing location	Zip Code s, and access hatches and size of of influent and effluent piping.
7. 8. 9.		med: ) Extensions (ie, riser rings);	( ) Inspection Por	
10.	Check any of the following con-	ditions observed:		
	house; ( ) Abundant grass		) Backflush of wat	able odors; ( ) Sewer backup in ter from absorption area to tank;
11.	Amount of septage or other soli	d or semi-solid material remov	ved:	
	( ) 500 gallon tank; ( ) 75 ( ) 1750 gallon tank; ( ) 2	0 gallon tank; ( ) 1000 gallon 000 gallon tank; ( ) 2250 gal	tank; ( ) 1250 ga lon tank; ( ) 2500	llon tank; ( ) 1500 gallon tank; gallon tank; ( ) Other
12.	Recommendations:			
13.	Destination of the septage (nam	e of treatment facility, include	address if private	property):
14.	Printed name of Pumper:		DEL I VIIIII IV.	
	Signature of Pumper:  Company and address:			

NOTE: Completion of this Report is required by Marion Township for information purposes only and shall not be deemed to be any certification of conditions by the Pumper. A copy of this report is to be submitted to the property owner listed above and a copy mailed within thirty (30) days after pumping to Marion Township.

Appendix D:
Task Activity Plan Approval
Community Notifications
Inter-municipal Agreements







## Pennsylvania Department of Environmental Protection

#### 909 Elmerton Avenue Harrisburg, PA 17110-8200 January 21, 2004

JAN 2 2 2 4

Southcentral Regional Office

(717) 705-4707 FAX (717) 705-4760

Marion Township Supervisors c/o Lisa Brubaker, Secretary 420 Water Street Stouchsburg, PA 19567

Re: Act 537 Planning (06943)
Plan of Study and Task/Activity Report
Marion Township, Berks County

#### Ladies and Gentlemen:

We received a Plan of Study and Task/Activity Report for the preparation of an Act 537 Official Plan (Plan) submitted by Light-Heigel & Associates, Inc. under a cover letter dated January 7, 2004.

We have approved your Task/Activity Report for an estimated total Plan cost of \$68,990. Your resulting Act 537 Official Plan must be consistent with Act 537, Chapter 71, Sections 71.21 and 71.31 of the Department's regulations, and with information contained in both A Guide for Preparing Act 537 Update Revisions (February 1998 with revisions through January 2003), and the manual entitled Act 537 Sewage Disposal Needs Identification. In accordance with the Task/Activity report, the completed Plan will be submitted to the Department by August 15, 2005.

Following Departmental approval of your completed Act 537 Plan, you may apply for the reimbursement grant. At that time, as part of your reimbursement application, you will find that you must submit cost invoices clearly identifying the task in the approved Task/Activity Report to which they apply.

If you have any questions, please call me at 717-705-4766.

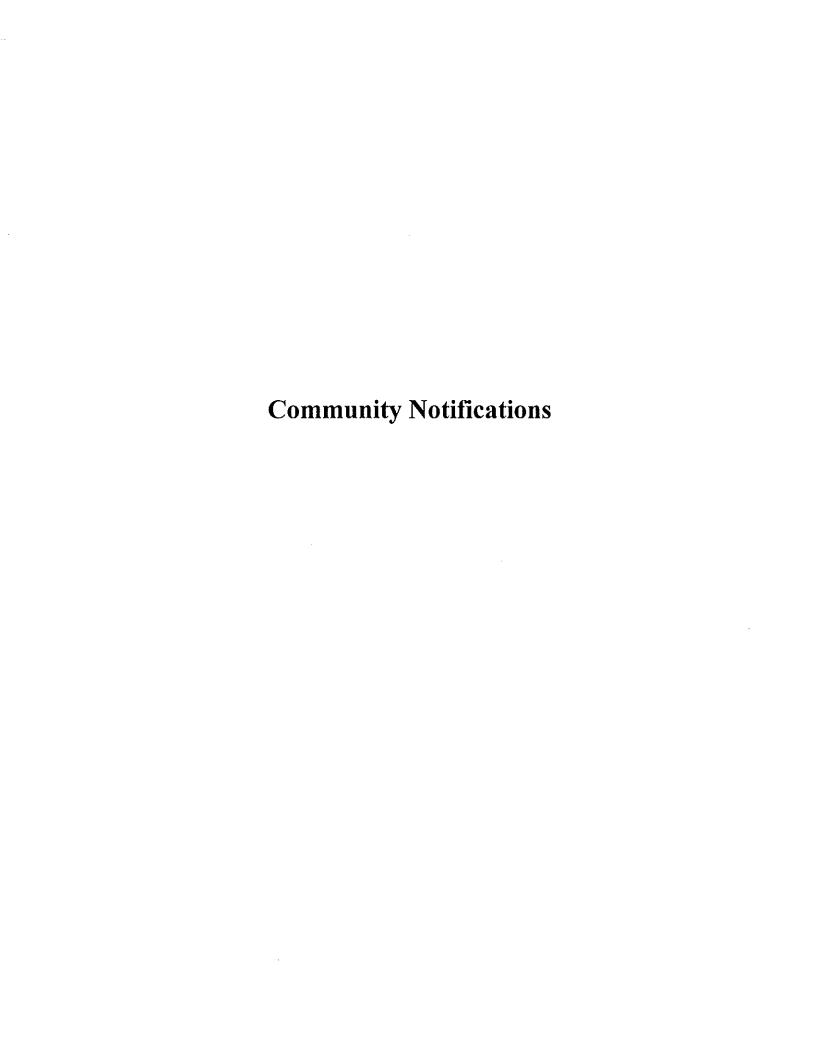
Sincerely,

Paul Curry Paul Curry

Sewage Planning Specialist Water Management Program

cc: Light-Heigel & Associates, Inc.







#### Keff@Light-Heigel.com

rom:

Scott Carl [scott@entecheng.com]

Sent:

Monday, December 21, 2009 10:23 AM

To: Cc:

KEFF@LIGHT-HEIGEL.COM wwwtp@comcast.net; Steve Riley

Subject:

Fwd: Womelsdorf SA



MIKE,

AS DISCUSSED IN MY VOICE MAIL TO YOU, ATTACHED IS THE COMMENTS LETTER WE PREPARED AND ISSUED TO DOUG HOOVER REGARDING OUR REVIEW OF THE MARION TOWNSHIP ACT 537 PLAN.

ONCE YOU GET TO REVIEW OUR LETTER, I THINK IT WOULD BE BENEFICIAL FOR US (ENTECH AND DOUG HOOVER) TO MEET WITH YOU (PRIOR TO THE NEXT WOMELSDORF SEWER AUTHORITY MEETING) AND GET YOUR THOUGHTS.

THANKS,

SCOTT

Sincerely,

Scott M. Carl Sr. Principal Entech Engineering Inc. 4 South Fourth Street P.O. Box 32

Reading, PA 19603

tel: (610) 373-6667 ext. 1180

fax: (610) 373-7537

315 Clay Road Lititz, PA 17543

tel: (717) 626-6666 ext.1401

fax: (717) 626-6600 nextel: 484-256-2673 scarl@entecheng.com www.entecheng.com

No virus found in this incoming message. Checked by AVG - www.avg.com

Version: 9.0.717 / Virus Database: 270.14.116/2579 - Release Date: 12/21/09 02:36:00





4 South Fourth Street	P.O. Box 32	Reading, PA 19603	Entech Engineering, Inc.
nh. 410 272 4447	fv. A10 373 7537	unuw enterhena rom	Principals

December 2, 2009

Principals: Scott M. Carl, Sn. Michael J. Daschbach, PE Jeffrey C. Euclide, PE, CEM David H. Feick Matthew S. Lloyd Robert J. Weir, PE

Entech No. 4196.01

Mr. Doug Hoover Womelsdorf Sewer Authority 498 North Water Street Womelsdorf, PA 19567

Re: Marion Township Act 537 Review

Dear Doug:

As requested at the November Authority meeting, Entech has reviewed the copy of the Marion Township Act 537 Plan that was provided to us. We have broken our review into three major areas: our comments related to the cover letter from Light-Heigel & Associates, Inc. which accompanied the Act 537 Plan, our comments on the November 2009 revision of the Act 537 Plan and Light-Heigel's reply to Motley Associates review letter of March 2009 preliminary draft of the Act 537 Plan. Our comments are as follows:

#### November 11, 2009 Letter from Light-Heigel & Associates, Inc.

item 1 - Page 1, 1<sup>st</sup> Paragraph — "We ask that the Authority comment on the Plan's preferred alternative, which is the sewer extension to Marion Township's Phase 1B Sewer Management Area requiring an additional 50,000 gpd capacity and funds for the limited upgrade of the Authority's treatment plant."

This is the single biggest question we have related to the Marion Township Act 537 Reference is made throughout the Plan that the existing Plan (the Plan). Womelsdorf Sewer Authority (WSA) Waste Water Treatment Plant (WWTP) needs to be expanded in order to handle the additional flow from Marlon Township. We note in Appendix D of the Plan the preliminary draft report from Motley Associates titled, "Womelsdorf WWTP Expansion - Preliminary Cost Estimates". This report references anticipated flow from Heidelberg and Marion Townships totaling approximately 250,000 gpd. However, Page 45 of the report notes, "The scope of the Heidelberg-Marion combined project to upgrade and expand the WSA facilities was not feasible to Heldelberg Township. Heidelberg Township withdrew from the study in 2008." With Heidelberg Township no longer interested and Marion Township seeking an additional 50,000 - 60,000 gpd, we are unsure why a plant expansion is needed to handle this added flow. Our November 13, 2009 memo indicated that the 5 year projection of flow from the 2008 WSA Chapter 94 Report (which includes completion of Stonecroft), plus the proposed 475 bed nursing home and a 60,000 gpd allocation to Marion Township would total 0.40 mgd. This is less than the 0.475 mgd that the WSA WWTP is rated for. Therefore, we are unsure why the WWTP would need to be expanded in order to accommodate Marion Township alone.



Page 22 of the 537 Plan notes that the WSA WWTP expansion in 2000, "...did not provide capacity for additional sewerage services other than the Borough's own requirements." This same concept is found on Page 35 where it states, "At present time, there is no reserve capacity within the WSA system that may be available for community development in Marion Township." We are unsure what future requirements were anticipated within the Borough when the plant expansion was completed, but the 2008 Chapter 94 report does not project any significant increase in customers over the next 5 years. We wonder if some of this capacity could be used to provide sewer service to Marion Township without the need to expand the plant.

As we have noted previously, our brief review of the current issues facing WSA included a review of the current plant capacity, projected growth and the necessity of a plant expansion. We are certain there are other factors and previous discussions that Entech Is not aware of that have led to the anticipated need for a plant expansion. Further discussions should be held with WSA and the WWTP staff to allow Entech to better understand all of the aspects regarding a potential plant expansion. This will allow us to confirm if our initial interpretation regarding the plant expansion is accurate or not.

Item 2 - Page 1, 4<sup>th</sup> Paragraph – Reference is made to Tables in Appendix D and an estimated Annual Base Rental of \$232 per year per EDU that was used in the calculation. We note where this value is used on Tables 7-1, 7-1A, 7-1B, and 7-1C, but there is no reference as to how this value was derived. Also, the 4<sup>th</sup> paragraph is unclear as to who is paying this fee, Marion Township or WSA (we think it is Marion Township).

Item 3 – Page 2, 1<sup>st</sup> Paragraph – We assume that this paragraph is not referring to "Tapping Fees" but rather "Connection Fees". We question it as some people use these terms interchangeably, yet Act 57 has specific separate definitions for each. If the reference to Connection Fee is the same as in Act 57, this request seems reasonable. If it is actually referring to Tapping Fees, then further discussion is necessary between WSA and Marion Township.

Item 4 – Page 2, 2<sup>nd</sup> Paragraph – It notes that the Plan suggests sewers in Stonecroft Village are to be dedicated to Marion Township instead of WSA. In reading the terms of the current agreement between Marion Township and WSA, we understand that this request can be made by Marion Township and WSA is obligated to abide by the request. Therefore, we see no issue with this request in the Plan.

Item 5 - Page 2, 3<sup>rd</sup> Paragraph - This paragraph discusses the concept that properties in the Phase 1B portion of the Marion Township service area have on-lot wells, for which water billing data is non-existent. Due to this, the suggestion is that a per EDU charge be used for quarterly billing purposes. It also notes that customers in Stonecroft Village, who have public water, will continue with the practice of sewer billing based on water consumption. We agree with this approach.



Item 6 – Page 2, 4<sup>th</sup> Paragraph – "Also, the Plan identifies prorating factors for Marion Township's responsibility for the existing 20" diameter main along the western boundary of the Borough, which is the point of connection for the proposed sewer extension into the Township."

First question we have is what is the responsibility that Light-Heigel is referring to? We assume it is maintenance of this line, but is this a concept that was previously discussed with WSA? If not, greater detail is required. The paragraph goes on to point out that Marion Township would be responsible for 20% for the portion of the line from William Penn Blvd. to Route 422 and 30% from Route 422 to WSA's WWTP. We can not find any reference as to how these percentages were calculated. We note they appear on Table 7-0, but there is no reference as to how they were derived. Further clarification on this concept is necessary.

Item 6 – Page 2, 6<sup>th</sup> Paragraph – This paragraph references Maps 11a, 11b, 11c and 11d and the options for providing service to Phase 1B/2 and to just Phase 1B. It describes the need for a "full expansion" of the WSA WWTP in the event that both Phases 1B and 2 are connected, and a limited upgrade of just Phase 1B is connected. We refer to our opinion of the need to upgrade the plant under Item 1 given the current available capacity at the WSA WWTP and the lack of identified reserved capacity for other future growth. Furthermore, we are unclear how the additional flow going from just Phase 1B to Phase 1B/2 requires greater plant expansion.

## <u>Marion Township Act 537 Sewage Facilities Official Plan Update - November 2009</u>

Page 10 – 2<sup>nd</sup> Paragraph – It notes that the ability to connect Phase 2 of Marion Township is "...contingent upon the availability of sewer capacity from the WSA ....". This relates specifically to Phase 2, yet our earlier comments regarding the need to increase the plant capacity remains true. Page 44 of the plan mentions a range of 185-252 EDUs, which we understand is the range necessary to serve Phase 1B or Phase 1B/2. The total flow associated with both phases falls within the 50,000 – 60,000 gpd range, which we believe can be handled adequately without an expansion of the WSA WWTP.

Page 21 – 3<sup>rd</sup> Paragraph – Reference is made to peak monthly average flows from 1993 and 1994. There is also a footnote that indicates that WSA performed work in 1996 and 1997 that eliminated much of the I & I that was causing such high spikes in flow in 1993 and 1994. We are unsure why for an Act 537 Plan being prepared in 2009 reference would be made to flow peaks that occurred in 1993 and 1994, especially if subsequent remediation work was performed. Furthermore, we are unclear on why this information is stated in the first place. It does not seem to lead into any further discussion about the impact of such peak flows. Our inclination would be that noting such high peak flows would impact the ability to meet future flow requirements, and perhaps is the reason the expansion at the WSA WWTP is noted. However, there is no correlation between this paragraph and the many references to an increase in plant size.



Page 22 – 2<sup>nd</sup> and 3<sup>rd</sup> Paragraphs – The Act 537 Plan notes concerns about the condition of the existing 20" diameter WSA sanitary sewer line that would serve Marion Township. Specifically, concern is noted that if ownership of this sewer line were transferred to Marion Township, Marion Township should not incur significant costs to repair and maintain this line. We are unclear on a couple of items related to this sewer line: how old is the line, what condition is it currently in, would it serve WSA customers in addition to customers from Marion Township (other than Stonecroft), what repair work has been done to date, etc. These details need to be established before Entech can offer a further opinion on the concerns related to the 20" sewer main raised in the Plan.

Page 47 – 4<sup>th</sup> paragraph – Reference is made to an August review of the Marion Township 537 Plan and the cost estimates for the limited WSA WWTP upgrade that are provided in Tables 6-2 and 6-3. We are unsure if the review they are referring to is the review provided by Motley Associates dated August 19, 2009, as it seems that it would have been Motley to provide the costs associated with the limited upgrade. However, the cost provided in Tables 6-2 and 6-3 of \$445,885 is not referenced in the Plan. The amount in Tables 6-0 and 6-1 of \$2,581,150 is found in Motley's "Womelsdorf WWTP Expansion – Preliminary Cost Estimates". However, there is no reference to the \$445,885 figure for the limited upgrades in this study or in their August 19, 2009 letter. The scope of work for the limited plant upgrade and how the associated cost was developed should be clarified.

Page 57 – 4<sup>th</sup> paragraph – There is discussion about available capacity at the WSA WWTP. It notes that based on the 2007 WSA Chapter 94 report, a projected 0.1 mgd of available capacity is projected and that this capacity "... may be utilized in the interim for the Township's project until the upgrades to the WSA plant are completed as long as other development in the Borough does not acquire the available capacity." Again we wonder what development in the Borough is anticipated that will require this available capacity.

Page 70 – The "Capital Financing Plan for the Selected Alternative" and "User Rate and Funding Options for the Selected Alternative" sections of the Plan are not provided. These aspects of the Plan are important to gauge the financial viability of the selected alternative and how it will impact the end users. While this plan was submitted to DEP for an advisory review, these sections should be provided to WSA as soon as they are available from Marion Township to better understand what impact the selected alternative will have on the Marion Township end users.

Appendix D – Capacity Agreement between WSA and Century Land Development Co. indicates that a digester project and WWTP re-rate are required as part of the terms of the agreement which was developed to provide sewer service to the Stonecroft development. Entech's understanding is that these two projects were not undertaken.



Appendix D – Preliminary draft report titled, "Womelsdorf WWTP Expansion – Preliminary Cost Estimates", dated January 16, 2008 and prepared by Motley Associates is included. Entech is uncertain if a final version of the report was ever prepared and Issued to WSA. Additionally, the preliminary draft report seems to be solely calculations without any narrative associated with the project. Did WSA ever receive a companion document from Motley that further explains the purpose of the expansion, the assumptions used, etc.

## Motley Associates August 19, 2009 Review and Light-Heigel's October 20, 2009 Reply

Motley Associates was asked to review the March 2009 draft version of the Marion Township Act 537 Plan. Motley issued a review letter dated August 19, 2009 with its comments. Light-Helgel issued a reply letter dated October 20, 2009, responding to Motley's concerns. In reviewing Light-Helgel's letter, it appears that they have incorporated certain replies into this latest revised version (November 2009) of the Act 537 Plan.

Motley offered a total of seven (7) comments in its review letter. Entech has reviewed Light-Heigel's reply to those comments and offers the following thoughts:

Comment No. 1 - Alternatives and inter-municipal cooperation - Adequately addressed.

Comment No. 2 – Use of 1993 and 1994 data – As we noted above, the Act 537 Plan refers to peak flow rates that occurred at the WSA WWTP in 1993 and 1994. Motley pointed out that I & I remediation work was done in 1996 and 1997. Light-Heigel revised the 537 plan to include a footnote to this effect. As we indicated above, we are unclear why they are using such old data in the first place.

Comment No. 3-20" sewer main – Motley pointed out their concern with the Act 537 Plan's assessment that the condition of the 20" sewer main to serve Marion Township was suspect and that maintenance costs were to be shared. Light-Heigel replied to this comment that they have identified a shared responsibility for various portions of this sewer line. As we noted above, we are unsure why there are such major concerns regarding this line and how Light-Heigel's breakdown in percentage of responsibility was developed.

Comment No. 4 – Available Sewer Capacity – Motley commented that the Act 537 Plan indicates possible existing available capacity at WSA's WWTP. Motley only made mention of it; Light-Heigel replied that it has been removed from the revised Act 537 Plan. However, we note on Page 57 of the revised plan this discussion remains and was not removed.

Comment No. 5 – Table 6-0 – 6-3 Calculations – Adequately addressed.

Comment No. 6 - Phase 1B Flow Rate - Adequately addressed.

Comment No. 7 - Inter-municipal Agreements - Adequately addressed.



Our recommendation is for Entech to review with you our findings/concerns noted above. Upon your direction, we can then review them further with the Authority and/or Marion Township and their Engineer. I will be in contact with you to schedule a meeting in the next few days.

In the meantime, please feel free to call me with any questions.

Sincerely

Scott/M. Carl, Sr.

Principal



## Light-Heigel & Associates, Inc.

ENGINEERS • SURVEYORS • BUILDING CODE INSPECTORS MUNICIPAL SERVICES

October 20, 2009

Womelsdorf Sewer Authority 101 W. High Street Womelsdorf, PA 19567

RE:

Marion Township

Act 537 Plan - Review Letter Dated 08/19/09

Dear Authority Members.

Light-Heigel & Associates, Inc. has received the review comments from Thomas J. Motley, Jr. with Motley Associates, Inc. concerning the Womelsdorf Sewer Authority's review of the Marion Township Act 537 Preliminary Plan. We offer the following responses for the Authority's consideration:

1. Numerous alternatives are explored with the lowest cost alternative as connection to Womelsdorf. The reserved capacity would limit any future connections. Section 7.5 pages 61 is somewhat confusing in that it stops short of selecting an alternative and leaves one to believe that a facility on the Feeg property may be preferable due to a lack of "Inter-municipal cooperation".

Response: Based on the Authority's Engineer's review the Marion Township Act 537 Plan Update dated March 2009, the report has been revised eliminating the statement regarding inter-municipal cooperation. Also, the results review comments from the PA Historical Museum Commission additional costs are include into the Marion Township Treatment Plant sites due to the Commission's requirement that the sites be investigated and development of the sites shall be based upon the findings of the investigation and presence of historical and archeological resources. The Present Worth Analysis in Table 7-0 shows the best value for Marion Township sewer system is the connection to the Womelsdorf Plant, Table 7-0 line 4.

2. Section 4.3, page 20 discusses concerns regarding I&I. Chapter 94 reports from 1993 and 1994 are cited as indicators of a problem. The report fails to recognize that in 1996 and 1997 the entire collection system was televised and grouted eliminating the problem.

Response: Page 19 of the report includes the Authority's response on the I & I conditions that have been corrected.

CIVIL

STRUCTURAL

MUNICIPAL

ENVIRONMENTAL

HYDROLOGY

INSPECTIONS

SOILS TESTING

LAND SURVEYS

AERIAL SURVEYS

LAND DEVELOPMENT

STORM WATER DESIGN

ZONING ENFORCEMENT

FARM PRESERVATION

BUILDING CODE SERVICES

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 Hailfax, 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 805 Estelle Drive Suite 111 Lancaster, PA 17601 717-892-7002

Fax: 717-892-7020

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 ontandon, PA 17850

Montandon, PA 17850 570-524-7742 Fax: 570-524-7746

SCHUYLKILL. 39 Dock St. Schuylkiil Haven, PA 17972

570-385-3439 Fax: 570-385-5788

NEW JERSEY 327 Greens Ridge Rd. Stewartsville, NJ 08886 1-800-257-2190 3. Section 4.3, page 21 discusses I&I expenses. Specifically, Authority owned lines within the Township (Stonecroft) are identified to be turned back to the Township, however, they appear to wish to limit responsibility to repair or upgrade these lines.

Response: The responsibility for repair of the existing has been considered in the report on Pages 20 & 21. The Operations and Maintenance cost considerations are included the Present Worth Analysis in Table 7-0. The PW Analysis provides for a 100% responsibility of the sewers in Stonecroft Village, 20% responsibility for the existing WSA sewer from Wm. Penn Blvd to the proposed connection near US 422, and 30% responsibility for the existing WSA sewer from the proposed connection to the WSA Plant.

4. Section 7, page 55 indicates that there is 0.1 MGD capacity available in Womelsdorf citing the 2007 Chapter 94. It goes on further to speculate that it may be possible to utilize this capacity for the Township.

Response: The narrative has been revised to eliminate the inference that the .1 MGD capacity may be available for the Marion Township sewer extension.

5. The costs presented in Tables 6-0 through 6-3 do reflect the costs that were supplied by Motley. An amount equal to the prorated portion of the facility used by Marion for the costs included in Table 6-2 & 3 would need to be added. Additionally, flow equalization may not be needed.

Response: The prorating of the existing WSA sewer lines that will serve Marion Township have been prorated in the O & M considerations in Table 7-0.

6. The estimated flows from Phase 1B are not contained in the plan. We assume that they have remained at the originally estimated 40,000 to 59,400 GPD level. We are unsure as to how the annual O&M costs presented in Table 6-9D were arrived at.

Response: The estimate flows are presented on page 55 of the report. At 250 GPD per EDU the estimated flow from Phase 1B area is 46, 250 GPD and at 100 GPCD for 396 per capita in Phase 1B area the estimated flow is 39,600 GPD.

7. "Conceptual" Intermunicipal Agreements should be discussed sooner rather than later.

Response: The Township's Solicitor will contact with the Authority's Solicitor regarding the development of an inter-municipal agreement.

Should you have any questions, please give our office a call.

Sincerely,

Michael S. Keffer, P.E.
Light-Heigel & Associates, Inc.
MSK/Imi
X:\PROJECTS\2004\04-0040 MARION TWP\CORRESPONDENCE & NOTES\MOTLEY ASSOC. RESP. LTR 102009.DOC



# MOTLEY ASSOCIATES, INC.

505 EAST LANCASTER AVENUE SHILLINGTON, PA 19607 PH: (610) 775-0888 FAX: (610) 775-9847 WWW.MOTLEYASSOC.COM

August 19, 2009

Womelsdorf Sewer Authority 101 W. High Street Womelsdorf, PA 19567

RE: Marion Township Act 537 Plan - Preliminary

Dear Authority Members:

We have reviewed the above referenced plan and have the following comments:

- 1. Numerous alternatives are explored with the lowest cost alternative as connection to Womelsdorf. The reserved capacity would limit any future connections. Section 7.5 page 61 is somewhat confusing in that it stops short of selecting an alternative and leaves one to believe that a facility on the Feeg property may be preferable due to a lack of "intermunicipal cooperation".
- 2. Section 4.3, page 20 discusses concerns regarding I & I. Chapter 94 reports from 1993 and 1994 are cited as indicators of a problem. The report fails to recognize that in 1996 and 1997 the entire collection system was televised and grouted eliminating the problem.
- 3. Section 4.3, page 21 discusses I & I expenses. Specifically, Authority owned lines within the Township (Stonecroft) are identified to be turned back to the Township, however, they appear to wish to limit responsibility to repair or upgrade these lines.
- 4. Section 7, page 55 indicates that there is .1 MGD capacity available in Womelsdorf citing the 2007 Chapter 94. It goes on further to speculate that it may be possible to utilize this capacity for the Township.
- 5. The costs presented in Tables 6-0 through 6-3 do reflect the costs that were supplied by Motley. An amount equal to the prorated portion of the facility used by Marion for the costs included in Table 6-2&3 would need to be added. Additionally, flow equalization may not be needed.

- 6. The estimated flows from Phase 1B are not contained in the plan. We assume that they have remained at the originally estimated 40,000 to 59,400 GPD level. We are unsure as to how the annual O&M costs presented in Table 6-9D were arrived at.
- 7. "Conceptual" Intermunicipal Agreements should be discussed sooner rather than later.

We hope these comments are helpful in proceeding with the project.

Sincerely;

Motley Associates, Inc.

Thomas J. Motley, Jr.

Associate



### MOTLEY ASSOCIATES, INC.

505 EAST LANCASTER AVENUE SHILLINGTON, PA 19607 PH: (610) 775-0888 FAX: (610) 775-9847

June 30, 2008

Michael S. Keffer, PE Light-Heigel & Associates, Inc. 1700 DeKalb Pike Bluc Bell, PA 19422

RE: Estimated Operating Costs Womelsdorf WWTP

#### Dear Mike:

Following is our estimate of operating cost for an expanded Womelsdorf WWTF. This estimate is based on a total forward flow of 315,900 gpd, with 256,300 gpd attributable to Womelsdorf and 59,600 gpd attributable to Marion.

The estimate utilizes the 2008 operating budget with adjustments for variable cost items. It was assumed the only variable cost items are electric, chemicals and sludge disposal. Due to the ability of an SBR to throttle air during the treatment process these costs should remain fairly accurate regardless of the size of the expansion. Naturally, as total flow increases the treatment cost per gallon will decrease. The Womelsdorf flow will most likely exceed 256,300 by the time any expansion occurs, and likewise, the Marion flow will take some time to reach the 59,600 reserve.

These figures will be included in our final report. Hopefully they will be of use to you in the meantime. Should you have any questions, please feel free to contact me.

Sincerely;

Motley Associates, Inc.

Thomas J. Motley, Jr.

Associate

#### OPINION OF PROBABLE OPERATING COSTS

EXPENSE	ESTIMATED COST
Administrative Wages	\$20,675.00
Operator Wages	\$48,693.00
Asst. Operator Wages	\$44,450.00
Operator Overtime	\$12,000.00
Employee Insurance	\$31,343.00
Employee Taxes	\$9,625.00
Office Supplies	\$600.00
Office Equipment	\$500.00
Chemicals	\$9,859.93
Operating Supplies	\$800.00
Trash Removal	\$650.00
Lab Supplies	\$2,100.00
Vehicle Fuel	\$600.00
Heating Oil	\$3,000.00
Repair & Maint	\$15,100.00
Small Tools	\$900.00
Lab Testing	\$6,500.00
Sludge Removal	\$67,787.03
Audit	\$3,000.00
Permits/Postage	\$1,300.00
Telephone	\$1,850.00
Vehicle Mnt	\$700.00
Medical Testing	\$350.00
Advertising	\$600.00
Vehicle Ins	\$900.00
Electric	\$41,904.71
Water	\$2,300.00
Computer/Software Maint	\$550.00
Training	\$900.00
Laundry	\$1,800.00
PA One Call	\$500.00
Insurance-Plant	\$21,000.00
Legal	\$8,000.00
Engineering	\$12,000.00
TOTAL COST	\$372,837.68
COST PER GALLON	\$0.003233



### Light-Heigel & Associates, Inc.

ENGINEERS AND SURVEYORS

STRUCTURAL MUNICIPAL

ENVIRONMENTAL

HYDROLOGY

INSPECTIONS

SANITARY

LAND SURVEYS

STORM WATER

LAND DEVELOPMENT

SO/LS/PERCOLATION

TESTING

AFRIAL SURVEYS

ZONING ENFORCEMENT

MUNICIPAL PLANNING

MAIN OFFICE: 430 EAST MAIN ST. PALMYRA, PA 17078 717-838-1351 1-800-257-2190

Sure 102, Grande Plaza 1103 Rocky Drive West Lawn, PA 19609 610-678-7560 Fax: 610-678-7686

> · HALIFAX 906 North River Rd P.O. Box 602 Halfax, PA 17032 717-896-8881 Fax: 717-896-9145

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

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

MONTGOMERY 1700 Dekalb Pike B'ue Bell, PA 19422 610-279-1830 Fax. 610-279-1824

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

> NEWJERSEY 327 Greens Ridge Rd. Stewartsville, NJ 08886 1-800-257-2190

WARRINGTON P.O. Box 639 rington, PA 18976 215-918-2603 Fax: 215-918-2603

March 17, 2006

Womlesdorf Borough Authority 101 W. High St Womelsdorf, PA 19567

Attn. Mr. Paul Hopple, Chairman

RE: Marion Township Sewage 537 Plan Update Extension of Womelsdorf Sewers To Stouchsburg

Dear Mr. Hopple:

We request the Authority authorize their Engineer, Motley Associates to provide Marjon Township with information on the capability of the Womelsdorf sewers and treatment plant to serve a public sewer extension to Shady Cabins and Stouchsburg. Based on preliminary discussions with Mr. Motley, we understand there maybe a need for some improvements to the existing treatment equipment. We also understand that your engineer's service for this work will be Marion Township's responsibility and we ask that you advise us of the fees and an estimated cost that will be charged to Light-Heigel for this service. Please understand that the extension comments light-heiget com of the Womelsdorf sewers is one of the options being evaluated. The preferred alternative will be the option that is the best value to the citizens of Marion Township.

During 2005 Light-Heigel & Assoc. surveyed sewage disposal systems in Marion Township. The survey was done in accordance with the PA DEP protocol for sewage disposal needs. We've determined that Stouchsburg and Shady Cabin's need improved sanitary sewer facilities. We identified approximately 190 residential dwellings and 15 commercial properties with a need for improved sanitary sewage facilities in these two areas. We estimate these to be 220 to 240 additional EDU's and based on 245 gallons per day per EDU as applied for Stonecroft Village, the Stouchsburg - Shady Cabins sewer extension will add 54,000 - 59,000 gallons per day to the current average daily flow at the Womelsdorf sewer plant. We believe this sewer extension will be very similar to the recent sewer extension to Stonecroft Village.

We've enclosed the maps prepared for our survey. These maps have been used to estimate possible future sewer disposal needs in Marion Township. The future needs may be the result of development after the sewer is extended to Stouchsburg. We estimate that an additional 200 EDU's maybe required at some time in the future for the areas that may develop on lands adjacent to the Borough.

Please reply to us at your earliest convenience. We will meet with you and Mr. Motley at your convenience to outline the information we believe will satisfy the 537 Plan update. Thank you!

Sincerely,

Michael S. Keffer, P.E.

Encl.

Cc Marion Township Gene M. Venzke, Solicitor James Motley, P.E. Doug Hoover, Operator

> Providing Answers. Designing Solutions. A member of A PROFESSIONAL MANAGEMENT GROUP www.light-heigel.com



### MOTLEY ASSOCIATES, INC.

1300 NEW HOLLAND ROAD KENHORST, PA 19607 PH: (610) 775-0888 FAX: (610) 775-9847

May 17, 2006

Mr. Michael S. Keffer, PE Light-Heigel & Associates, Inc. 430 East Main Street Palmyra, PA 17078

RE: Marion Township Act 537 Update

Dear Mr. Keffer:

We are in receipt of your March 17 correspondence regarding preparation of a study to determine the cost to expand the Womelsdorf WWTP. Subsequent to your request, it is our understanding that Heidelberg Township also wishes to participate in any expansion.

The following proposal was prepared to account for the needs of both municipalities:

#### SCOPE OF WORK

- 1. Determine optimum point of connection to the existing interceptors.
- 2. Determine existing peak flows in both interceptors using "flo tote" or similar meters.
- 3. Estimate average and peak flows from both new contributing areas.
- 4. Estimate pumping requirements for both areas to determine interceptor capacity requirements.
- 5. Analyze both interceptors from the point of connection to outfall to determine available capacity.
- 6. Provide recommendations and cost estimates for any expansion required for the interceptors.
- 7. Prepare a qualitative flow analysis for both areas to determine organic loading requirements. The analysis shall take into account the effect of:
  - a. force main detention time
  - b. existing and proposed commercial and industrial users

- c. anticipated regulatory changes such as, but not limited to, BNR requirements
- 8. Determine required hydraulic and organic capacity.
- 9. Evaluate the entire facility, without limitation, to determine expansion requirements at the following levels:
  - a. 250,000 gpd
  - b. flow required for existing and proposed users
  - c. flow required for existing users only
- 10. Provide recommendations on expansion.
- 11. Provide detailed project cost estimates.
- 12. Provide ten copies of the completed study.

#### COMPENSATION

Motley Associates, Inc. will perform the above outlined services for a lump sum fee of twelve thousand dollars (\$12,000.00) plus the cost of meter rental which is estimated to be four thousand dollars (\$4,000.00). All work will be billed monthly based upon percentage of completion and will be due upon receipt.

Actual completion time will depend on meter availability, it is however, estimated between two and three months from the time of authorization to proceed.

As we are retained by the Womelsdorf Sewer Authority, all work would be performed at their direction and invoiced in their name. Due to the cost involved, the Authority may require funds be placed on deposit prior to authorization to proceed, or provide for some alternate payment arrangements

Should you have any questions, please contact me.

Sincerely;

Motley Associates, Inc.

Thomas J. Motley, Jr.

Cc: Womelsdorf Sewer Authority

# HEIDELBERG TOWNSHIP MUNICIPAL AUTHORITY

May 30, 2006

Marion Township 420 Water Street Stouchsburg, Pa 19567

Dear Sir or Madam:

This letter is to confirm that at the Heidelberg Township Municipal Authority meeting on Monday, May 22, 2006 that that Broad has committed to joining with the Marion Township to share expenses for Motley Engineering to do a study to determine the cost to expand the Womelsdorf Sewer Plant.

If anymore information is needed, please feel free to contact mc.

Sincerely,

Heidelberg Township Municipal Authority

Carol Q. Heppley, Lev/ Treas.

Carol A. Keppley, Secretary/Treasurer

June 8, 2006

Motley Associates, Inc. 1300 New Holland Road, Kenhorst, PA 19607

Attn. Mr. Thomas J. Motley, Jr.

RE:

Marion Township Act 537 Update

Consideration of Connection to Womelsdorf Sewer System

Required improvements and estimate design and construction costs

Dear Mr. Motley:

Pursuant to the action of the Womelsdorf Sewer Authority on May 17<sup>th</sup> and the Marion Township Board of Supervisor's on May 25th, we authorize you to proceed with the work outlined in your letter of May 17, 2006. We understand that the report will be completed by August 30, 2006.

The service to Marion Township is approved for 50 % of the quoted amount in your 5/17/2006 letter. If your service exceeds the quoted amount, additional service shall only proceed for the Marion Township requirements with authorization from Light – Heigel & Assoc. Inc.

We ask that you forward progress reports with the monthly invoices delineating the services and work completed for the Marion Township extension versus Heidelberg Township extension separately. Also, we will need a copy of your insurance carriers certificate for your workers compensation insurance coverage. This must be on file with Light – Heigel & Assoc. Inc. before payments will be issued.

If you have any questions, please call

Sincerely,

Michael S. Keffer, P.E.
Encl.
Cc Marion Township
Gene M. Venzke, Solicitor
Womelsdorf Sewer Authority
Womelsdorf Wastewater Treatment Plant
Heidelberg Township Authority

#### WOMIELSDORIF WWITH EXPANSION

#### PRELIMINARY COST ESTIMATES

January 16, 2008

Prepared by:

Motley Associates, Inc. 505 E. Lancaster Ave. Shillington, PA 19607



# .750 MGD TREATMENT FACILITY ANALYSIS Table 1

TREATMENT UNIT	EXISTING CAPACITY	REQUIRED CAPACITY	REQUIRED CHANGE
Headworks	1100 gpm	1485 gpm	Replace .
Influent Channel	4.47 mgd	2.25 mgd	Adequate
Influent Pumps	1100 gpm	1485 gpm	Upgrade
SBR	.495 mgd	.750 mgd	Expand
ALUM System	1440 gpd	432 gpd	Adequate
Effluent Meter	2204 gpm	2204gpm	Adequate
Cl <sub>2</sub> Contact Tanks	46298 gal	34380 gal	Adequate
Cl <sub>2</sub> Pumps	200 lbs/day	165 lbs/day	Adequate
Reaeration System	1.2 mgd	1.875 mgd	Upgrade
Flood Pump	2400 gpm	2400 gpm	Adequate
Digesters	.495 mgd	.750 mgd	Expand
Generator	265 KW	300 KW (est)	Replace

# .750 MGD TREATMENT FACILITY ANALYSIS Table 2

#### OPINION OF PROBABLE CONSTRUCTION COSTS

HEADWORKS	\$ 122,000	
INFLUENT PUMP STATION	\$ 37,000	
SEQUENCING BATCH REACTOR	\$ 950,000	
REAERATION	\$ 25,000	
DIGESTER	\$ 230,000	
GENERATOR	\$ 63,000	
CENTRIFUGE	\$ 174,000	
SUB TOTAL		<u>\$ 1,601,000</u>
15 % CONTINGENCY	\$ 240,150	
TOTAL		<u>\$ 1,841,150</u>

#### .750 MGD TREATMENT FACILITY ANALYSIS EXISTING FACILITY COSTS Table 3

ESS EXPANSION
\$ 722,572
\$ 82,121
\$ 1,420,258
\$ 2,224,951
\$ 2.96

TOTAL FACILITY COST	
New Construction	\$ 1,841,150
Cost of Existing Facility (.250 MGD @ \$2.96 / gal)	\$ 740,000
TOTAL COST	\$ 2,581,150
COST PER GALLON	\$ 10.33

#### .750 MGD TREATMENT FACILITY ANALYSIS FACILITY COST ALLOCATION Table 4

	ALLOCATED FLOW	RESERVED FLOW	COST
HEIDELBERG TOWNSHIP	158,410 GPD	181,500 GPD	\$ 1,874,895
MARION TOWNSHIP	59,600 GPD	68,500 GPD	\$ 707,605

#### HEIDELBERG TOWNSHIP FLOW ADJUSTMENT

#### LINETTE CANDIES ORGANIC ADJUSTMENT

Linette Candies BOD exceeds design values of 300 mg/l

1606 mg/l Linette waste / 300 mg/l design = 5.35 increase in strength

9,000 gpd current usage x 5.35 = 48,150 gpd equivalent strength 20,000 gpd expanded usage x 5.35 = 107,000 gpd equivalent strength

#### HYDRAULIC ADJUSTMENT

Include Feege property at 20 EDU's for 5,360 gpd

Include Gelsinger property at 100 EDU's for 26,800 gpd

### PRELIMINARY DRAFT

#### HEIDELBERG TOWNSHIP FLOW ADJUSTMENT

#### TREATMENT FACILITY ALTERNATIVES

#### ALTERNATE "A"

Linette provide pretreatment to 300 mg/l BOD and expand to 20,000 gpd Feege and Gelsinger property to be included

#### ALTERNATE "B"

Linette provide pretreatment to 300 mg/l BOD with no expansion Feege and Gelsinger property to be included

#### ALTERNATE "C"

Linette provide no pretreatment and expand to 20,000 gpd Feege and Gelsinger property to be included

#### ALTERNATE "D"

Linette provide no pretreatment with no expansion Feege and Gelsinger property to be included

#### HEIDELBERG LOADING BASED ON FLOWS

ALTERNATE	TREATMENT FLOW
A	104,910
В	94,910
С	211,910
D	158,410

#### SYSTEM LOADING BASED ON FLOWS

ALTERNATE	TREATMENT FLOW
A	164,510
В	154,510
С	271,510
D	218,010

#### HEIDELBERG TOWNSHIP FLOW ADJUSTMENT

#### COLLECTION SYSTEM HYDRAULIC CAPACITY

#### WATER STREET INTERCEPTOR MANHOLE # BH 4

1. With Linette expansion:

99,550 gpd

2. Without Linette expansion:

89,550 gpd

#### PINE STREET COLLECTOR MANHOLE # MH35

1. With Linette expansion:

72,750 gpd

2. Without Linette expansion:

62,750 gpd

#### WATER STREET COLLECTOR BETHANY METER MANHOLE

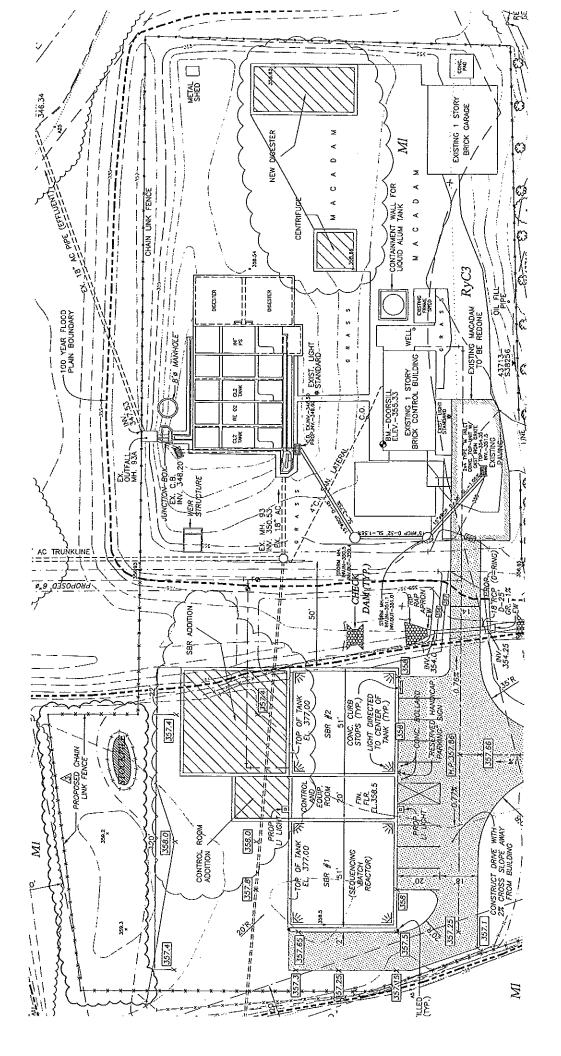
20,250 gpd

#### SR 419 INTERCEPTOR

5,360 gpd

#### TREATMENT SYSTEM HYDRAULIC CAPACITY

	LINETTE EXPANSION	NO LINETTE EXPANSION
Heidelberg Flows	104,910	94,910
Marion Flows	59,600	59,600
Total	164,510	154,510



Consulting Engineers

June 15, 2004

### MOTLEY ASSOCIATES, INC.

1300 NEW HOLLAND ROAD KENHORST, PA 19607 PH: (610) 775-0888 FAX: (610) 775-9847

Marion Township Board of Supervisors 420 Water Street Stouchsburg, PA 19567

RE: Marion Township; 537 Planning

Dear Board Members:

The Womelsdorf Borough Council and Womelsdorf Sewer Authority have requested that we respond on their behalf to your correspondence dated April 13, 2004.

As you are aware, all capacity in the Womelsdorf WWTP allocated for users outside the Borough has been reserved. Womelsdorf is willing to entertain proposals for the expansion of service areas into the Township only to the extent that the Township would be willing to pay all costs associated with an expansion of the facility to provide such service.

As requested, we have attached a copy of your zoning map indicating the Township properties currently served, or in the case of Stonecroft Village, proposed to be served by Womelsdorf. A copy of our sewer system map is also attached for your use.

In regard to your request for a complete copy of our Act 537 Plan, we are unsure as to how it may be of use to you. The plan is rather large and expensive to reproduce. Perhaps you could be more specific as to the sections or information that you are interested in, thereby reducing reproduction and shipping costs.

Sincerely;

Motley Associates, Inc.

Thomas J. Motley, Jr.

Cc: Womelsdorf Borough Council Womelsdorf Sewer Authority John Muir, Esq. Allen Schollenberger, Esq.

# Heidelberg Township Berks County, Pennsylvania

P.O. Box 241 Robesonia, PA 19551 Phone (610) 693-3197

June 17,2004

Marion Township 420 Water Street Stouchsburg, PA 19567

Attn: Ms. Lisa A Brubaker, Secretary

Re: Act 537 Sewage Planning

Dear Ms. Brubaker:

We are currently in the process of having a meeting on June 21, 2004 to discuss the status of the Heidelberg Township Municipal Authority. So in regards to your letter of April 13, 2004 addressing your notification of updating your Act 537 Sewage Facility Plan, we at this time have no knowledge of any sewage needs.

Yours truly,

Carol A. Keppley, Sec/Treas.

Heidelberg Municipal Authority

Level a. Keppley

420 WATER STREET STOUCHSBURG, PENNSYLVANIA 19567

April 13, 2004

Mill Creek Township 81 East Alumni Avenue Newmanstown, PA 17073

Attn: Ms. Lorie J. Kupp, Secretary

RE: Marion Township; 537 Sewage Planning

Dear Ms. Kupp:

This letter serves as notification that Marion Township is preparing an update to their Act 537 Sewage Facility Plan. We are notifying Mill Creek Township and other adjoining municipalities in order to establish a cooperative plan for sewage disposal needs.

Our plan will address the sewage needs for all of Marion Township. PA Act 537 regulations require we communicate with all municipalities and their planning agencies in the regional planning area while preparing our updated plan.

If you have any questions, please call us at 610-589-2860. If your engineer or planners have knowledge of sewage needs within close proximity to the Marion Township boundary with Mill Creek Township, please contact us in writing on or before June 21, 2004.

Sincerely,

Lisa A. Brubaker, Township Secretary

420 Water Street

Stouchsburg, PA 19567

lab

Mailod 4-15-All

#### 420 WATER STREET STOUCHSBURG, PENNSYLVANIA 19567

April 13, 2004

Lebanon County Planning Department Room 206, Municipal Building 400 South 8<sup>th</sup> Street Lebanon, PA 17042-6794

Attn: Mr. Earl H. Meyer

RE: Marion Township, Berks County; 537 Sewage Planning

Dear Mr. Meyer:

This letter serves as notification that Marion Township is preparing an update to their Act 537 Sewage Facility Plan. We are notifying Lebanon County Planning Department and all adjoining municipalities in order to establish a cooperative plan for sewage disposal needs.

Our plan will address the sewage needs for all of Marion Township. PA Act 537 regulations require we communicate with all municipalities and their planning agencies in the regional planning area while preparing our updated plan.

If you have any questions, please call us at 610-589-2860. If you have knowledge of sewage needs within close proximity to the Marion Township boundary with Lebanon County communities, please contact us in writing on or before June 21, 2004.

Sincerely.

Lisa A. Brubaker, Township Secretary

420 Water Street

Stouchsburg, PA 19567

lab

Maile 4-15-04

420 WATER STREET STOUCHSBURG, PENNSYLVANIA 19567

April 13, 2004

Jackson Township 60 North Ramona Road Myerstown, PA 17073

Attn: Ms. LaRue Kreiser, Secretary

RE: Marion Township; 537 Sewage Planning

Dear Ms. Kreiser:

This letter serves as notification that Marion Township is preparing an update to their Act 537 Sewage Facility Plan. We are notifying Jackson Township and other adjoining municipalities in order to establish a cooperative plan for sewage disposal needs.

Our plan will address the sewage needs for all of Marion Township. PA Act 537 regulations require we communicate with all municipalities and their planning agencies in the regional planning area while preparing our updated plan.

If you have any questions, please call us at 610-589-2860. If your engineer and planners have knowledge of sewage needs within close proximity to the Marion Township boundary with Jackson Township, please contact us in writing on or before June 21, 2004.

Sincerely,

Lisa A. Brubaker, Township Secretary

Lioa A. Buballer

420 Water Street

Stouchsburg, PA 19567

lab

mailed 4-15-04

#### 420 WATER STREET STOUCHSBURG, PENNSYLVANIA 19567

April 13, 2004

Jefferson Township 64 Derr Road Bernville, PA 19506

Attn: Ms. Lori Deck, Secretary

RE: Marion Township; 537 Sewage Planning

Dear Ms. Deck:

This letter serves as notification that Marion Township is preparing an update to their Act 537 Sewage Facility Plan. We are notifying Jefferson Township and other adjoining municipalities in order to establish a cooperative plan for sewage disposal needs.

Our plan will address the sewage needs for all of Marion Township. PA Act 537 regulations require we communicate with all municipalities and their planning agencies in the regional planning area while preparing our updated plan.

If you have any questions, please call us at 610-589-2860. If your engineer and planners have knowledge of sewage needs within close proximity to the Marion Township boundary with Jefferson Township, please contact us in writing on or before June 21, 2004.

Sincerely,

Lisa A. Brubaker, Township Secretary

Lion A. Burboller

420 Water Street

Stouchsburg, PA 19567

lab

Mailed 4-15-04

420 WATER STREET STOUCHSBURG, PENNSYLVANIA 19567

April 13, 2004

Womelsdorf Borough 101 High Street Womelsdorf, PA 19567

Attn.: Ms. Mickey Balistrieri, Secretary

RE: Marion Township; 537 Sewage Planning

Dear Ms. Balistrieri:

This letter serves as notification that Marion Township is preparing an update to their Act 537 Sewage Facility Plan. We are notifying Womelsdorf Borough and other adjoining municipalities in order to establish a cooperative plan for sewage disposal needs.

Our plan will address the sewage needs for all of Marion Township. PA Act 537 regulations require we communicate with all municipalities and their planning agencies in the regional planning area while preparing our updated plan. We are aware that your community updated its 537 plan and recently upgraded and expanded your wastewater treatment plant.

We have enclosed a copy of our current zoning map, which shows the Zoning Districts HC, CC, R1, and R2 of Marion Township that are available for development and possible public sewerage. Also, the sewage needs study of Stouchsburg Village and Shady Cabin areas is progressing and will better define the present sewage needs in comparison to future sewage needs within Marion Township.

At this time we ask that Borough Council, your engineer, and planners consider the possibility of expanding our inter-municipal agreement to include the service area of Stouchsburg and Shady Cabin. We ask that you reply in writing on or before June 21, 2004 if you are willing to entertain a proposal for additional service area in Marion Township. Also, we would like to acquire a copy of your sewer system map and the recent Womelsdorf Borough 537 Plan.

If you have any questions call us at 610-589-2860.

Sincerely,

Lisa A Brubaker, Township Secretary

enc

Mailed 4-15-04

420 WATER STREET STOUCHSBURG, PENNSYLVANIA 19567

April 13, 2004

Tulpehocken Township P.O. Box 272 22 Rehrersburg Road Rehrersburg, PA 19550

Attn: Ms. Judy Bashore

RE: Marion Township; 537 Sewage Planning

Dear Ms. Bashore:

This letter serves as notification that Marion Township is preparing an update to their Act 537 Sewage Facility Plan. We are notifying Tulpehocken Township and other adjoining municipalities in order to establish a cooperative plan for sewage disposal needs.

Our plan will address the sewage needs for all of Marion Township. PA Act 537 regulations require we communicate with all municipalities and their planning agencies in the regional planning area while preparing our updated plan. We are aware that your community is undertaking similar activities in the Mt. Aetna area and may be able to offer inter-municipal service to the western most section of Marion Township along SR 501 south of Mt. Aetna.

This area will be considered for public service. At this time we ask that you advise us of the information your engineer and planners will require, and the procedures necessary to establish an inter-municipal sewer agreement with your community.

If you or your agents have knowledge of any other areas with sewage needs in close proximity to our boundary please contact us on or before June 21, 2004. Also, if you have any questions call us at 610-589-2860.

Sincerely,

Lisa A. Brubaker, Township Secretary

Suon A. Butaken

Cc Mark Pickering, Brinjac Engineering, Inc.
Larry Martin, Vice President, Dutch Valley Foods
Mr. Paul Curry

Mailed 4-15-04

LAW OFFICES

JOHN W. ROLAND
EDWIN L. STOCK
S. WHITNEY RAHMAN
ROBERT R. KREITZ
JOHN E. MUIR
EUGENE ORLANDO, JR.
DEBORAH A. SOTTOSANTI
STEPHANIE L. DAKE
ERIC E. WINTER
JONATHAN P. PHILLIPS

OF COUNSEL TO THE FIRM DAVID H. ROLAND MARY M. BERTOLET JERRY R. RICHWINE

DANTE C. CUTRONA

RAYMOND C. SCHLEGEL (2004) D. FREDERICK MUTH (2006) ROLAND & SCHLEGEL

A PROFESSIONAL CORPORATION

627 NORTH FOURTH STREET
P. O. BOX 902

READING, PENNSYLVANIA 19603-0902 (610) 372-5588

> FAX (610) 372-5957 firm@rolandschlegel.com www.rolandschlegel.com

OLEY OFFICE 308 MAIN STREET OLEY, PA 19547 (610) 987-3277

FLEETWOOD OFFICE 12 WEST MAIN STREET FLEETWOOD, PA 19522 (610) 944-6870

EXETER OFFICE EXETER RIDGE CORPORATE CENTER 3970 PERKIOMEN AVENUE, SUITE 200 READING, PA 19606 (610) 779-3830

> BOYERTOWN OFFICE 300 E. PHILADELPHIA AVENUE BOYERTOWN, PA 19512 (610) 367-7443

October 7, 2002

Marion Township Attn: Lisa A. Brubaker, Secretary 420 Water Street Stouchsburg, PA 19567

Re: Womelsdorf Sewer Authority

Dear Ms. Brubaker:

I am writing to you in my capacity as Solicitor to the Womelsdorf Sewer Authority. At our May 21, 2008 meeting, it was discussed as to information we had been receiving from Marion Township regarding occupancy permits for the Stonecroft Village Houses. As the Township is aware, we provide sewage service to those facilities. It appears we have not been receiving information from Marion Township as to the current list of those new homes which are occupied, as well as the names of the new homeowners.

On behalf of the Authority, I would ask that when an occupancy permit is issued by Marion Township that a copy be provided to the Womelsdorf Sewer Authority so that we may properly bill those new customers.

If you have any questions regarding this request or require someone from the Authority be present at the next Township meeting, please contact me.

Thank you for your anticipated cooperation in this matter.

Very truly yours,

ROLAND & SCHLEGEL, P.C.

John E. Muir

JEM/nlf:33630-11/166279

cc: Paul Hopple, Chairman – Womelsdorf Sewer Authority Mickey Balistrieri





#### LETTER OF TRANSMITTAL

TO:

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

BUREAU OF FORESTRY

ECOLOGICAL SERVICES SECTION

400 MARKET STREET

PO BOX 8552

HARRISBURG, PA 17105-8552

FROM:

AMANDA GROFF, EIT

SUBJECT: MARION TOWNSHIP ACT 537 PLAN

MEA FILE # 14022

DATE:

2/26/14

CC:

FILE

ENCLOSED PLEASE FIND THE FOLLOWING INFORMATION FOR A LARGE PROJECT PNDI:

- ONE (I) COPY OF THE COMPLETED PNDI FORM
- ONE(I) COPY OF THE USGS QUAD MAP WITH THE PROJECT BOUNDARY AND QUAD NAME

IF YOU HAVE ANY QUESTIONS OR NEED ANY ADDITIONAL INFORMATION, PLEASE FEEL FREE TO CONTACT OUR OFFICE.

/AEG





#### LETTER OF TRANSMITTAL

TO:

PENNSYLVANIA FISH AND BOAT COMMISSION

NATURAL DIVERSITY SECTION

DIVISION OF ENVIRONMENTAL SERVICES

450 ROBINSON LANE

BELLFON'IE, PA 16823-7437

FROM:

AMANDA GROFF, EIT

SUBJECT:

MARION TOWNSHIP ACT 537 PLAN

MEA FILE # 140022

DATE:

2/26/14

CC:

PILE

ENCLOSED PLEASE FIND THE FOLLOWING INFORMATION FOR A LARGE PROJECT PNDI:

- ONE (I) COPY OF THE COMPLETED PNDI FORM
- ONE(1) COPY OF THE USGS QUAD MAP WITH THE PROJECT BOUNDARY AND QUAD NAME

IF YOU HAVE ANY QUESTIONS OR NEED ANY ADDITIONAL INFORMATION, PLEASE FEEL FREE TO CONTACT OUR OFFICE.

/AEG



## **Professional Engineers** & Consultants

#### LETTER OF TRANSMITTAL

TO:

PENNSYLVANIA GAME COMMISSION

BUREAU OF WILDLIFE HABITAT MANAGEMENT

DIVISION OF ENVIRONMENTAL PLANNING AND HABITAT PROTECTION

2001 ELMERTON AVENUE HARRISBURG, PA 17110-9797

FROM:

AMANDA GROFF, EIT

SUBJECT: MARION TOWNSHIP ACT 537 PLAN

MEA FILE # 140022

DATE:

2/26/14

CC:

FILE

ENCLOSED PLEASE FIND THE FOLLOWING INFORMATION FOR A LARGE PROJECT PNDI:

- ONE (1) COPY OF THE COMPLETED PNDI FORM
- ONE(I) COPY OF THE USGS QUAD MAP WITH THE PROJECT BOUNDARY AND QUAD NAME

IF YOU HAVE ANY QUESTIONS OR NEED ANY ADDITIONAL INFORMATION, PLEASE FEEL FREE TO CONTACT OUR OFFICE.

/AEG





#### LETTER OF TRANSMITTAL

TO:

UNITED STATES FISH AND WILDLIFE SERVICE

ENDANGERED SPECIES SECTION 315 SOUTH ALLEN STREET, SUITE 322 STATE COLLEGE, PA 16801-4851

FROM:

AMANDA GROFF, EIT

SUBJECT: MARION TOWNSHIP ACT 537 PLAN

MEA FILE # 140022

DATE:

2/26/14

CC:

FILE

#### ENCLOSED PLEASE FIND THE FOLLOWING INFORMATION FOR A LARGE PROJECT PNDI:

- ONE (I) COPY OF THE COMPLETED PNDI FORM
- ONE(I) COPY OF THE USGS QUAD MAP WITH THE PROJECT BOUNDARY AND QUAD NAME

IF YOU HAVE ANY QUESTIONS OR NEED ANY ADDITIONAL INFORMATION, PLEASE FEEL FREE TO CONTACT OUR OFFICE.

/AEG

#### 1. PROJECT INFORMATION

Project Name: Marion Township, Berks County 537 Plan

Date of review: 2/26/2014 4:32:54 PM

Project Category: Waste Transfer, Treatment, and Disposal, Liquid waste/Effluent, Sewage

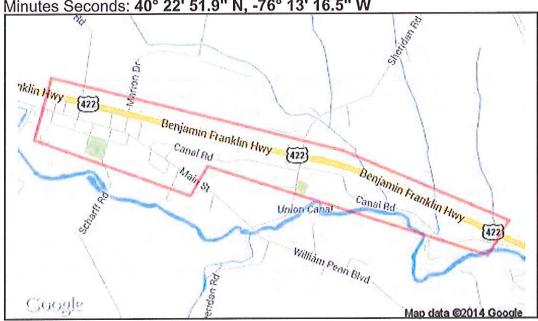
module/Act 537 plan Project Area: 346.7 acres

County: Berks Township/Municipality: Marion

Quadrangle Name: WOMELSDORF ~ ZIP Code: 19567

Decimal Degrees: 40.381074 N, -76.221252 W

Degrees Minutes Seconds: 40° 22' 51.9" N, -76° 13' 16.5" W



### 2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Project Search ID: 20140226440060

Note that regardless of PNDI search results, projects requiring a Chapter 105 DEP individual permit or GP 5, 6, 7, 8, 9 or 11 in certain counties (Adams, Berks, Bucks, Carbon, Chester, Cumberland, Delaware, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Schuylkill and York) must comply with the bog turtle habitat screening requirements of the PASPGP.

### **RESPONSE TO QUESTION(S) ASKED**

Q1: How many acres of tree removal, tree cutting or forest clearing will be necessary to implement all aspects of this project? [Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre).]
Your answer is: 1. 0 acres

#### 3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

### **PA Game Commission**

**RESPONSE:** No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

### PA Department of Conservation and Natural Resources

**RESPONSE:** No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

### PA Fish and Boat Commission

**RESPONSE:** No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

### U.S. Fish and Wildlife Service

**RESPONSE:** No impacts to <u>federally</u> listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.* is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

## 4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. For cases where a "Potential Impact" to threatened and endangered species has been identified before the application has been submitted to DEP, the application should not be submitted until the impact has been resolved. For cases where "Potential Impact" to special concern species and resources has been identified before the application has been submitted, the application should be submitted to DEP along with the PNDI receipt. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. DEP and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <a href="http://www.naturalheritage.state.pa.us">http://www.naturalheritage.state.pa.us</a>.

Project Search ID: 20140226440060

#### 5. ADDITIONAL INFORMATION

The PNDI environmental review website is a **preliminary** screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

#### 6. AGENCY CONTACT INFORMATION

## PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section 400 Market Street, PO Box 8552, Harrisburg, PA. 17105-8552 Fax:(717) 772-0271

#### U.S. Fish and Wildlife Service

Endangered Species Section 315 South Allen Street, Suite 322, State College, PA. 16801-4851 NO Faxes Please.

#### **PA Fish and Boat Commission**

Division of Environmental Services 450 Robinson Lane, Bellefonte, PA. 16823-7437 NO Faxes Please

#### PA Game Commission

Bureau of Wildlife Habitat Management Division of Environmental Planning and Habitat Protection 2001 Elmerton Avenue, Harrisburg, PA. 17110-9797 Fax:(717) 787-6957

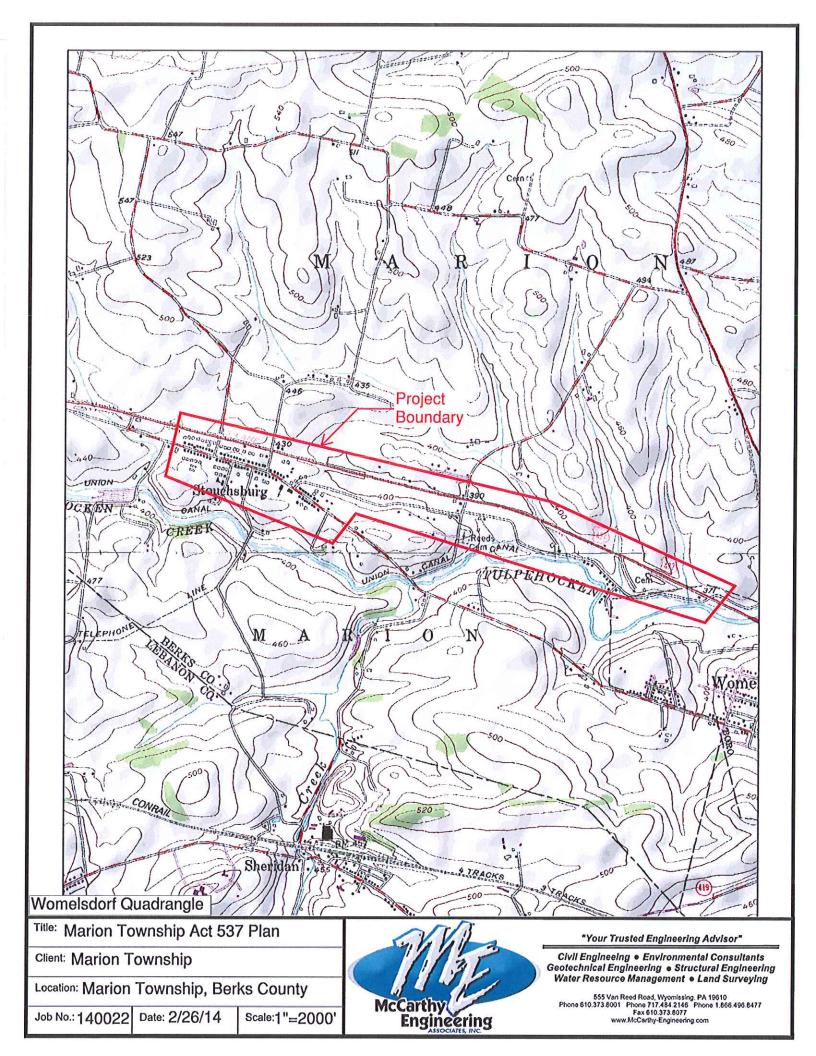
#### 7. PROJECT CONTACT INFORMATION

Name: Amanda Groff		
Company/Business Name: McCarthy Eng	gineering	
Address: 555 Van Reed Road		
City, State, Zip: Wyomissing, PA 19610		_
Phone:( 610 ) 373-8001	Fax:( 610 ) 373-8077	Ī
Email: agroff@mccarthy-engineering.c	com	ē

#### 8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to reado the online environmental review.

Amarda Graff	2/26/14
applicant/project proponent signature	date





#### BUREAU OF FORESTRY

10 March 2014

PNDI Number: 20140226440060

Amanda Groff McCarthy Engineering

Email: agroff@mccarthy-engineering.com (hard copy will not follow)

Re:

McCarthy Engineering; Marion Township Act 537 Plan

Marion Township, Berks County, PA

Dear Ms. Groff,

Thank you for the submission of the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt Number 20140226440060 for review. PA Department of Conservation and Natural Resources screened this project for potential impacts to species and resources under DCNR's responsibility, which includes plants, terrestrial invertebrates, natural communities, and geologic features only.

#### No Impact Anticipated

PNDI records indicate species or resources under DCNR's jurisdiction are located in the vicinity of the project. However, based on the information you submitted concerning the nature of the project, the immediate location, and our detailed resource information, DCNR has determined that no impact is likely. No further coordination with our agency is needed for this project.

This response represents the most up-to-date review of the PNDI data files and is valid for two (2) years only. If project plans change or more information on listed or proposed species becomes available, our determination may be reconsidered. For PNDI project updates, please see the PNHP website at <a href="https://www.naturalheritage.state.pa.us">www.naturalheritage.state.pa.us</a> for guidance. As a reminder, this finding applies to potential impacts under DCNR's jurisdiction only. Visit the PNHP website for directions on contacting the Commonwealth's other resource agencies for environmental review.

Should you have any questions or concerns, please contact Su Ann Shupp, Ecological Information Specialist, by phone (717-783-7990) or via email (c-sushupp@pa.gov).

Sincerely,

Rebecca H. Bowen, Section Chief Bureau of Forestry, Ecological Services Section

ebeca H. Bour

Pennsylvania Natural Heritage Program

conserve

sustain

enjoy



## Commonwealth of Pennsylvania Pennsylvania Historical and Museum Commission Bureau for Historic Preservation

Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120-0093
www.phmc.state.pa.us

March 29, 2011

Michael S. Keffer, P.E. Light-Heigel & Associates, Inc. 320 Plaza Drive Palmyra, PA 17078

Re:

File No. ER 2009-1221-011-B

USDA: Act 537 Plan Update

Womelsdorf Sewer System Connection

Marion Twp., Berks Co.

Dear Mr. Keffer:

The Bureau for Historic Preservation (the State Historic Preservation Office) has reviewed the above named project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992, and the regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation. These requirements include consideration of the project's potential effect upon both historic and archaeological resources.

There is a high probability that prehistoric and historic archaeological resources are located in this project area. In our opinion, the activity described in your proposal should have no effect on such resources. Should the scope of the project be amended to include additional ground disturbing activity this office should be contacted immediately and a Phase I Archaeological Survey may be necessary to locate all potentially significant archaeological resources.

The properties listed below, listed in or eligible for the National Register of Historic Places, are located near the project area. In our opinion, the activity described in your proposal will have no effect on such resources. Should the applicant become aware, from any source, that unidentified historic or archaeological properties are located at the project site, or that the project activities will have an effect on these properties, the Bureau for Historic Preservation should be contacted immediately.

#### Union Canal, Tulpehocken Creek Historic District

If you need further information regarding archaeological survey please contact Doug McLearen at (717) 772-0925. If you need further information concerning historic structures please consult Susan Zacher at (717) 783-9920.

Sincerely,

Douglas C. McLearen, Chief

Division of Archaeology &

Protection

#### **Project Memorandum**

#### LIGHT-HEIGEL & ASSOCIATES, INC.

**ENGINEERS AND SURVEYORS** 

Suite 102, 1103 Rocky Drive West Lawn, PA 19609 Phone: (610) 678-7560 Fax: (610) 678-7686 Mike Keffer Page 1 of 1

E-mail: keff@light-heigel.com

To:

Roy Zartman

Date:

5/25/2011

CC:

Marion Township

Andrew S. George, Solicitor

Walter Hurd

Project: Marion Township Sewer System Tulpehocken Township Stream Crossing

#### Hello Mr. Zartman:

I am writing to advise you of the results of our efforts to clear the proposed alignment for a sewer pipe under the Tulpehocken Creek at the eastern end of your meadow (just south of the US 422 bridge over the creek). You may recall I discussed the need for this investigation with you 1-1/2 moths ago. To date all agencies have cleared the proposed plan with the exception of the US Fish and Wildlife Service in State College PA. I have attached copies of the responses from the various agencies for your reference.

As you can see the US Fish and Wildlife Service has required that we have a wetland soil scientist check the pipe crossing area for the endangered bog turtle species. We have retained the services of Seth Bacon from Pottstown, PA. Seth will check the crossing area on both sides of the creek for bog turtle habitat. His Phase 1 report may identify that the habitat exists. If the habitat exists, a Phase 2 study maybe required at a later date. We'll keep you apprised of the situation as we progress.

Bog turtle evaluations do not disturb the area and will not affect the use and condition of the meadow. Mr. Bacon and our survey crew maybe in the lower end of your meadow for a day or two in mid to late June. We will call you when we have scheduled the date for the work. After the work is complete, we will check that the area and verify that it is satisfactory. We do not anticipate any difficulty with your grazing animals and all work is by hand techniques.

Also, as soon as we can select a set alignment for the crossing, we will contact you as we prepare easement agreements and supporting documents for the land use agreement between you and Marion Township.

Thank you for your cooperation and if you have any questions please call us.

Mike Keffer Encl.

ENGINEERS • SURVEYORS • BUILDING CODE INSPECTORS .
MUNICIPAL SERVICES

February 21, 2011

Pennsylvania Historical and Museum Commission Bureau for Historic Preservation Division of Archaeology & Protection Commonwealth Keystone Building, 2nd Floor 400 North Street Harrisburg, PA 17120-0093

Attn. Douglas C. McLearen, Chief

Re: ER 2009-1221-011-A

Marion Township 537 Plan Update

Marion Township, Berks County

Dear Mr. McLearen:

We are writing in reply to your letter of May 29, 2009 on the above reference subject. A copy of your letter is attached in the report. We apologize for the delay in providing a response to your review letter. After considering the information that was requested based on our initial submission, we re-evaluated the Act 537 Plan with the four potential sites for a wastewater treatment plant. We acquired an inter-municipal agreement for a sewer connection into the existing Womelsdorf Borough system. The inter-municipal agreement was accomplished through the cooperation of the Womelsdorf Borough Sewer Authority. At this time, we are not considering further evaluation of the Marion Township wastewater treatment plant alternatives. The connection to the Womelsdorf system is the preferred alternative.

We are submitting the attached report for your review and comment on the Plan's preferred alternative, connection into the Womelsdorf sewer system. This was one of the alternatives included in our original submission. We request that that you advise us if the proposed connection to the proposed Womelsdorf system requires further evaluation prior to approving the Plan.

The sewer extension to Stouchsburg Village consists of approximately 22,600 LF of sewer construction. 14,500 LF is 8" gravity sewer of varying depths. 8,100 LF is low pressure sewer and force main pipe only 4 ft. deep.

CIVIL

STRUCTURAL

MUNICIPAL

ENVIRONMENTAL

HYOROLOGY

INSPECTIONS

SOILS TESTING

LAND SURVEYS

AERIAL SURVEYS

LAND DEVELOPMENT

STORM WATER DESIGN

ZOMNG ENFORCEMENT

FARM PRESERVATION

BUILDING CODE SERVICES

BERKS

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

BUCKS

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

DAUPHIN

906 North River Rd. Halifax, PA 17032 717-896-8881 Fax: 717-896-9145

DAUPHIN/ SCHUYLKILL 730 West Grand Ave. Tower City, PA 17980

Tower City, PA 17980 717-647-4755 Fax: 717-647-4681

LANCASTER 805 Estella Drive Suite 111 Lancaster, PA 17601 717-892-7002 Fax: 717-892-7020

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

Fax: 717-838-3820 MONTGOMERY 617 West Main St.

Lansdale, PA 19446 610-678-7560 Fax: 610-678-7686

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

SCHUYLKILL 39 Dock St. Schuylkil Haven, PA 17972 570-385-3439 Fax: 570-385-5788 The sewer mains are shown on the site plans in the report. The sewer mains are within the existing Township and PA DOT right of ways or in easements to be acquired immediately adjoining the public right of ways. The type of work is trench excavation construction.

The sewer extension will connect to the existing Womelsdorf system along the south side US 422, east of the Tulpehocken Creek in Womelsdorf Borough. The connection can be seen on the maps in Sections 3 and 4 in the report. The Marion Township sewer will extend west along the right of way of US 422, under the Tulpehocken Creek, under the inactive Buckeye oil pipe line and under the Canal Road into the 100' x 50' site for the sanitary pump station. The pump station will be on an existing developed lot immediately west of the Canal Road at its intersection with US 422.

The west bank of Tulpehocken Creeks is the approximate path of the former Union Canal mentioned in your review comments. The proposed crossing point for the sewer force main was selected considering that the construction of US 422, Canal Road and the Buckeye Pipeline have crossed and previously disturbed the former path of the Union Canal at this point.

We ask that you consider the additional information and advise us of if the project may proceed for the selected alternative.

Thank you for your consideration of this request.

Sincerely,

Michael S. Keffer, P.E.

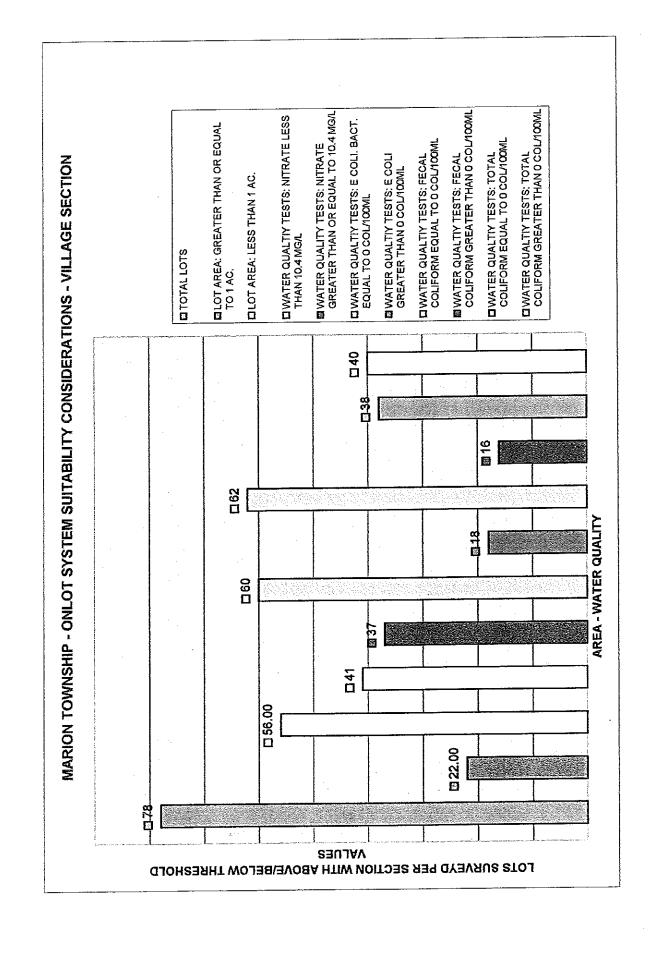
Encl.

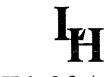
CC Marion Township, letter only
Andrew S. George, Solicitor, letter only
Womelsdorf Sewer Authority, letter only
John Muir, Esquire, letter only



## Miscellaneous







ENGINEERS • SURVEYORS • BUILDING CODE INSPECTORS MUNICIPAL SERVICES

October 14, 2009

Mr. Roland Feeg 646 Rt. 419 Womelsdorf, PA 19567

RE:

Workshop Discussion for the Marion Township 537 Sewage Plan Update;

Sites for a Marion Township Wastewater Treatment Plant

Dear Mr. Feeg:

As you may recall a few months ago we discussed with you the Township's plan to provide improved sewers in certain sections of the Township and that your property was one of the sites in the eastern part of the Township considered suitable for a new wastewater treatment facility. We've proceeded with the evaluation and on October 20th at 6:30 pm there will be an open workshop discussion at the Township Office regarding the status of the 537 Plan. You are invited to attend the workshop and we will answer any questions you may have.

The development of the Marion Township 537 Plan includes the consideration of environmental. historical, archaeological characteristics of the sites that are suitable for a treatment plant such as the area of your property shown on the attached map. In addition the estimated costs to develop and operate the treatment plant and the sewer system connected to it are also considered in the evaluation of the alternatives. If built, the new treatment plant will be owned and operated by Marion Township.

Please note that the part of your property shown on the attached map is one of four sites that have been evaluated for a new sewer plant. The Plan also considers connecting Marion Township sewers to the existing Womelsdorf Sewer Plant.

When we introduced this process to you, we advised you that we would be submitting preliminary information on the use of your property to the Pennsylvania Historical Museum Commission for review and that we would send you the Commission's review of the that data. We've enclosed the attached letter from the Commission for your information.

After this workshop the 537 Plan's reports and information should be submitted to the Berks County Planning Commission and the PA Department of Environmental Protection for review and comment before the Township selects the preferred alternative. If you have any questions or you would like to comment on the information from the PA Historical Museum Commission or on the potential location of a treatment plant facility on your property feel free to attend the October 20th workshop meeting. Thank you for your cooperation.

Sincerely,

Michael S. Keffer, P.E.

CC. Marion Township, letter only

CIVIL

STRUCTURAL

MUNICIPAL

ENVIRONMENTAL

HYDROLOGY

INSPECTIONS

SOILS TESTING

LAND SURVEYS

**AERIAL SURVEYS** 

LAND DEVELOPMENT

STORM WATER DESIGN

ZONING ENFORCEMENT

FARM PRESERVATION BUILDING CODE SERVICES

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 215-346-1980 Fax: 215-348-1983

DAUPHIN

906 North River Rd. P.O. Box 602 Halifax, 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** 805 Estelle Drive

Suite 111 Lancaster, PA 17601 717-892-7002 Fax: 717-892-7020

> 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 Schuylkili Haven, PA 17972 570-385-3439 Fax: 570-385-5788

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



ENGINEERS • SURVEYORS • BUILDING CODE INSPECTORS MUNICIPAL SERVICES

October 14, 2009

Mr. Stephen Bennetch 6 Main St. Womelsdorf, PA 19567

RE:

Workshop Discussion for the Marion Township 537 Sewage Plan Update;

Sites for a Marion Township Wastewater Treatment Plant

Dear Mr. Bennetch:

As you may recall a few months ago we discussed with you the Township's plan to provide improved sewers in certain sections of the Township and that your property was one of the sites in the eastern part of the Township considered suitable for a new wastewater treatment facility. We've proceeded with the evaluation and on October 20th at 6:30 pm there will be an open workshop discussion at the Township Office regarding the status of the 537 Plan. You are invited to attend the workshop and we will answer any questions you may have.

The development of the Marion Township 537 Plan includes the consideration of environmental, historical, archaeological characteristics of the sites that are suitable for a treatment plant such as the area of your property shown on the attached map. In addition the estimated costs to develop and operate the treatment plant and the sewer system connected to it are also considered in the evaluation of the alternatives. If built, the new treatment plant will be owned and operated by Marion Township.

Please note that the part of your property shown on the attached map is one of four sites that have been evaluated for a new sewer plant. The Plan also considers connecting Marion Township sewers to the existing Womelsdorf Sewer Plant.

When we introduced this process to you, we advised you that we would be submitting preliminary information on the use of your property to the Pennsylvania Historical Museum Commission for review and that we would send you the Commission's review of the that data. We've enclosed the attached letter from the Commission for your information.

After this workshop the 537 Plan's reports and information should be submitted to the Berks County Planning Commission and the PA Department of Environmental Protection for review and comment before the Township selects the preferred alternative. If you have any questions or you would like to comment on the information from the PA Historical Museum Commission or on the potential location of a treatment plant facility on your property feel free to attend the October 20<sup>th</sup> workshop meeting. Thank you for your cooperation.

Sincerely,

Michael S. Keffer, P.E.

Encl. CC. Marion Township, letter only CIVIL

STRUCTURAL

MUNICIPAL

ENVIRONMENT

HYDROLOGY

INSPECTIONS

SOILS TESTING

LAND SURVEYS

**AERIAL SURVEYS** 

LAND DEVELOPMENT

STORM WATER DESIGN

ZONING ENFORCEMENT

FARM PRESERVATION

BUILDING CODE SERVICES

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 Halifax, PA 17032 717-896-89 Fax: 717-896-9

> DAUPHIN/ SCHUYLKILL

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

LANCASTER

805 Estelle Drive Suite 111 Lancaster, PA 17601 717-892-7002 Fax: 717-892-7020

> LEBANON/ DAUPHIN 430 East Main St.

Palmyra, PA 17078 717-838-1351 1-800-257-2190 Fax: 717-838-3820

MONTGOMERY

1700 Dekalo 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 Fax: 570-385

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

101 WEST CHERRY STREET • PALMYRA, PA 17078 • 717-833-3120 • FAX: 717-833-3122 www.tight-heigel.com



ENGINEERS • SURVEYORS • BUILDING CODE INSPECTORS MUNICIPAL SERVICES

October 14, 2009

Mr. Floyd Martin 455 Canal Road Womelsdorf, PA 19567

RE:

Workshop Discussion for the Marion Township 537 Sewage Plan Update;

Sites for a Marion Township Wastewater Treatment Plant

Dear Mr. Martin:

As you may recall a few months ago we discussed with you the Township's plan to provide improved sewers in certain sections of the Township and that your property was one of the sites in the eastern part of the Township considered suitable for a new wastewater treatment facility. We've proceeded with the evaluation and on October 20th at 6:30 pm there will be an open workshop discussion at the Township Office regarding the status of the 537 Plan. You are invited to attend the workshop and we will answer any questions you may have.

The development of the Marion Township 537 Plan includes the consideration of environmental, historical, archaeological characteristics of the sites that are suitable for a treatment plant such as the area of your property shown on the attached map. In addition the estimated costs to develop and operate the treatment plant and the sewer system connected to it are also considered in the evaluation of the alternatives. If built, the new treatment plant will be owned and operated by Marion Township.

Please note that the part of your property shown on the attached map is one of four sites that have been evaluated for a new sewer plant. The Plan also considers connecting Marion Township sewers to the existing Womelsdorf Sewer Plant.

When we introduced this process to you, we advised you that we would be submitting preliminary information on the use of your property to the Pennsylvania Historical Museum Commission for review and that we would send you the Commission's review of the that data. We've enclosed the attached letter from the Commission for your information.

After this workshop the 537 Plan's reports and information should be submitted to the Berks County Planning Commission and the PA Department of Environmental Protection for review and comment before the Township selects the preferred alternative. If you have any questions or you would like to comment on the information from the PA Historical Museum Commission or on the potential location of a treatment plant facility on your property feel free to attend the October 20th workshop meeting. Thank you for your cooperation.

Sincerely,

Michael S. Keffer, P.E.

CC. Marion Township, letter only

CIVIL

STRUCTURAL

MUNICIPAL

ENVIRONMENTAL

HYDROLOGY

INSPECTIONS

SOILS TESTING

LAND SURVEYS

AERIAL SURVEYS

LAND DEVELOPMENT

STORM WATER DESIGN

ZONING ENFORCEMENT FARM PRESERVATION

BUILDING CODE SERVICES

BERKS

Suite 102, Grande Plaza 1103 Rocky Dr. West Lawn, PA 19609 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 Halifax, 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 805 Estelle Drive Suite 111

Lancaster, PA 17601 Fax: 717-892-7020

LEBANON/ DAUPHIN 430 East Main St Palmyra, PA 17078 717-838-1351 1-800-257-2190

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

Fax: 717-838-3820

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



## Commonwealth of Pennsylvania Pennsylvania Historical and Museum Commission Bureau for Historic Preservation

Commonwealth Keystone Building, 2<sup>nd</sup> Floor 400 North Street Harrisburg, PA 17120-0093 www.phmc.state.pa.us

May 29, 2009

Michael Keffer Light-Heigel & Associates Suite 102, 1103 Rocky Drive West Lawn, PA 19609

TO EMPEDING DEVIEW USE BHP REFERENCE NUMBER

Re: ER 2009-1221-011-A Marion Twp., 537 Plan Update Marion Twp., Berks County, PA

Dear Mr. Keffer:

The Bureau for Historic Preservation (the State Historic Preservation Office) has reviewed the above named project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992, and the regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation. These requirements include consideration of the project's potential effect upon both historic and archaeological resources.

#### Archaeological Resources

#### Site #1, Feeg Tract

Based on an evaluation by our staff, there is a high probability that significant archaeological sites are located in the proposed plant site and in the associated sewer alignment. Although there are no recorded archaeological sites within the proposed plant site location, this area is similar to the settings of known archaeological sites in the vicinity. In addition to the above, your submission maps indicate a proposed sewer line that extends west from the proposed plant site. This line intersects the location of previously recorded archaeological site 36BK291. A Phase I archaeological survey to verify the extent of the known site and its potential significance and to locate other sites along this line and in the proposed plant site location is required. Guidelines and instructions for conducting Phase I surveys are available on our web site or from our office upon request.

#### Site #2, Martin Tract

Comments above are applicable to Site 2 as well.

Michael Keffer 2009-1221-011-A 5/29/2009 Page 2

#### Site #3, Brubaker Tract

The proposed treatment plant and associated lines for this alternate are also located in areas of high probability for the locations of archaeological sites, and a Phase I survey will be required.

#### Site #4

This proposed plant site location is in the approximate area of previously recorded archaeological sites 36BK91 and 36BK92. A Phase I archaeological survey to verify the extent and potential significance of the known sites in the area of the proposed plant site location is required.

#### Historical Resources

Your request does not include sufficient information. We are unable to proceed with our review for historic structures until the information on the attached form is provided.

If you need further information regarding archaeological survey, please contact Doug McLearen at (717) 772-0924. If you need further information concerning historic structures review, please consult Ann Safley at (717) 787-9121.

Sincerely,

Douglas C. McLearen, Chief Division of Archaeology &

Protection

#### PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION BUREAU FOR HISTORIC PRESERVATION

## INFORMATION REQUEST SHEET (Revised 4/07)

Please submit checked items for PHMC to proceed with review.

PROJECT INITIATION
<ul> <li>A. FUNDING/PERMITTING/LICENSING/APPROVAL PROGRAM</li> <li>( ) 1. Contact person for federal/state/local agency, address, phone number.</li> <li>( ) 2. Letter from federal agency initiating consultation, or a letter from federal agency authorizing an alternate agency or a consultant to initiate consultation.</li> <li>( ) 3. Identify the Federal/State Agency and funding program or permit/license.</li> </ul>
B. PROJECT DESCRIPTION
<ul> <li>( ) 1. Narrative description of the project and related actions resulting from the project.</li> <li>( ) 2. Proposed boundary of the project's Area of Potential Effect (APE) (remember to consider visual impacts)</li> </ul>
<ul> <li>( ) 3. Description and Justification of selection of the Area of Potential Effect</li> <li>( ) 4. Architectural plans of existing conditions (as-built or as-found)</li> </ul>
( ) 5. Preliminary architectural drawings or plans (floor plans, elevations, specifications)
( ) 6. Work write-ups
() 7. Plans and specifications
X 8. Site plans of existing conditions X 9. Site plans of proposed development  Showing locations of lines and treats  plants + pump stations + access  plants + pump stations
C. PROJECT LOCATION
( ) 1. U.S.G.S. 7.5 min. series quadrangle with the PROJECT LOCATION(S) AND LIMITS
CLEARLY MARKED using a colored pen. Please include name of the quadrangle  ( ) 2. U.S.G.S. 7.5 min. series quadrangle with Area of Potential Effect marked (potential area of direct effect can be delineated inside area of indirect effect)
( ) 3. Street map (for properties in densely populated areas)
( ) 4. Street map showing location and historic district boundaries (if appropriate)
( ) 5. Street address of property
() 6. Municipality in which project is located (not mailing address location)
D. PROJECT SIZE (supply as appropriate for project)
() 1. Acreage of project area
( ) 2. Miles/feet of project and right-of-way width
3. Extent and nature of ground disturbing activities (i.e. grading, trenching, foundation excavation)

(over)

R PHOTO	GRAPHS (no Polaroids, or p	nhotoconies. Clear high re	esolution digital images a	accented )
	. Exterior of building(s) in p		boration digital miagos t	iccopica.
	. Interior of building(s) in pr	•		
	. Interior of building(s) illust		reas/features	
X4	. Buildings, streetscape, setti	ing of features in Area of P	otential Effect (APE)	
	. Views of project site			
( ) (	. Other			
	DOTOD LON		•	•
	ARTICIPATION  Massayras subiah suill ba/ar	have been taken to identify	, consulting parties	
	. Measures which will be/or . List of proposed consulting		consuming parties.	
	. Measures which will be/or		and involve the public.	
( ) -	7 Industrial Will Co. C.		in in the process	
RESOURC	E IDENTIFICATION, EVA	LUATION AND PROJEC	T EFFECT	•
		•		
	RAL RESOURCE IDENT:			
` '	. Description of methodolog	- · · · · · · · · · · · · · · · · · · ·		
( ) 2	2. Plan proposed for identific	ation of historical (including	ng historic districts, build	lings, structure
	objects) and archaeological	resources and proposed in	nethodology to be used.	
( ) 3	. Pennsylvania Historic Reso	ource form(s) for all proper	ties 50 years or older an	d potentially
• •	eligible for the National Re	gister identified in the API	3. (See our website at:	
	www.phmc.state.pa.us/bhp	-	` .	
( ) 4	Historical background/con		historic resources identif	fied.
	J	•		•
B. EFFEC				
()	. How will the project affect	t building(s) over 50 years	old?	
$\mathcal{M}^{2}$	2. National Register listed/el	igible property(s) exists in	project area. How will t	he project affe
	this historic property(s)?	Union Canal and	& Tulpehocken	reek Hist
		District	. ,	
		**************************************	•	•
.C. Other:				
C. Other:	· 124-24-31-4-1			
C. Other:			· ·	
C. Other:		· · ·		
C. Other:		<u> </u>		



(610) 375-4441 Telephone



April 30, 2009

Michael Keffer Light-Heigel & Associates, Inc. 101 West Cherry Street Palmyra, PA 17078

#### Dear Michael,

I have reviewed the information you sent regarding sewer improvements on Main Street in Stouchsburg and have attached a set of plans showing UGI's facilities in the area. The locations of our facilities on the enclosed map are approximate and a PA One Call will be required to verify the exact locations before excavation. Please note gas service lines may be present along all gas mains, but are not included on the enclosed map. Facility depth can not be determined without field excavations.

Our only recommendation with respect to the project is that you install the sewer facilities on the opposite side of the road from the gas main. If you have any questions or require further information, please feel free to contact me.

Mike Landis Engineer II

Her When

UGI Utilities Inc.

Phone (610) 736-5481

Fax (610) 736-5805

Email mlandis@ugi.com



#### Pennsylvania Department of Environmental Protection

#### 909 Elmerton Avenue Harrisburg, PA 17110-8200 March 10, 2006

Southcentral Regional Office

717-705-4707 FAX – 717-705-4760

Mr. Michael Keffer, P.E. Light-Heigel & Associates 1700 DeKalb Pike Blue Bell, PA 19422

RE: Sewage
Preliminary Effluent Limits
Village of Stouchsburg
Wastewater Treatment Facility
Marion Township, Berks County

Dear Mr. Keffer:

In response to your March 2, 2006 request, we have developed preliminary effluent limits for a discharge of 0.10 MGD of treated wastewater to the Tulpehocken Creek. Any changes in the size or location of the discharge will require a reevaluation. The preliminary effluent limits are:

	Concentration (mg/l)				
Parameter	Monthly	Weekly	Instanteous		
	Average	Average	Maximum		
CBOD₅	25 🤲	. 40	50		
Total Suspended Solids	30	45	. 60		
Ammonia Nitrogen (as N)	20	XXX	40.		
Total Phosphorus	1.0	ै XXX	2.0		
Total Residual Chlorine	0.5	XXX	1.6 🖟		
Dissolved Oxygen	Minimimun of 5.0 at all times				
рН	Within the range of 6 to 9 standard units at all time				
Fecal Coliform	Not greater than 200/100ml as a geometric average value, not greater than 1000/100ml in more than 10% of the samples tested from May 1 to September 30; not greater				
	than 10,000/100 ml as a geometric average value during the remainder of the year.				



Issuance of these limits does not represent approval for a discharge to the waters of the Commonwealth. This information is provided as an aid in evaluating alternative wastewater disposal methods.

To meet the requirements of the Sewage Facilities Act, the proposed facility must be included in the municipality's Official Plan for Wastewater Management approved by the Department. If you have not already done so, please initiate the planning process by contacting Ms. Renae Wood at 610-916-0100.

When the municipality has a Department-approved Official Plan that addresses this project, permit applications may be submitted. Please remember that an NPDES permit application must be filed with the Department at least 180 days before you propose to commence discharge of treated wastewater. A Water Management Part II permit must be obtained from the Department prior to starting construction of a wastewater treatment plant. Permit applications can be obtained by contacting this office.

If you have any questions do not hesitate to call.

Sincerely,

Byron Davis, PE

Permits Section
Water Management Program

cc: Ms. R. Wood, PaDEP

#### Search Site I Arts/Entertainment Lifestyle Multimedia Special Sections Community News Money \$79/Hr Job - 433 Openings "Killer White Teeth" AARP Endorsed Auto Ins. Make \$79/hr Working From Hom Over 50? Save up to \$402, 9 out of 10 AARP Dentists don't want you to know this teeth On CNN, NBC, & Fox News Policyholder's saved. whitening secret. www.liheNewsInfo.com/msnnew www.SharonsTeethStory.com AARP The lartford com

10/22/2009

Last Update: 10/22/2009 12:15:00 AM

## Marion Township outlines plans for sewer system; connection fee estimated at \$7,500 per property



By Erin Negley Reading Eagle

Marion Township officials have outlined a proposed public sewer system for parts of Stouchsburg and two other neighborhoods that would cost an estimated \$6.7 million.

The proposal involves 185 properties connecting to the Womelsdorf Sewer Authority system. The cost would include construction of sewer lines and operation and maintenance for 20 years.

Property owners would pay a \$7,500 connection fee, which might change depending on how much funding is obtained through grants.

The monthly user fee for an average residential customer was estimated at \$66, said Michael Keefer, township engineer.

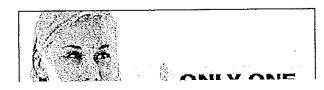
About 40 residents attended an authority meeting Tuesday, and several groans were heard as the proposed fees were announced.

Marion plans to submit the sewer proposal to the state Department of Environmental Protection at the end of the month.

The DEP is expected to respond with recommendations, which township supervisors would review before voting on a plan.

Supervisor Tony L. Brubaker said there would be a public hearing before a plan is adopted.

"It's a bugger," he said about the fees. "I don't know how to sugarcoat it."



The impetus for the sewer project began in 2004 after several Stouchsburg residents complained about water quality in their wells.

A-0040 10/26/2009 The DEP investigated and suggested that the township update its municipal sewer plan.

During a study, wells were randomly tested, and E. coli and fecal matter were found.

The 185 properties selected for the public sewer system are too small for new on-site septic systems.

The properties are in Stouchsburg, in the Edris Road area and in the Shady Cabin

neighborhood.

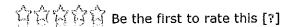
The properties include residences, businesses and a church, Keefer said.

Costs could soar, Keefer added, if the DEP requires the Womelsdorf Sewer Authority to make major improvements to handle the extra flow.

If that happens, Marion could require all 250 properties along the new sewer lines to connect to the system. But Keefer said that is not expected.

The alternative to connecting with Womelsdorf would be to build and operate a separate treatment plant at a cost of \$9.3 million.

Contact Erin Negley: 610-371-5047 or enegley@readingeagle.com.



You might also like:

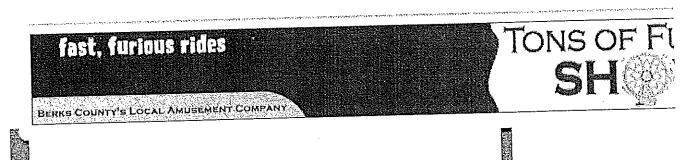
- Ontelaunee Township board delays vote on sewer-rate increase (this site)
- Lower Heidelberg Township selects firm to work on sewage plan (this site)
- Marion Township supervisors continue work on three-year trash and recycling plan (this site)

Selected for you by a sponsor:

Modular builders seize 'green' edge (ajc.com)

Article Comments Below - Click here to add a comment

You must be logged in to comment on articles. Login here or if you don't have an account you can create an account here.



© 2009 Reading Eagle Company, All Rights Reserved - Serving the Berks County community and surrounding areas for over 140 years! These links are not endorsements of any products or services in such sites, and no information in such site has been endorsed or approved by this site. Privacy Policy

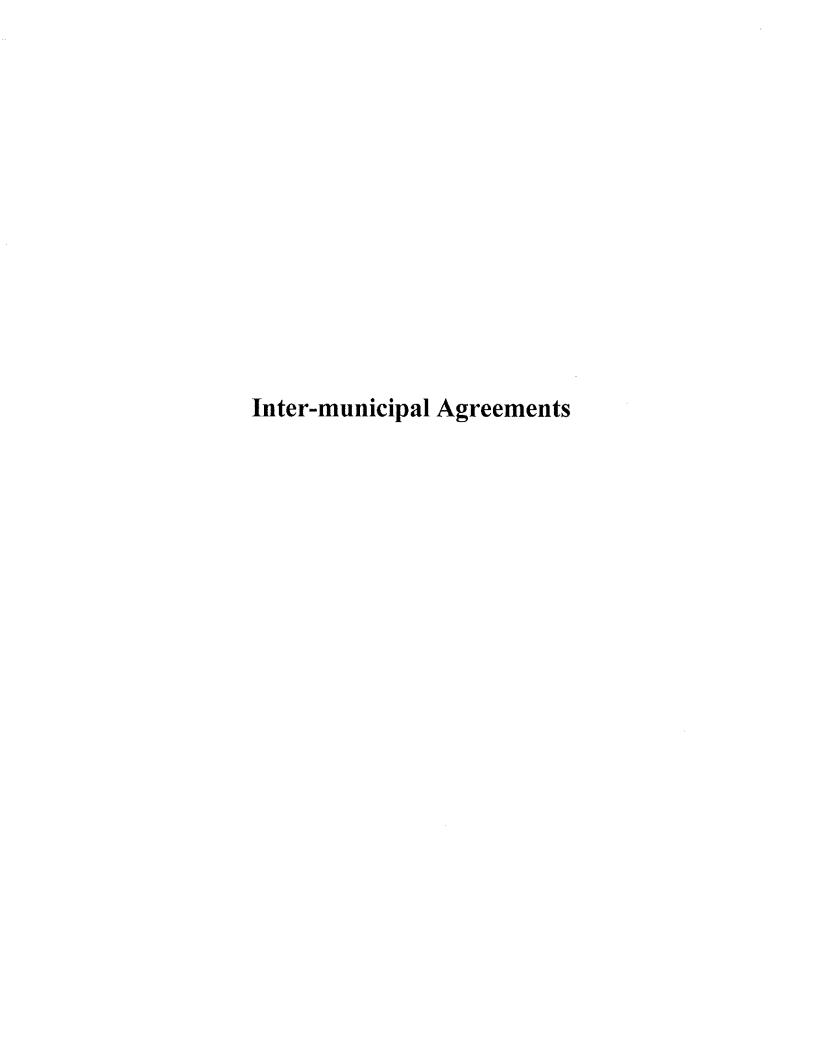
WEEU 830 AM | Reading Eagle Press
Reading Eagle Company • 345 Penn Street • Reading • PA • 19603 • 610.371.5000

#### NOTICE

Notice is hereby given that the Marion Township has updated its Department of Environmental Protection Act 537 Sewage Facility Plan. This plan addresses the extension of the public sewage system to Stouchsburg Village, Shady Cabins, Edris Road, and properties along U.S. 422 in need of public sewers. It also addresses the requirements for the continued use of on –lot sewage disposal facilities in the Township. This plan will be available for a 30 day public review commencing on December 15, 2009 at the Township Office, 420 Water Street, Womelsdorf – Stouchsburg, PA 19567 Monday Through Thursday 8:30 A.M. to 2:30 P.M. and Friday 8:30 A.M. to 11:30 A.M. Comments shall be submitted in writing to the Township Secretary at the listed address.

Lisa A. Brubaker Secretary – Treasurer Marion Township







# Tulpehocken Township Memorandum of Understanding

For

**Public Sewer** 

to
Dutch Valley Food Distributors, Inc.



#### MEMORANDUM OF UNDERSTANDING

RELATING TO THE CONSTRUCTION OF A SANITARY SEWAGE COLLECTION SYSTEM KNOWN AS THE DUTCH VALLEY SEWER MAIN EXTENSION PROJECT, AND THEREBY PROVIDING PUBLIC SANITARY SEWER SERVICE TO THE DISTRIBUTION CENTER OF DUTCH VALLEY FOOD DISTRIBUTORS, INC. LOCATED IN MARION TOWNSHIP, BERKS COUNTY, PENNSYLVANIA

This MEMORANDUM OF UNDERSTANDING ("Memorandum of Understanding" or "Agreement") entered into this 29.1 day of 2007 by and among TULPEHOCKEN TOWNSHIP, a township of the second class organized and existing under the laws of the Commonwealth of Pennsylvania having its principal office at 22 Rehrersburg Road, P.O. Box 272, Rehrersburg, Berks County, Pennsylvania 19550-0272, hereinafter referred to as "Township,"

#### and

MARION TOWNSHIP, a township of the second class organized and existing under the laws of the Commonwealth of Pennsylvania having its principal office at 420 Water Street, Stouchsburg, Berks County, Pennsylvania 19567, hereinafter referred to as "Marion,"

#### and

DUTC H VALLEY FOOD DISTRIBUTORS, INC., a business corporation organized and existing under the laws of the Commonwealth of Pennsylvania, having its principal office at 7615 Lancaster Avenue, P.O. Box 465, Myerstown, Berks County, Pennsylvania 17067, hereinafter referred to as "Dutch Valley."

#### BACKGROUND

- A. Township owns a sanitary sewage collection system a portion of which serves the Village of Mt. Aetna and a portion of which serves the Village of Rehrersburg, and the Township owns two sewage treatment plants, one of which serves the collection system of the Village of Mt. Aetna and one of which serves the collection system of the Village of Rehrersburg ("Tulpehocken Collection System" and "Tulpehocken Sewage Treatment Plants," respectively), all located in the Township, Berks County, Pennsylvania. The Tulpehocken Sewage Treatment Plants (the "Plants") currently treat primarily domestic strength sewage originating from residential structures located within the service area of the Township.
- B. Dutch Valley is the owner of a commercial business which processes and distributes food on a regional and national basis from its facilities located at 7615 Lancaster Avenue, in Marion Township, Berks County, Pennsylvania, near the Village of Mt. Actua (the "Distribution Center"). Dutch Valley presently owns and operates a large on-lot septic system to treat the sewage wastes generated by the Distribution Center.

- C. Dutch Valley desires to construct a sanitary sewer collection system and related facilities, to be located partly within Marion Township and partly within Tulpehocken Township, to transport wastewater emanating from the Distribution Center to the Tulpehocken Collection System and the Tulpehocken Sewage Treatment Plant serving the Village of Mt. Aetna, and to discontinue the use of its large on-lot septic system (the "Project").
- D. Dutch Valley has heretofore informally agreed to construct, at its sole cost and expense, the Project from the Distribution Center to the Tulpehocken Collection System in the Township.
- E. Marion intends to consent to, and cooperate with, the Project, on the condition that, in the event Marion Township should ever wish to assume responsibility for public sewer services in the portion of Marion where the Distribution Center is located, then the Distribution Center would become a customer of Marion's sewer system.
- F. The parties hereto desire to set forth in writing the allocation of the costs, duties, and responsibilities relating to the construction of the Project.

#### UNDERSTANDING

NOW, THEREFORE, the parties hereto intending to be legally bound, agree as follows:

- 1. The foregoing Background section is incorporated herein by reference as though the same were set forth herein at length.
- 2. Design and survey work for the Project has been completed by the Township's Engineer, LTL Consultants, Ltd. ("LTL"). The cost of this work through December 31, 2006 was Five Thousand Eight Hundred Fifty-seven Dollars (\$5,857.00) and was paid by the Township to LTL. Upon the execution of this Agreement, and as a condition of its effectiveness, Dutch Valley shall immediately reimburse the Township for the said design and survey work in the amount of Five Thousand Eight Hundred Fifty-seven Dollars (\$5,857.00). If the Township incurred or incurs any additional design or

survey expenses after December 31, 2006, the Township shall invoice Dutch Valley for said expenses and Dutch Valley shall pay such invoices immediately upon receipt.

- 3. Expenses for legal services provided by the Township Solicitor and the Marion Solicitor for advising the Township and Marion, respectively, regarding the Project, including but not limited to drafting this Agreement, have been incurred by the Township and Marion. As to the Township, the cost of this work was Three Thousand Forty-seven Dollars (\$3,047.00) through December 31, 2006. Upon the execution of this Agreement, and as a condition of its effectiveness, Dutch Valley shall immediately reimburse the Township for the said legal expenses in the amount of Three Thousand Forty-seven Dollars (\$3,047.00). The Township shall invoice Dutch Valley for any legal expenses incurred by the Township for advising the Township regarding the Project in excess of the said amount, and Marion shall invoice Dutch Valley for any legal expenses incurred by Marion for advising Marion regarding the Project, and Dutch Valley shall pay such invoices immediately upon receipt.
- 4. In connection with the construction of the Project by Dutch Valley, the Township will incur inspection costs. The inspection costs are estimated at Three Thousand Five Hundred Dollars (\$3,500,00). The inspection costs shall be paid by Dutch Valley as provided hereinafter.
- 5. In connection with the construction of the Project, the Township will incur right of way agreement, deed of dedication, and bill of sale preparation and recording costs. The document preparation and recording expenses are estimated at One Thousand Dollars (\$1,000,00). The document preparation and recording expenses shall be paid by Dutch Valley as provided hereinafter.

- 6. In connection with the construction of the Project, the Township and Marion will incur miscellaneous costs. The miscellaneous costs of Township are estimated at Five Hundred Dollars (\$500.00). The miscellaneous costs shall be paid by Dutch Valley as provided hereinafter.
- 7. In order to secure payment of the inspection, document preparation and recording expenses, and miscellaneous costs, Dutch Valley shall, upon the execution of this Agreement, and as a condition of its effectiveness, deposit a cash escrow with the Township in the amount of Five Thousand Dollars (\$5,000.00), and also deposit another cash escrow with Marion in the amount of Two Thousand Dollars (\$2,000.00), against which amount the Township and Marion, respectively, shall draw for payment of the inspection, right of way agreement preparation and recording expenses, and miscellaneous costs. Dutch Valley shall replenish the escrow by depositing with the Township or Marion, as the case may be, an additional amount of One Thousand Dollars (\$1,000.00) whenever, if ever, the balance of the escrow falls below Five Hundred Dollars (\$500.00). During the life of this Agreement, the Township and Marion shall provide monthly statements to Dutch Valley reporting any disbursements from the escrow, the remaining balance of the escrow, and whether an additional deposit is required to be made. Whenever the Township or Marion notifies Dutch Valley that an additional deposit is required, such payment shall be made to the Township or Marion, as the case may be, within fourteen (14) days after the date of the request. The escrow shall remain in place until construction of the Project has been completed, the Project has been inspected, and the Project and any rights-of-way located within the Township have been dedicated to the Township.

- 8. Dutch Valley shall construct the Project, at Dutch Valley's sole cost and expense, in accordance with the terms and provisions of the Township's specifications (the "Specifications"), in accordance with drawings prepared by LTL (the "Plans") and as may be required by other governmental agencies, in a good and workmanlike manner, in compliance with all pertinent statutes of the Commonwealth of Pennsylvania, and in compliance with all pertinent ordinances of the Township. The portion of the line located within Marion shall also be subject to all pertinent specifications and ordinances of Marion. Construction of the Project shall be subject to inspection and approval by the Township's engineer. Dutch Valley shall endeavor to obtain all required rights-of-way over private property; provided, however, that if Dutch Valley is unsuccessful, the Township and/or Marion, depending on the township through which the right-of-way is required, shall condemn, if legally permissible, the necessary right-of-way at Dutch Valley's expense, including, without limitation, condemnation damages, expenses and, any attorney's fees incurred by the Township or Marion. If such condemnation is required, Dutch Valley shall be required to deposit an escrow for estimated litigation and condemnation expenses in an amount to be determined by the Township or Marion, as the case may be, as to any condemnation within the Township or Marion, respectively.
- 9. Upon completion of construction of the Project and certification by the Township's engineer that the Project was constructed in accordance with the Plans and Specifications, the portion of the Project, including all rights of way, located within the Township shall be dedicated to the Township, its successors and assigns, and shall become an integral part of the sanitary sewer collection system of the Township. Acceptance of dedication of the Project shall be within the sole and absolute discretion of the Township.

Dutch Valley shall retain ownership of the portion of the Project located in Marion, or shall dedicate such portion to Marion, at Marion's discretion. In addition, as a condition of the Township's acceptance of the dedication of the Project, Dutch Valley agrees to secure the structural integrity of the Project as well as the functioning thereof, in accordance with their design and specifications, for a term not to exceed eighteen (18) months from the date of acceptance of dedication by the Township by posting with the Township financial security in an amount equal to fifteen percent (15%) of the actual cost of installation of the portion of the Project located within the Township, and by posting with Marion financial security in an amount equal to fifteen percent (15%) of the actual cost of installation of the portion of the Project located within Marion. The Yownship and Marion, respectively, shall have the right to cure Dutch Valley's defective performance in the maintenance, repair or replacement of the dedicated Project within said eighteen (18) month period, and shall have the right to expend or draw against the posted maintenance financial security to pay for such work, as to the portion of the project located within the Township and as to the portion of the Project located within Marion, and Dutch Valley so acknowledges and agrees. Dutch Valley shall pay for the costs of inspections of the Project during the maintenance period to the extent the costs of such inspections exceed the inspection escrow provided above.

Dutch Valley shall have the right to purchase eleven (11) EDU's at 265 gallons per day per EDU (the "Reserved Capacity") from the Township for the Distribution Center at the current price of One Thousand Five Hundred Dollars (\$1,500.00) per EDU for an aggregate fee of Sixteen Thousand Five Hundred Dollars (\$16,500.00) (the "Fee") and the same are hereby reserved by the Township for Dutch Valley's use. Dutch Valley shall pay

to the Township only the portion of the Fee, if any, which exceeds the estimated construction cost of the Project as determined by the Township on the recommendation of the Township Engineer. In consideration for this credit, Dutch Valley shall not be entitled to any compensation from the Township if any other users connect to the Project. For a period of ten (10) years after the date of dedication to the Township of that portion of the Project within the Township, if other users located in Marion connect to the Project within said time period, and if the portion of the Project located within Marion has been, at that time, turned over to Marion to be part of Marion's own sewage system, then Marion agrees to add a reimbursement component with any new tapping fee it may charge for connection onto the Project lines and refund the same to Dutch Valley for a proportionate share of its actual out of pocket expenses incurred in constructing the Project, without any accrual of interest being credited thereon and without any adjustment for any inflation of the value of such expenses from the date such expenses were incurred until the date of any reimbursement. Upon the approval by the Township of the construction cost estimate for the Project, any portion of the Fee which is due, if any, shall be paid by Dutch Valley to the Township. The Reserved Capacity shall be utilized by Dutch Valley solely in connection with Dutch Valley's Distribution Center. The parties acknowledge that the Reserved Capacity shall not be severable from the land which constitutes the Distribution Center and shall run with the land. Dutch Valley shall not sell, assign or transfer any Reserved Capacity to any other third party.

11. Dutch Valley shall pay to the Township user fees based on the volume of wastewater discharged into the Township's sewer system, measured on the actual metered gallons of fresh water pumped into Dutch Valley's plumbing system divided

by two hundred sixty-five (265) and multiplied by the standard per-EDU rate charged by the Township to other sewer system customers, as established by the Township from time to time. Dutch Valley shall install, maintain, and calibrate a water meter, in accordance with the Township's specifications, at the sole expense of Dutch Valley. The accuracy of the water meter shall be tested semiannually at the expense of Dutch Valley, and the cost of any repairs to the water meter as a result of these semiannual tests shall be borne by Dutch Valley. In the event the water meter malfunctions for one or more days during the month, a historically representative daily figure for that day or days of the week shall be used by the Township for each period of water meter malfunction. Dutch Valley shall grant an easement to the Township for access to the water meter at all times for the purpose of reading, inspecting, and checking the water meter for The Township shall render monthly billings to Dutch Valley. In the event that Dutch Valley exceeds a monthly daily average of 2,915 gallons per day in any month, Dutch Valley shall pay a surcharge to the Township. The surcharge rate shall be established by the Township from time to time at its discretion; but in any event, the surcharge rate shall not be less than the standard per-EDU rate for the excess flow calculated on the basis of the equivalent EDUs corresponding to the volume of excess flow. In the event the sewage discharged by Dutch Valley exceeds normal domestic strength, then Dutch Valley shall pay to the Township a surcharge equal to the total quarterly loading in pounds in excess of the total plant capacity limitation for that parameter times the applicable surcharge rate times a factor of five. Only one organic parameter shall be used as the basis for the organic loading penalty determinations. In

the event the Plants would be required by the Pennsylvania Department of Environmental Protection (PaDEP) to perform additional treatment greater than the current level of treatment required, the Township reserves the right to add controls on pollutant parameters in addition to any previously established pollutant parameters, and to add the costs of those parameters to the applicable surcharge billing cost described herein. The Township shall have the right to perform sampling of wastewater discharged by Dutch Valley into the Tulpehocken Collection System to determine compliance with these requirements. Also, in the event the portion of the Project located within Marion is turned over to Marion to be part of Marion's own sewage system, then Marion shall have all the rights of the Township under this paragraph.

- 12. If for any reason the Distribution Center is not connected to the Township Sewage Collection System within two (2) years from the date of this MOU, this MOU shall expire unless extended by the Township and Marion, except that Dutch Valley shall continue to be responsible for any expenses incurred by the Township or Marion which have not otherwise been paid out of the escrow under Section 7 above.
- 13. Dutch Valley shall, at the cost and expense of Dutch Valley, maintain and repair the portion of the Project located within Marion. In the event Marion should ever wish to assume responsibility for public sewer services in the portion of Marion where the Distribution Center is located, upon written notification by Marion to Dutch Valley, Dutch Valley shall dedicate and turn over to Marion, at no cost or expense to Marion, any sewer mains and easements and related facilities located within Marion, and effective upon such

transfer the Distribution Center shall become a customer of Marion's sewer system. If the Distribution Center continues to be connected to the Township Collection System after said transfer of the portion of the Project located within Marion to Marion, then Marion and the Township shall negotiate and enter into an agreement for the provision of sewer services by the Township to Marion with respect to the Distribution Center, as well as any other areas of Marion for which the Township and Marion mutually agree for the Township to provide sewer services.

- 14. In the event Marion would desire the Township to service other areas within Marion, then Marion and the Township agree to discuss and negotiate the feasibility, terms and conditions for the same.
- 15. This Memorandum of Understanding shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.
- 16. If any provision of this Memorandum of Understanding or the application thereof to any party or circumstance be held invalid or unenforceable, the remainder of this Memorandum of Understanding and the application of such provisions to other parties or circumstances shall not be affected thereby and to this end the provisions of this Memorandum of Understanding are declared severable.
- 17. Except for an assignment of sewer lines or rights to Marion as set forth herein, no party to this Memorandum of Understanding may assign this Memorandum of Understanding or any rights hereunder without the prior written consent of the other parties hereto.
- 18. Except for the applicability of paragraph 12 hereof, the duration of the Memorandum of Understanding shall be perpetual.

19. This Memorandum of Understanding and all controversies hereunder shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania without regard to its principles of conflicts of law.

IN WITNESS WHEREOF, AND INTENDING TO BE LEGALLY BOUND HEREBY, the parties hereto have caused this Memorandum of Understanding to be executed as of the day and year first above written.

TOWNSHIP:	TULPEHOCKEN TOWNSHIP, BERKS COUNTY, PENNSYLVANIA
· ·	By: Blos. WET
·	Chairman Atlest: Suly A Pashore
	Serfetary (
MARION:	MARION TOWNSHIP, BERKS COUNTY, PENNSYLVANIA By:
•	Chaigman A. Burbaker
•	Secretary
DUTCH VALLEY:	DUTCH VALLEY FOOD DISTRIBUTORS, INC. A Pennsylvania Business Corporation
	By: Pay Ella
•	Title: Vice Res HR.



# Womelsdorf Sewer Authority Inter-municipal Agreement

for

**Public Sewer** 

to

Stonecroft Village



·/: ·

### AGREEMENT

THIS AGREEMENT, made this day of 10005 7 2003, by and between the Township of Marion, Berks County, Pennsylvania, having an address of 420 Water Street. Stouchsburg, Pennsylvania, party of the first part;

#### AND

The Womelsdorf Sewer Authority, Berks County, Pennsylvania, a municipal authority having a mailing address of 101 High Street, Womelsdorf, Pennsylvania 19567, party of the second part.

### RECITALS:

WHEREAS, the Womelsdorf Sewer Authority, Berks County, Pennsylvania ("Womelsdorf Sewer Authority") is the owner and operator of a sanitary sewage treatment plant which services the Borough of Womelsdorf, Berks County, Pennsylvania ("Borough"), and provides public sewer service to residents in the Borough; and

WHEREAS, the Borough and the Township of Marton, Berks County, Pennsylvania ("Marion Township"), are adjoining municipalities; and

WHEREAS, Marion Township has no public sanitary sewer service presently located within its borders; and

WHEREAS, a subdivision located in Marion Township known as Stonecroft Village Subdivision proposes 214 single family residential lots and is requesting 217 EDU's of service. The said subdivision plan is now in the process of review and approval by the Marion Township Board of Supervisors; and

WHEREAS, the Stonecroft Village Subdivision proposes that all of the homes within that development be serviced with public sanitary sewer service connected to the Womelsdorf Sewer Authority sanitary sewer lines and treatment plant; and

WHEREAS, Century Land Development, the subdivider for Stonecroft Village Subdivision, has made arrangements with the Womelsdorf Sewer Authority for the payment of all necessary fees to provide sanitary sewage service to the Stonecroft Village Subdivision and for Century Land Development to construct the necessary sewer line extensions to accomplish the same; and

MUGEL SHEADEL

Faz: 6103728710

Jul 13 2006 14:15 P. 95

WHEREAS, the Stonecroft Village Subdivision plans to submit a sewage module to the Pennsylvania Department of Environmental Protection showing sanitary public sewer service with the Womelsdorf Sewer Authority for the Stonecroft Village Subdivision; and

WHEREAS, Marion Township is in the process of review of its Act 53? Plan to determine its present and future sanitary sewer needs and to determine whether a public sewer system is necessary or appropriate for portions of Marion Township.

NOW, THEREFORE, this Agreement witness the parties hereto agree as follows:

- The Womelsdorf Sewer Authority shall, at no cost or expense to Marion Township, supply sanitary sewer service and shall maintain and repair the sanitary sewer lines for all homes located within the Stonecroft Village Subdivision after the Womelsdorf Sewer Authority determines that the said sanitary sewer lines are properly installed by Century Land Development and properly connected to the Womelsdorf Sewer Authority System. After acceptance of the sanitary server lines from the Stonecroft Village Subdivision into the Womelsdorf Sewer Authority system any and all maintenance and repair of said sanitary sewer lines shall be at the cost and responsibility of the Womelsdorf Sewer Authority.
- At any point in time in the future Marion Township may request, in writing, that the Wornelsdorf Sewer Authority turn over to Marion Township, at no cost or expense to Marion Township, all ownership, control, and maintenance responsibilities for the said sanitary sewer lines servicing the Stonecroft Village Subdivision. Womelsdorf Sewer Authority shall timely approve any such request and execute and deliver to Marion Township the necessary documentation to accomplish the transfer after which all ownership control, maintenance and repair responsibility for said sanitary sewer lines located within Marion Township shall be the sole responsibility of Marion Township,
- In the event Marion Township would take over the ownership, control, and maintenance and repair responsibilities of the said sanitary sewer lines, Marion Township agrees that the said lines shall remain connected to the Womelsdorf Sewer Authority sanitary sewage system and treatment plant, and the Womelsdorf Sewer Authority and Marion Township would negotiate the charge by Womelsdorf Sewer Authority to Marion Township for the treatment of the sewage from said lines.
- Marion Township will now approve the Stonecroft Village Subdivision sewage planning module based on the foregoing and will include the same as part of its Act 537 plan review and revision.

MOGEL SEE DEC

Fax:6103728710

Jul 18 2006 14:16

P. 06

5. In the event Marion Township would desire the Womelsdorf Sewer Authority to service other areas located within Marion Township, the parties agree to discuss and negotiate the feasibility, terms, and conditions for the same.

- The duration of this Agreement shall be perpetual.
- 7. This Agreement shall become effective upon the approval of a Resolution by both Marion Township and the Womelsdorf Sewer Authority approving the terms hereof.

IN WITNESS WHEREOF, the parties have hereunto set their respective hands and seals.

Date: 2003

WOMELSDORF SEWER AUTHORITY

By: R. Shance (SEAL)

TOWNSHIP OF MARION

By: 1 CS Ol (SEAL)

1ax:6103/28/10

Jul 10 2006 14:16

## WOMELSDORF SEWER AUTHORITY RESOLUTION NO. \_1\_\_-03

RESOLUTION OF THE WOMELSDORF AUTHORITY, SEWER BERKS COUNTY, PENNSYLVANIA. AUTHORIZING THE EXECUTION AND IMPLEMENTATION AGREEMENT BETWEEN MARION AND THE WOMELSDORF SEWER AUTHORITY TO PROVIDE SANITARY SEWER STONECROFT VILLAGE SUBDIVISION IN MARION TOWNSHIP

WHEREAS, the Womelsdorf Sewer Authority Berks County (the "Authority") is a public instrumentality of the Commonwealth of Pennsylvania and a public body corporate and politic organized and existing under the Pennsylvania Municipality Authorities Act, approved June 19, 2000, 2001,

WHEREAS, Stonecroft Village is a Subdivision of two hundred fourteen (214) single family residential lots located within Marion Township, Berks County, Penusylvania, and desires to have public sanitary sewer service applied to all of these said homes, its club house, and its utility facility by the

WHEREAS, the Board of Supervisors of Marion Township, Berks County, Pennsylvania, agrees that the Womelsdorf Sewer Authority may supply sanitary sewer service to the said homes in accordance with the terms and conditions set forth in the attached Agreement between the Township of Marion and

NOW, THEREFORE, be it resolved by the Board of the Womelsdorf Sewer Authority, Berks County, in lawful ression duly assembled, as follows:

The Womelsdorf Sewer Authority authorizes the execution and implementation of the Agreement with Marion Township and the Womelsdorf Sewer Authority, a copy of which is attached hereto and made a part hereof, which Agreement become effective immediately.

RESOLVED AND ADOPTED as a Resolution by the Board of the Womelsdorf Sewer Authority, Berks County, Pennsylvania, on the Zo day of April 2003.

THE WOMELSDORF SEWER AUTHORITY

Robert R. Shartle, Chairman

ODI 13. 22 0103/01040

I'MAN TUNLLL

#### CAPACITY AGREEMENT

AGREEMENT made this year day of march, 2003 by and between WOMELSDORF SEWER AUTHORITY, a Pennsylvania municipality authority, with a mailing address of 101 W. High Street, Womelsdorf, Pennsylvania, 19567 (hereinafter the "Authority") and CENTURY LAND DEVELOPMENT CO., a Pennsylvania Corporation, with a mailing address of 14 Summer Hill Drive, Sinking Spring, Pennsylvania 19608 (hereinafter the "Doveloper").

#### BACKGROUND

Developer is the equitable owner of a residential subdivision located on approximately ninety-three and one-half (93.5) acres of land located in the Township of Marion, County of Berks, Commonwealth of Pennsylvania, more fully described in a Dead recorded in Record Book 2582, Page 415 (hereinafter the "Property") to be known as Stonecroft (hereinafter the "Development"). The Developer has submitted a preliminary subdivision plan to the Township of Marion (hereinafter the "Township") to subdivide and develop the Property, which plan was prepared by Stackhouse, Scitz & Bensinger, Plan No. 2001-035-F, Drawings 1.1 - 8.2, plan date January 7, 2003. As part of the subdivision approval process, the Developer has requested Two Hundred Fifteen (215) equivalent dwelling units ("EDUs") of sewer capacity from the Authority.

There are currently 30,000 gallons per day of sewer capacity available to consumers who own property outside of the Borough of Womelsdorf. The Development is located outside of the Borough of Womelsdorf. The Developer is requesting sewer capacity of a total of \$2,675 gallons per day or 215 EDU's. In order to satisfy the Developer's request, certain improvements and work needs to be performed to the Womelsdorf Sewer Treatment Plant.

The Authority has agreed to grant 215 EDUs of the Developer's request for the construction phase (hereinafter the "Phase") of the Development. However, in order to provide the requested EDUs of the requested sewer capacity for the Development, an aerobic digester (hereinafter the "Digester Project") must be constructed and paid for by the Developer and the Authority must complete a Re-rate for the Pennsylvania Department of Environmental Protection (hereinafter the "Re-rate Project"). The Developer has agreed to pay all costs associated with

constructing the Digester Project in order to provide the additional 90 EDUs of capacity necessary for the Development. The Developer has further agreed to pay all costs not to exceed Twenty-five Thousand Dollars (\$25,000,00) associated with the Re-Rate project.

As of the date of this Agreement, the Authority Engineer has advised the Authority and the Developer that the costs associated with the construction of the Digester Project, including engineering fees is estimated to be One Hundred and Three Thousand Dollars (\$103,000.00) and the costs associated with the Re-rate Project not to exceed Twenty-five Thousand Dollars, (\$25,000.00) plus the Department of Environmental Protection ("DEP") application fee of Seven Hundred and Fifty Dollars (\$750.00). Developer agrees that the estimates as prepared by the Authority Engineer are accurate, fair and reasonable.

Therefore, based upon the aforementioned estimated costs. Developer has agreed to pay the actual costs for the construction of the Digester Project and the Re-Rate Project on or before the date of Final Plan Approval and has further agreed to pay for the requested 215 EDU's, resulting in a sewer capacity reservation cost of Three Thousand Dollars (\$3,000.00) per EDU. Developer agrees to pay the EDU fee at the time the building permit is approved. In the event that DEP requires additional capital improvements related solely to the Development, other than the aforementioned Digester Project, the Developer agrees to pay all costs, including reasonable engineering and legal fees, associated with obtaining compliance any additional DEP requirements.

NOW, THEREFORE, in consideration of the mutual agreements made herein and intending to be legally bound hereby, the parties agree as follows:

- 1. The Authority hereby grants the request of the Developer for 215 EDUs of sewer capacity for the Development.
  - 2. The Developer covenants to proceed with the Development with the intent that it

be completed within sixty (60) months from the date of Final Plan Approval. However, in the event the Developer becomes involved in litigation with respect to any rights-of-way or other real estate issues in connection with the construction of the Development; or if the developer is delayed at any time in the progress of the Development by labor disputes, fire, unusual delay in transportation, extraordinary and unusual weather conditions, casualties, war, Acts of God, or similar causes beyond the Developer's control, then the dates of completion pursuant to this Agreement shall be extended for such reasonable time as the Authority may determine.

- 3. The Developer shall pay all costs, including reasonable engineering and legal fees, associated with the installation of the Digester. All costs associated with the Re-rate Project shall be paid prior to any connections being made to the sewer system and prior to any final plan approval.
- 4. The engineering design of the sewer lines shall be approved by the Authority and the Authority Engineer.
- 5. The Developer has previously paid One Hundred Dollars (\$100.00) per 215

EDU's to reserve the requested capacity within the sewage treatment plant. Developer agrees that the remaining costs of the EDUs calculated at Two Thousand Nine Hundred Dollars (\$2,900.00) per EDU be paid in full within months (60) months from the date of this agreement. In the event the Developer fails to pay in full for the 215 EDUs within sixty (60) months from the date of this agreement, all sewer reservation monies, currently Twenty One Thousand Five Hundred Dollars (\$21,500.00), shall be completely forfeited to the Authority as additional consideration for the execution of this Agreement. Any deposit monies provided by the Developer shall be drawn upon last by the Authority and credited to Developers payments for

EDU's.

- 6. Should the individual EDUs fail to be connected and providing flow within
- Twelve (12) months following the purchase of the individual EDUs, Developer agrees to pay and shall be charged the minimum monthly service charge per EDU as established by ordinance.
- 7. The Developer agrees that no compensation shall be payable to the Developer for any rights-of-way in the Development which are used to serve as access to the sewer lines or are used for the collection system serving the Development.
- 8. The parties hereto agree that the Developer, having been provided 215 EDUs for the Development is not entitled to any reimbursement for the zerobic digester. Nothing herein shall limit or otherwise prohibit the Authority from including the costs of the zerobic digester in the calculation of future tap in fees for any future Act 203 submission to the extent permissible and allowed by law.
- 9. The Developer agrees that the Authority shall have the right of at the Developer's expense, including reasonable legal feas, to secure compliance with the terms and conditions of this Agreement as well as the Authority and the Borough of Womelsdorf's rules, regulations, specifications or ordinances.
- This Agreement may be modified, amended or altered only by the written consent of both parties hereto.
- 11. This Agreement shall be binding upon and shall inure to the benefit of the heirs, successors and assigns of the parties hereto.
  - 12. This Agreement shall be recorded in the Berks County Recorder of Deeds.

# Womelsdorf Sewer Authority Treatment Plant Evaluation

For

Marion Township

Alternative



#### INTERMUNICIPAL AGREEMENT

This Intermunicipal Agreement (hereinafter the "Agreement") is made and entered into this \_\_\_\_\_\_\_\_\_, 2010, by and between

WOMELSDORF SEWER AUTHORITY, a municipal authority operating under the laws of the Commonwealth of Pennsylvania, with a mailing address of 101 High Street, Womelsdorf, Berks County, Pennsylvania 19567, and

TOWNSHIP OF MARION, a political subdivision of the Commonwealth of Pennsylvania, with a mailing address of 420 Water Street, Stouchsburg, Berks County, Pennsylvania 19567.

#### **BACKGROUND**

WHEREAS, the Womelsdorf Sewer Authority (hereinafter "Authority") is the owner and operator of a sanitary sewer treatment plant with associated collection lines and facilities which provide public sewer service to the Borough of Womelsdorf;

WHEREAS, the Borough of Womelsdorf and the Township of Marion (hereinafter "Township") are adjoining municipalities;

WHEREAS, the Township's study and report for the update of the 537 Plan have determined that sewer systems within the sewage needs area of Township are insufficient and proposes the revision of its Act 537 Plan providing public service to its residences;

WHEREAS, Township desires to connect to the Authority sanitary sewer system in order to provide sanitary sewer service to its residents and to comply with the mandates of DEP;

WHEREAS, the General Assembly of the Commonwealth of Pennsylvania has provided for intermunicipal cooperation in the performance of governmental functions, powers and

responsibilities by the Act of December 19, 1996, P.L. 1158, No. 177 § 1, 53 Pa. C.S. 2301, et seq., as amended;

WHEREAS, as a result of the anticipated connections from the Township to the Authority, the Authority is making improvements and modifications to the sanitary sewer treatment plant;

WHEREAS, subject to the Township's receipt of adequate financing for the project,

Township will construct the necessary facilities including sewer line extensions to convey

sewage to the Authority's sanitary sewage treatment plant;

WHEREAS, in order for its residents to connect to the sanitary sewer system of
Authority, Township will pay to Authority the agreed upon portion of costs of the connection to
the Authority's sanitary sewer system, including tapping fees, as agreed to by the parties and
their proportional share of the costs of the current improvements and upgrades to the sanitary
sewer treatment plant; and

WHEREAS, since the costs of the construction of the collection system by the Township have not been finalized nor has the proportional share of the costs of the current improvements and upgrades to the sanitary sewer treatment plant been determined;

NOW, THEREFORE, in consideration of the mutual covenants and promises set forth herein, the Parties hereto, intending to be legally bound, hereby agree as follows:

- 1. The recitals set forth in the BACKGROUND section of this Agreement are hereby incorporated in the body of this Agreement as if more fully set forth herein at length.
- 2. <u>Term.</u> The term of this Agreement shall be for a period of twenty (20) years commencing on the date hereof (hereinafter the "Initial Term"). At the expiration of the Initial Term, this Agreement shall renew for successive five (5) year terms unless either party provides

notice of non-renewal at least one hundred and eighty (180) days before the expiration of the then-current term.

3. Sewage Capacity. The Authority agrees to accept and process up to a maximum of 60,000 gallons per day of sewage flow from Township (hereinafter the "Maximum Daily Flow"). Township sewage flow shall be measured by the Township and will be calculated on a monthly basis averaging the daily sewage flow measurement for that month. The Authority may, in its sole and complete discretion, accept and process flows in the excess of the Maximum Daily Flow; in the event that Authority elects to accept and process excess flows, it may charge Township an excess flow fee as set forth in Article 4 of this Agreement.

### 4. Fees.

- A. Authority agrees to accept, treat and dispose of sanitary sewage generated in Township in accordance with the terms and conditions of this Agreement. The Township agrees to accept and be bound by all of the rules and regulations of the Authority, including but not limited to the pretreatment, if necessary, of any industrial wastewater.
- B. Township agrees that it will pay to Authority the agreed portion of the connection fee for each equivalent dwelling upon collection of the connection fee unit (hereinafter "EDU") of sanitary sewer service as set forth in the Authority fee schedule as adopted by the Township.
- C. Discharges by Township in excess of the Maximum Daily Flow shall be assessed an excess flow fee in the amount of \$8.97 per 1,000 for each gallons of excess flow.
- D. Authority is hereby authorized to bill the Township for all residential, commercial and industrial users of the Authority sanitary sewer servicing the Township in

accordance with the then current Authority fee schedule, and take all legal action permitted by Pennsylvania law with respect to nonpayment.

E. The Township agrees that it will pay a mutually agreed upon sum of money for their proportional share of the costs of the 2010 and 2011 Sewer Plant Treatment Project for the ongoing and recent upgrades to the Authority's sanitary sewer treatment plant subject to the Township acquiring adequate financing for the project.

#### 5. Connection to Authority Sewer System.

- A. The parties acknowledge that Authority is providing sanitary sewage treatment to Township and that Township is responsible for all necessary conveyance lines and facilities in order to connect to the Authority sanitary sewage system.
- B. The service area covered for sanitary sewage treatment service provided by Authority under this Agreement shall be as shown on the Act 537 Plan update adopted by the Township. The parties agree that the Authority and the Township shall have the ability to form sewer districts in the Township or extend the boundaries of existing sewer districts in the Township from time to time as permitted by adopted updates to the Township's Act 537 Plan.
- C. Township may make additional connections to the Authority sewer system from time to time pursuant to the terms of this Agreement. The Township shall bear the cost of any such additional connections. The Township agrees to provide the Authority with an easement in form and description satisfactory to the Authority over any streets or properties as necessary for the construction of any additional connections.
- D. Where the Township seeks to make an additional connection to the Authority sewer system, the Township Engineer or, in the event a developer proposes to construct the interconnection, such developer's consulting engineer, shall prepare plans and

specifications for the construction of the additional connection and submit same to the Authority Engineer for review and Approval in accordance with all Authority Ordinances and regulations. Any changes to the plans and specifications shall also require review and approval by the Authority Engineer. The Township shall administer the construction or inspection of the additional connection in such a manner as to make certain that all work is performed according to plans drawn by the Township or developer's engineers and approved by the Authority.

- E. The Township shall construct or cause to be constructed, operate and maintain a metering device as approved by the Authority at any additional connection that is made to the Authority wastewater system.
- F. Any additional connection to the Authority wastewater system shall require payment to the Authority the agreed proportionate share of the costs of connection, including tapping fees.

#### 6. Construction.

A. Township shall design and construct all conveyance lines and facilities necessary to transport wastewater from Township to the Authority wastewater plant sewer line as shown on the adopted Act 537 Plan update (hereinafter the "Connection Facilities"). Township shall pay all costs associated with the design and construction of the Connection Facilities including but not limited to all materials, labor and any necessary appurtenances, and shall restore all structures and road surfaces disturbed during the construction of the Connection Facilities. Township shall obtain at its expense the necessary permits, environmental or otherwise, required for the design and construction of the Connection Facilities. These construction and design documents, including the plans and specifications, shall be submitted to the Authority and the Pennsylvania Department of Environmental Protection (hereinafter "DEP")

for review prior to bidding. The design shall be approved by Authority and DEP prior to bidding the Connection Facilities project.

- B. Authority reserves the right to inspect at will the Connection Facilities both during and after construction without notice to Township.
- C. Township agrees to indemnify and hold harmless Authority from any and all actions for damages arising out of the installation and construction of the Connection Facilities within both the Township and the Borough of Womelsdorf including any actions brought by designers, engineers, contractors or subcontractors.

#### 7. Equipment.

- A. All equipment installed by Township shall be approved by the Authority prior to its installation and/or use.
- B. Township shall install and/or utilize any equipment or appurtenances required by the Authority, including but not limited to manholes, lines, stubs and meters.

#### 8. Maintenance and Inspections.

- A. The Authority and Township shall ensure that all sewer lines and equipment located in their respective municipalities are maintained in good operating order and shall further ensure that said lines and equipment are not negatively impacting, or otherwise impeding, the operation of the sanitary sewer system and the Authority treatment facility in accordance with DEP requirements.
- B. The Authority shall have the right to inspect and test all sewer lines and equipment located in the Township, including such inspections and tests as may be necessary to verify the number and types of properties connected to the sanitary sewer system in the Township. If upon inspection Authority discovers conditions or equipment that are negatively

impacting or otherwise impeding the sanitary sewer system, the Authority may demand, in writing, that the Township satisfactorily rectify such conditions or equipment. If Township fails to replace or repair such equipment within the reasonable time prescribed in the written notice by the Authority, Authority may enter upon the property and make the necessary repair or replacement, and shall be entitled to reimbursement from Township of the cost of labor and equipment utilized.

## 9. Exchange of Information and Reports.

- A. The Township shall records pertinent to the operation and maintenance of the sanitary sewer system to the Authority on a quarterly basis. Such records shall include, but shall not be limited to: (1) the average daily flow (in gallons) carried by the sewer lines for each town for the past year; and (2) the average daily amount (in gallons) treated at the Facility for the past year.
- B. The Township shall issue a report to the Authority setting forth the Equivalent Dwelling Units generating wastewater to be accepted, treated and disposed of by the Authority for the upcoming year. This report shall also include an estimate of the daily amount of wastewater (in gallons) to be generated by such Equivalent Dwelling Units for the upcoming year.
- C. The Authority and Township agree to keep and maintain adequate records relative to the sanitary sewer system of each town. The Authority shall, within five business days after written notice to Township, have the right to inspect all records of Township relating to the construction, expansion, operation and maintenance of the sanitary sewer system.
- 10. <u>Indemnification</u>. Except for any claim resulting from the negligent or intentional action, inaction or omission of Authority, its agents, servants and/or employees, Township shall, at its sole cost and expense, indemnify and save harmless Authority for any losses, claims, damages, awards, penalties or injuries, including reasonable attorneys' fees, incurred by any

third party arising from the connection to the sewage treatment system of Authority by Township and its agents, servants, employees and/or any other party acting at the direction of or with the permission of Township.

#### 11. Insurance.

- A. The Township agrees to maintain at all times during the term of this

  Agreement comprehensive general public liability insurance in which the Authority shall be
  named as an additional insured with minimum limits of liability of One Million Dollars

  (\$1,000,000.00) single limit coverage. All insurance policies required by this provision shall be
  obtained by the Township at the sole expense of Township and shall be placed with companies
  qualified to do business within the Commonwealth of Pennsylvania and shall include a waiver of
  subrogation by the insurance carrier.
- B. Township shall maintain worker's compensation coverage and any other insurance policies required for its employees, agents, contractors and/or subcontractors who perform any obligations of Township under this Agreement.
- C. Said insurance policies shall provide for a least sixty (60) days notice to the Authority before cancellation. Copies of certificates of policies of insurance shall be delivered to the Authority prior to the execution of this Agreement.
- 12. <u>Compliance with Ordinances and other Regulations</u>. Township and residential, commercial and industrial users located within Township connected to the Authority sanitary sewer system shall comply with all Ordinances, rules and regulations of Authority as adopted from time to time.
- 13. <u>Termination</u>. In the event that the Authority terminates this Agreement for any reason other than a threat of imminent harm to the Authority sanitary sewer system, the Authority

shall be obligated to continue to accept and treat wastewater from Township until such time as Township is able to implement an alternative wastewater treatment disposal plan.

#### 14. Miscellaneous.

- A. <u>Modification</u>. This Agreement may be modified only by written agreement signed by the Authority and the Township.
- B. <u>Descriptive Headings</u>. The descriptive headings of this Agreement are included for convenience in reference only and do not in any way limit or amplify the terms and provisions of this Agreement.
- C. <u>No Joint Venture</u>. The relationship between the Authority and the Township shall not be deemed a partnership or joint venture.
- D. Notices. All notices, demands, consents, requests and other communications hereunder which may be or are required to be given by either Party, shall be in writing and shall be deemed to have been properly given when sent by United States registered or certified mail, postage prepaid, addressed to the Parties hereto, at the following addresses or at such other address as either Party may, from time to time, designate in a notice to the other:

#### To Authority:

Womelsdorf Sewer Authority 101 High Street Womelsdorf, PA 19567

#### With a copy to:

John E. Muir, Esquire Roland & Schlegel, LLC 627 North Fourth Street, P.O. Box 902 Reading, PA 19603

#### To Township:

Township of Marion 420 Water Street Stouchsburg, PA 19567

#### With a copy to:

Andrew S. George, Esquire Mogel, Speidel, Bobb and Kershner 520 Walnut Street, P.O. Box 8581 Reading, PA 19603

Each Party hereto shall have the right, by giving not less than five (5) days prior written notice to the other parties hereto, to change any address of such Party for the purpose of notices under this Section

- E. <u>No Assignment; Binding Effect</u>. Neither this Agreement, nor any right, interest nor obligation hereunder, may be assigned by any party hereto without the prior written consent of the other party hereto, and any attempt to do so will be void, except for assignments and transfers by operation of law. Subject to the preceding sentence, this Agreement is binding upon, insures to the benefit of and is enforceable by the party's hereto and there respective successors and assignees.
- F. Governing Law. This Agreement shall be governed by, construed and enforced in accordance with the laws of the Commonwealth of Pennsylvania.
- G. <u>Severability</u>. The invalidity or unenforceability of any particular provision or part of any provision of this Agreement shall not affect the other provisions or parts hereof. If any provision is determined to be invalid or unenforceable by a court of competent jurisdiction, the balance of the Agreement will remain in effect.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the day and year first above written.

WOMELSDORF SEWER AUTHORITY

By:

Attest:

TOWNSHIP OF MARION

By:

#211444



An Ordinance of the Board of Supervisors of Marion Township Governing Municipal Management of Sewage Disposal

# AN ORDINANCE OF THE BOARD OF SUPERVISORS OF MARION TOWNSHIP GOVERNING MUNICIPAL MANAGEMENT OF SEWAGE DISPOSAL

AND NOW, this \_\_\_\_\_ day of \_\_\_\_\_, 2013

it is hereby ordained that the Code of Ordinances of

Marion Township is amended by adding thereto

Parts 1, 2 & 3 governing the management sewage disposal, as follows:



## Table of Contents

PART 1	3
Article I	3
Article II. Connection of Existing Properties	A A
Article III	<u> </u>
Article IV. Failure to Connect: Violations and Penalties	4
Article V	5
Article VI Privies, Cesspools, Vaults, Septic Tanks, or Similar Receptacles	5
Article VII. Prohibited Discharges	. 5
Article VIII Grinder Pumps and Low Pressure Sewer System	5
Article IXViolations and Penalties	8
Article X Notice Requirements	8
Article XI. Appendix	8
PART 2	13
Article XII Introduction and Purpose	13
Article XIII	.13
Article XIV	16
Article XV	16
Article XVI System Components	17
Article XVII Replacement Areas	18
Article XVIII Design of System	<b>19</b>
Article XIX Construction	
Article XX Inspections and Enforcement	<b>∂:</b>
Article XXI	21
Article XXII Maintenance	23
Article XXIII	24
Article XXIV Liens	
Article XXV Disposal of Septage	25
Article XXVI Administration	26
Article XXVII Appeals	. 30
Article XXVIII Penalties 30	
PART 3 III. INDUSTRIAL / COMMERCIAL WASTEWATER	31 
Article XXIX Discharge of Industrial/Commercial Wastes	
Article XXX Township of Marion Ordinance Governing the Admission of Industrial/32	
Commercial Wastes into the Womelsdorf Authority Treatment Facilities	
Article XXXI Township of Marion Ordinance Governing the Admission of Industrial/32 Commerce	ial Waste
Article XXXII Definitions, Word Usage and Abbreviations	
Article XXXIII National Categorical Pretreatment Standards The Categorical Pretreatment51 Sta	ındards Fo
Article XXXIV Local Limits	
Article XXXV Pretreatment Requirements	
Article XXXVI Miscellaneous Regulations 56	

#### PART 1 GENERAL

#### **Definitions** Article I.

- A. "Authority" shall mean the municipal authority of the Township of Marion, Berks County, Pennsylvania, or its authorized representative.
- B. Building Sewer shall mean the part of the drainage system that extends from the end of the building drain and conveys the discharge to the public sewer.
- C. "Low Pressure Building Sewer Repair / Replacement Agreement" herein after called "Agreement" shall mean the document establishing the responsibilities, rights, terms and conditions for the operation and maintenance of the low pressure sewer equipment on the Property.
- D. "Marion Township" shall mean the second class Township in Berks County Pennsylvania.
- E. "Owner" shall mean any person, corporation, partnership, etc. holding deed/title to lands within Marion Township.
- F. "Principal Building" shall mean the main or primary purpose for which any land, structure, or building is designed, arranged or intended, and for which they may be occupied or maintained under the terms of the Ordinance.
- G. "Property" shall mean land identified by the records of the Berks County land records department and within the sewer service areas.
- H. "Sanitary Sewer System" or "Sanitary Sewer Line" or "Sanitary Sewer Facility" shall mean all facilities as of any particular kind, for collecting, pumping, transferring, treating or disposing of sanitary sewage and industrial wastewater.
- "Special Service Areas" shall mean where the public sewer provided by the Township is an alternative sewer as defined by the Pennsylvania Department of Environmental Protection regulations.
- J. "Wastewater" shall mean the liquid and water-carried industrial, commercial, or domestic wastes from dwellings, commercial building, industrial facilities, and instructions whether treated or untreated, which is contributed into or permitted to enter the treatment plant.

# Article II. Connection of Existing Properties

Section 2.01 Each and every Owner of improved property within the Township on which sanitary sewage is generated, which property is adjoining or adjacent to or whose Principal Building is within 150 feet from the Sanitary Sewer System, shall, upon receipt of written notice, either by personal service or registered mail, from the Township that sewer service is available and that connection is ordered, shall connect said property with the sewer system in accordance with the rules and regulations of the Township within 60 days of the date of such notice, and shall use the sewer system.

Exception: Any property in Marion Township that adjoins or is adjacent to the Sanitary Sewer System and has a principal use of agriculture and has dwellings that generate sanitary sewage shall not be required to connect the dwellings that are greater than 500 feet from the sewer.

# Article III. Future Availability of Sewer Service

<u>Section 3.01</u> As from time to time sewer service becomes available to additional properties within the Township by reason of the improvement of properties adjoining or adjacent to or whose principal building is within 150 feet of the sewer system or by reason of construction of extensions to the sewer system, each and every Owner of such additional properties which are adjoining or adjacent to or whose principal building is within 150 feet of a sewer shall likewise, upon written notice, either by personal service or registered mail, from the Township ordering connection, shall connect said property with the Sanitary Sewer System within 60 days from the date of such notice, and shall use the sewer system.

#### Article IV. Failure to Connect; Violations and Penalties

Section 4.01 The provisions of this Ordinance are declared to be for health, safety and welfare of the citizens of the Township, and if any Owner of improved property within the Township who is required to connect his property with the sewer system neglects or fails to connect therewith within 60 days after written notice from the Township ordering the connection, the Township shall give such Owner written notice of this article, and upon the neglect or failure of such Owner to make the required connection within an additional period of 60 days from the date of such notice, such neglect or failure shall be and hereby is declared a violation of this article, and such Owner shall, upon conviction in a summary proceeding brought before a Magisterial District Judge under the Pennsylvania Rules of Criminal Procedure, be guilty of a summary offense and shall be punishable by a fine of not less than \$100 nor more than \$1,000, plus costs of prosecution. In default of payment thereof, the defendant may be sentenced to imprisonment for a term not exceeding 90 days. Each day or portion thereof that such violation continues or is permitted to continue shall constitute a separate offense.

# Article V. Township to Make Connection; Collection of Costs

Section 5:01 If any Owner of improved property within the Township who is required to connect said property with the Sanitary Sewer System neglects or fails to connect therewith within 60 days after receipt of written notice, either by personal service or registered mail, from the Township ordering the connection, the Township or their agents may enter the property and construct the connection. The Township or its agents may enter upon the property for the purposes of inspection, observation, measurement, sampling, testing or to construct the connection.

<u>Section 5.02</u> The Township shall send an itemized bill of the cost of construction to the Owner of the property to which connection has been made, which bill is payable immediately.

Section 5.03 If the Owner fails to pay the bill, the Township may file a claim for a municipal lien for the cost within six (6) months of the date of completion of the connection, plus reasonable attorney fees, costs and expenses as provided in Section 2502 of the Second Class Township Code, 53 P.S. § 67502(a).

# Article VI. Privies, Cesspools, Vaults, Septic Tanks or Similar Receptacles

<u>Section 6.01</u> Whenever the Township shall have given notice to any Owner ordering connection with the sewer system it shall be unlawful for such Owner to operate or use a privy, cesspool, vault, septic tank or similar receptacle for sanitary sewage upon his property, or to connect any such privy, cesspool, vault, septic tank or similar receptacle with the sewer system, or to discharge sewage into any storm sewer or other outlet other than the sewer system. No privy, cesspool, vault, septic tank or other similar receptacle shall be constructed or installed on any property accessible to the sewer system after sewer service becomes available to such property.

#### Article VII. Prohibited Discharges

<u>Section 7.01</u> Discharge of substances or materials to the sewer facilities shall be as regulated under PARTS 2 and 3 of this Ordinance.

#### Article VIII. Grinder Pumps and Low Pressure Sewer System

<u>Section 8.01</u> The Township will provide a low pressure sewer system for the delivery of a sanitary sewage from the properties within the Special Service Areas in the Township that are developed-improved lots owned by private Owners to the public sewer conveyance and treatment facilities; and

<u>Section 8.02</u> The Township has determined through an engineering feasibility study that the most cost effective way to provide sewerage to certain properties and their residents is via the installation of on-site grinder pumps upon each developed-improved property and their connection to a public low pressure sanitary sewer system for the Special Service Areas; and

<u>Section 8.03</u> The Township will construct a low pressure sewer main and appurtenances for the purpose of providing sewage conveyance and treatment services to developed properties located in the Special Service Areas; and

<u>Section 8.04</u> The Township requires that the Owners of developed-improved properties in the Special Service Areas connect to the low pressure sewer main including the installation of the house connections to the grinder pumps and their service laterals after the low pressure sewer main is constructed and installed and connected to the treatment facilities; and

Section 8.05 Upon receipt of funding for the Marion Township sewer project, the Township will agree to pay for the cost of purchasing and installing the grinder pumps and sewer laterals required for the developed-improved properties in the Special Service Areas to connect to the low pressure sewer main, in exchange for each Owner agreeing to provide the Township and its contractors access to said properties for the purpose of constructing, abiding by the financial responsibilities associated with the improved sewer service to the property in compliance with the Low Pressure Building Sewer Repair/Replacement Agreement with the Owner and operating the low pressure sewer service equipment in strict compliance with the pump manufacturer's instructions.

<u>Section 8.06</u> Repairing and maintaining said grinder pump, sewer lateral and related facilities, shall be subject to the terms and conditions set forth herein.

Section 8:07: Low Pressure Building Sewer Repair/Replacement Agreement

- A. Prior to the construction, installation and operation of the low pressure sewer service laterals and grinder pump systems the required Low Pressure Building Sewer Repair/Replacement Agreement shall be executed with the Owner of the property. After the Low Pressure Building Sewer Repair/Replacement Agreement is executed the Township will approve the installation of the facility;
- B. The Low Pressure Building Sewer Repair/Replacement Agreement is attached in the Appendix to this Section.

#### Section 8.08 Individual Building Sewers

- A. The Owner of a property in the Special Service Area shall grant an easement of twenty feet (20'), centered upon the sewer lateral and excluding ten feet (10') beyond the location for the grinder pump stations, as depicted in Exhibit A, for the purpose of installing, inspecting, monitoring and maintain the low pressure Building Sewer.
- B. Construction, Repair, Replacement, or Maintenance of Building Sewer
  - The Owner of the property connected to the low pressure system recognizes the importance that proper maintenance, repair and replacement of the Building Sewer will benefit not only the individual Owner, but also to the Township citizenry.
  - 2. The Owner hereby grants unto the Township, the right to maintain the grinder pump, although the Owner acknowledges that it shall not be the obligation of

the Township to maintain the grinder pump or low pressure system Building Sewer.

- 3. The maintenance of the grinder pump shall be subject to the specifications of the grinder pump manufacturer.
- The Owner hereby grants the Township, its agents, servants, or contractor(s) the right to access, repair, or service the Building Sewer located on the Property.
- 5. The cost of repair, replacement, service, and all other costs whatsoever to properly maintain the Building Sewer shall be borne by the Owner.
- 6. The Township shall comply with all municipal building requirements for such repair, replacement, or service of the grinder pumps in order to provide the Owner with the most competent and cost effective means of maintaining said pumps. All other constituent parts, including the lateral located on private property, shall be the responsibility of the Owner to maintain.
- C. At the direction of the Township, the Owner shall remove trees, shrubs and hardscape facilities from the work areas for the low pressure sewer building sewer improvement identified by Exhibit A. It is the intention of the Township, its agents and employees to avoid trees, structures, fences, bushes, shrubs and ornamental plants and flowers whenever and wherever possible. A preliminary "stakeout" of the Building Sewer area on the Property will be completed by the Township's Contractor.
- D. Owner shall grant the Township, its officers, employees and agents a license and temporary access to come upon the Property for the purpose of air testing and performing the work on the Building Sewer for a reasonable period of time deemed necessary by the Township. The Owner agrees, if applicable, to provide access to the inside plumbing cleanout for the purpose of an air test. The work area for the building sewer replacement shall be a twenty (20') foot wide easement centered along the proposed Building Sewer, as depicted in Exhibit A, extending from private property to the cleanout or if necessary, such locations as reasonably requested by the Township.
- E. Owners with low pressure sewer equipment on their property, shall indemnify and save harmless the Township, its officers, agents and employees, from all claims, liabilities, suits, judgments, verdicts, actions or proceedings at law or equity of any kind whatsoever arising out of, connected with or caused by any repair or replacement work or matter in, of, or related to the Sewer, including such other things as injury to property or the environment, and injury to sickness and death of each and every person or persons whatsoever, including without limitation, members of the public and officers, agents and employees of the Owner or its successor in title and assigns.

- F. All Contract bonding requirements placed upon the individual contractors, their subcontractors, agents and employees, to perform the installation of the sewerage to the Special Service Areas as shown on the Act 537 Plan in a timely, safe, and workmanlike manner shall extend the bonding through the date of substantial completion of the contract. Additionally, the contractor(s) are contractually obligated to the Township to warranty their work to be free of all defects for a period of one (1) year following the date of substantial completion of the contract.
- G. The work to be done for the low pressure sewer mains shall be considered the responsibility of the Township until financing obtained for the work from the project financing agency is retired, in accordance with applicable Ordinances and governmental regulation.

#### Article IX. Violations and Penalties

<u>Section 9.01</u> If any Owner of property within the Township or any other person shall violate any terms or conditions of this Ordinance upon conviction in a summary proceeding brought before a Magisterial District Judge under the Pennsylvania Rules of Criminal Procedure, be guilty of a summary offense and shall be punishable by a fine of not less than \$100 nor more than \$1,000, plus costs of prosecution.

<u>Section 9.02</u> In default of payment thereof, the defendant may be sentenced to imprisonment for a term not exceeding 90 days. Each day or portion thereof that such violation continues or is permitted to continue shall constitute a separate offense.

#### Article X. Notice Requirements

<u>Section 10.01</u> Notices to Owners under this article may be given either by personal service or by registered mail sent to the last known address of such Owner.

#### Article XI. Appendix

# LOW PRESSURE BUILDING SEWER REPAIR/REPLACEMENT

# **AGREEMENT**

THIS AGREEMENT, entered into t	this day of	, 2014, by and
between the TOWNSHIPOF MARION, Berks County, P		
	-	
as applicable a contractor designated or engaged by the T	ownship to impl	ement the subject matter of this
Agreement, and		<u> </u>
(hereinafter "Owner"), who own(s) property located at		
	,Wc	omelsdorf, Pennsylvania (the
"Property").		

WHEREAS, the Township has enacted an Ordinance requiring property Owners to properly construct and maintain the sewer line from the main in the street to the property served by the Township's sanitary sewer system (the "Sewer System") including sewer laterals on private property, the sewer laterals within the street right of way, and grinder pumps (collectively, the "Building Sewer"); the line from the grinder pump to the house is specifically excluded from this definition as it shall be installed at the resident's expense, to prevent infiltration and inflow into the Sewer System due to deficiencies in such Building Sewer; and

WHEREAS, the Township has been authorized by the Pennsylvania Department of Environmental Protection ("DEP") to provide an Act 537 Plan for the delivery of a sanitary sewerage system to the residents of sewer service area of the Township ("Owner") located in the Township of Marion; and

WHEREAS, the Township of Marion has determined through an engineering feasibility study that the most cost-effective way to provide sewerage to said residents is via the installation of on-site grinder pumps and a pumping station; and

WHEREAS, the Township has determined, under certain conditions and procedures, to construct improvements to selected Building Sewers as part of a community project to provide public sewer service; and

WHEREAS, the Township has determined to undertake such work on the Property, and the Owner must provide access to Property for the purpose of repair or replacement undertaken by a contractor selected by the Township and the Owner shall hold Township harmless in regard to activities undertaken on the Property with respect to the Building Sewer.

NOW, THEREFORE, in consideration of the mutual promises of the parties hereto, it is agreed as follows:

- 1. Initial Installation of Building Sewer. The Township shall, undertake installation of sewer laterals onto private property to connect to the sewer main. The Township shall also undertake the installation of the grinder pumps on the Property including excavation, repair or replacement of the pump, backfilling any resulting excavation, to a condition approximating that which existed prior to undertaking the work. Due to limitations placed upon the Township by the agency providing the funding for the sewer project the Township shall not be responsible for restoration of private drives and other hardscape facilities that may be impacted. The Owner(s) shall be responsible for watering and tending to the excavated areas on the Property following completion of the work. The Owner(s) herein grant the Township an easement of twenty feet (20') for the purpose of installation of the Building Sewer, including excavation and backfilling of the area designated by the Township its duly authorized agents, servants, and contractor(s) in consultation with the Owner(s).
- 2. Subsequent Repair, Replacement, or Maintenance of Building Sewer. Both parties herein recognize the importance that proper maintenance, repair, and replacement of the Building Sewer will serve not only to the individual Owner(s), but also to the Township citizenry. The Owner(s) does hereby grant unto the Township the right to maintain the grinder pump. The maintenance of the pumps shall be subject to the specifications of the grinder pump manufacturer. The Owner(s) does hereby grant the Township of Marion, its agents, servants, or contractor(s) the right of access to repair, replace, or service the grinder pump located on the property. The cost of the repair, replacement, service, and all other costs whatsoever to properly maintain the grinder pump shall be borne by the Owner(s). The Township may, at its discretion, undertake such repair, replacement, or service and later bill the Owner(s). The Township shall comply with all municipal bidding requirements for such repair, replacement, or service of the grinder pumps in order to provide the property Owner(s) with the most competent and cost effective means of maintaining said pumps. All other constituent parts, including the lateral located on private property, shall be the responsibility of the Owner(s) to maintain after initial installation is eompleted.
- 3. Prior to the commencement of work relating to the installation of sewerage to the Act 537 Plan area, and at the direction of the Township, the property Owner shall remove from the work area identified by the Township, all structures, fences, trees, bushes, shrubs, ornamental plants and flowers that property Owner desires to preserve. It is the intention of the Township, its agents and employees to avoid trees, structures, fences, bushes, shrubs, and ornamental plants and flowers whenever and wherever possible. A preliminary "stakeout" of the proposed area on the individual property will occur, with the homeowner's advice and consent, prior to installation of the lateral.
- 4. Owner(s) does hereby grant Township, its officers, employees and agents a lieense and temporary access to come upon the Property for the purpose of air testing and performing the work on the Building Sewer for a reasonable period of time deemed necessary by the Township. The Owner(s) herein agrees, if applicable, to provide access to the inside clean out for the purpose of an air test. The work area for the Building Sewer replacement work shall be a twenty (20') foot wide strip along the existing Building Sewer line extending from the private property line to the cleanout or, if necessary, such location as reasonably requested by the Township.

- 5. During the time the work on the Building Sewer is undertaken and thereafter Owner shall indemnify and save harmless the Township, its officers, agents and employees, from all claims, liabilities, suits, judgments, verdicts, actions or proceedings at law or equity of any kind whatsoever arising out of, connected with or caused by any repair or replacement work or matter in, of, or related to the Building Sewer which is subject to this agreement, including among other things, injury to property or the environment, and injury to and sickness and death of each and every person or persons whatsoever, including without limitation, members of the public and officers, agents and employees of the Property Owner(s) or its successor in title and assigns. Pursuant to the bonding requirements placed upon the individual contractor's, their subcontractors, agents and employees, there is a financial obligation upon the contractor's to perform the installation of the sewerage to the Act 537 Plan area in a timely, safe, and workmanlike manner.
- 6. Owner(s) acknowledges that the work to be done under this Agreement shall be considered the property and responsibility of the Township until is substantially complete, in accordance with applicable Township Ordinances and governmental regulations.
- 7. This Agreement shall constitute the entire agreement between the parties hereto. Any amendments hereto shall not be effective unless set forth in writing and signed by the parties.
- 8. This Agreement shall be binding upon any other co-owners, lien holders, successors, heirs, and assigns and any other parties having an interest in the Property.

IN WITNESS WHEREOF, the parties hereto intending to be legally bound hereby set their hands and seals on the day and year first above written.

ATTEST:	TOWNSHIP OF MARION, Marion Township, Berks County, Pennsylvani
Township Secretary	By:Chairman
	OWNER(S):
	Name:
	Name:

(FOR FUTURE USE)

# PART 2 OLDS (On-Lot Disposal System)

#### Article XII. Introduction and Purpose

<u>Section 12.01</u> This Article may be cited as the OLDS (On-Lot Disposal System) Management Program for Marion Township, Berks County, PA.

Section 12.02 As mandated by the municipal codes, the Clean Streams Law (35 P.S. 691.1 to 691.1001), and the Pennsylvania Sewage Facilities Act (Act of January 24, 1966, P.L. 1535 as amended, 35 P.S. 750.1 et seq., known as Act 537), municipalities have the power and the duty to provide for adequate sewage treatment facilities and for the protection of the public health by preventing the discharge of untreated or inadequately treated sewage. The Official Sewage Facilities Plan for Marion Township indicates that it is necessary to formulate and implement a sewage management program to effectively prevent and abate water pollution and hazards to the public health caused by improper treatment and disposal of sewage.

<u>Section 12.03</u> The purpose of this Ordinance is to provide for the inspection, maintenance and rehabilitation of On-lot Sewage Disposal Systems; to further permit the Township to intervene in situations which are public nuisances or hazards to the public health; and to establish penalties and appeal procedures necessary for the proper administration of a sewage management program.

#### Article XIII. OLDS Terms and Definitions

<u>Section 13.01</u> General Terms. In the interpretation of this Ordinance, the singular shall include the plural, and the masculine shall include the feminine and the neuter.

# Section 13.02 Specific Terms

- A. For the purposes of this Ordinance, the terms used shall be construed to have the following meanings:
  - 1. ACT The Pennsylvania Sewage Facilities Act, Act of January 24, 1966, P.L. (1965) 1535, No. 537, as amended, 35 P.S. Section 750.1 et seg.
  - ALTERNATIVE SYSTEM A system for the disposal of domestic wastewaters not operating below ground level but located on or near the site of the building or buildings being served (e.g., composting toilets, gray water recycling systems, incinerating toilets, spray irrigation and black water recycling systems, etc.)
  - 3. AUTHORIZED AGENT A licensed sewage enforcement officer, professional engineer or sanitarian, plumbing inspector, soils scientist, or any other qualified or licensed person who is delegated to function within the specified limits as the agent of the Board of Supervisors of Marion Township to carry out the provisions of this Ordinance.

- CODES ENFORCEMENT OFFICER (hereinafter called CEO) An individual employed by the Township to administer and enforce this and other ordinances in the Township.
- 5. COMMUNITY SEWAGE SYSTEM Any system, whether publicly or privately owned, for the collection of sewage publicly, or industrial wastes of a liquid nature from two or more lots or uses, or two or more equivalent dwelling units, and the treatment and/or disposal of the sewage or industrial waste on one or more of the lots or at any other site and which shall comply with all applicable regulations of the DEP.
- DEVELOPER Shall be defined as any person, partnership or corporation
  which erects or contracts to erect a building on property owned by it with the
  intent to sell the building to some other party upon its full or partial
  completion, or upon the conveyance of property on which the building is to be
  built.
- EQUIVALENT DWELLING UNIT (EDU) For the purpose of determining the number of lots in a subdivision or land development, that part of a multiple family dwelling, commercial, industrial establishment with sewage flows equal to four hundred (400) gallons per day.
- 8. IMPROVED PROPERTY Any property within the Township upon which there is erected a structure intended for continuous or periodic habitation, occupancy or use by human beings or animals and from which structure sewage shall or may be discharged.
- 9. INDIVIDUAL SEWAGE SYSTEM Any system of piping, tanks, or other facilities serving a single lot and collecting and disposing of sewage in whole or in part into the soil or any waters of the Commonwealth of Pennsylvania or by means of conveyance to another site for final disposal.
- LAND DEVELOPMENT A land development as defined in the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247, as amended, 53 P.S. Section 10101 et seq.
- 11. LOT A designated parcel, tract, or area of land established by a plat or otherwise as permitted by law and to be used, developed or built upon as a unit.
- 12. MALFUNCTION The condition, which occurs when an On-lot Sewage Disposal System causes pollution to the ground or surface waters, contamination of private or public drinking water supplies, nuisance problems or hazard to public health. Indications of malfunctioning systems include, but are not limited to, foul odors, lush grass growing over the system, backup of wastewater in the attached buildings, soggy ground over the system, surfacing sewage effluent flowing over the ground and occurring at any time of the year.
- 13. MANAGEMENT PROGRAM The management program shall encompass the entire area of Marion Township serviced by sewage facilities or any other Alternative System. All systems shall be operated under the jurisdiction of the Marion Township Board of Supervisors regulating the subsurface disposal

- and/or alternate systems, and other applicable laws of the Commonwealth of Pennsylvania.
- 14. OFFICIAL PLAN A comprehensive plan for the provision of adequate sewage disposal systems adopted by the Township and approved by the DEP in accordance with the Act and with applicable DEP regulations.
- 15. ON-LOT SEWAGE DISPOSAL SYSTEM Any system disposing of sewage in whole or in part into the soil or any waters of the Commonwealth of Pennsylvania or by means of conveyance to another site for final disposal, and which is located upon the lot which it serves.
- 16. OWNER Any person, corporation, partnership, etc. holding deed/title to lands within Marion Township.
- 17. PERSON Any individual, association, partnership, public or private corporation whether for profit or not-for-profit, trust, estate, or other legally recognized entity. Whenever the term "person" is used in connection with any clause providing for the imposition of a fine or penalty or the ordering of action to comply with the terms of this Ordinance, the term "person" shall include the members of an association, partnership or firm and the officers of any public or private corporation, whether for profit or not-for-profit.
- 18. PLANNING MODULE FOR LAND DEVELOPMENT A revision to, or exception to the revision of, the Township Official Plan submitted in connection with the request for approval of a subdivision or land development in accordance with DEP regulations.
- 19. PUMPER/HAULER Any person, company, partnership or corporation, which engages in cleaning community or individual sewage systems and transports the septage cleaned from these systems.
- 20. REHABILITATION Work done to modify, alter, repair, enlarge or replace an existing On-lot Sewage Disposal System.
- 21. REPLACEMENT AREA An area designated as the future location of an Alternative System or an individual On-lot Sewage Disposal System that shall be installed should the initial individual On-lot Sewage Disposal System installed or to be installed fail or otherwise become inoperable and which shall meet all the regulations of the DEP and all applicable Township ordinances for an individual On-lot Sewage Disposal System, and shall be protected from encroachment by an easement recorded on the Final Plan as filed with the Berks County Recorder of Deeds.
- SEPTAGE The residual scum and sludge pumped from septic systems.
- 23. SEWAGE Any substance that contains any of the waste products or excrement or other discharge from the bodies of human beings or any noxious or deleterious substance 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.

- 24. SEWAGE ENFORCEMENT OFFICER (hereinafter called SEO) A person appointed by the Board to administer the provisions of this Ordinance and authorized by the DEP in accordance with "Chapter 71, Administration of Sewage Facilities Program" of "Title 25, Rules and Regulations"; to perform percolation tests, site and soil evaluation, and issue sewage permits for Onlot Sewage Disposal Systems.
- 25. SEWAGE FACILITES Any method of sewage collection, conveyance, treatment, and disposal, which will prevent the discharge of, untreated or inadequately treated sewage into the waters of this Commonwealth or otherwise provide for the safe and sanitary treatment of sewage.
- 26. SINGLE AND SEPARATE OWNERSHIP The ownership of a lot by one or more persons which ownership is separate and distinct from that of any abutting or adjoining lot.
- 27. SUBDIVISION A subdivision as defined by the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247, as amended, 53 P.S. Section 10101 et seq.
- 28. TOWNSHIP Marion Township, Berks County, Pennsylvania.
- 29. ZONING HEARING BOARD The appointed Board and its designated agents.
- B. All other definitions of words and terms used in this Ordinance shall have the same meaning as set forth in "Chapter 73, Standards for Sewage Disposal Facilities" of "Title 25, Rules and Regulations, Department of Environmental Protection."

# Article XIV. Applicability

<u>Section 14.01</u> From the effective date of this Ordinance, its provisions shall apply to all persons owning any property in the Township serviced by an On-lot Sewage Disposal System and to all persons installing or rehabilitating On-lot Sewage Disposal Systems.

#### Article XV. Sewage Permit Regulations

Section 15.01 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 system is to be installed without first obtaining a permit indicating that the site, the plans and specifications of such system are in compliance with the provisions of the Pennsylvania Sewage Facilities Act (hereinafter called "Act 537" or "Act")and the standards adopted pursuant to that Act.

A. 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 the municipal SEO. If seventy-two (72) hours have elapsed, excepting Sundays and Holidays, since the SEO 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 SEO.

<u>Section 15.02</u> All permittees with for sewage permits shall notify the Township's certified SEO 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 Act 537 may be scheduled and performed by the Township's certified SEO at the cost of the applicant.

<u>Section 15.03</u> No zoning, building or occupancy permit shall be issued by the Township for a new building which will contain sewage generating facilities until a valid sewage.

<u>Section 15.04</u> No zoning, 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 the Township's CEO and the structure's Owner receive from the Township's SEO either a permit for alteration or a replacement of the existing sewage disposal system or written notification that such a permit will not be required. In accordance with Chapter 73 regulations, the certified SEO shall determine whether the proposed alteration or conversion of the structure will result in increased sewage flows.

<u>Section 15.05</u> Sewage permits may be issued only by a certified SEO employed by the Township for that express purpose. The DEP shall be notified by the Township as to the identity of its currently employed certified SEO.

<u>Section 15.06</u> No sewage permit may be issued unless proof is provided that the lot of record has existed since May 15, 1972, or that Act 537 planning approval has been provided by the Township.

# Article XVI. System Components

#### Section 16.01 Ground Markers

A. Any person who shall install new or rehabilitated systems 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 SEO. 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.

# Article XVII. Replacement Areas

# Section 17.01 Requirements

- A. After the effective date of this Ordinance, a Replacement Area for an individual Onlot Sewage Disposal System shall be required for all lots or lots to be created which are serviced or to be serviced by a community sewage system, or for which a valid permit for installation of an Alternative System or an individual On-lot Sewage Disposal System has been issued.
- B. The Replacement Area provided shall comply with the Act and with all regulations issued by the DEP as incorporated into this Ordinance concerning individual On-lot Sewage Disposal Systems, including isolation distances, and with the terms of this Ordinance and any other applicable Township ordinances.
- C. Identification of Replacement Area
  - 1. Each Applicant who shall submit a plan for the subdivision or development of land or who shall apply for a permit for the installation of an individual On-lot Disposal Sewage System, or who shall request approval of a Planning Module for Land Development or the adoption of a revision, exception to revision, or supplement to the Official Plan shall demonstrate to the satisfaction of the SEO that a suitable area exists on the lot or on each lot to be created for an initial individual On-lot Sewage Disposal System and for the Replacement Area. The SEO shall perform or observe all tests required for the location of an individual On-lot Sewage Disposal System to confirm the suitability of the Replacement Area. Allowance of open land for the Replacement Area without testing performed or observed by the SEO shall not constitute compliance with the requirements of this Section.
  - The location of the initial individual On-lot Sewage Disposal System and the Replacement Area as confirmed by the SEO shall be identified on the plot plans and diagrams submitted as part of the permit application.
  - 3. If the application has been submitted as a part of an application for subdivision or land development approval or as part of a request that the Township approve a Planning Module for Land Development or amend its Official Plan, or a request for an exception to the revision of the Official Plan, the location of each initial individual On-lot Sewage Disposal System and each Replacement Area shall be noted upon the plans. If the application is for subdivision or land development approval, a note constituting a permanent easement shall be added to the plans stating that no improvements shall be constructed upon the Replacement Area, and the deed to be recorded for each lot created as part of the subdivision or land development shall contain language reflecting this limitation.
  - 4. Any revisions to a permit or plan, affecting a Replacement Area, which previously has been approved pursuant to the provisions of this Ordinance, shall be reviewed for approval by the Board or its Authorized Agent.

# Article XVIII. Design of system

<u>Section 18.01</u> The applicant is responsible for the design and construction of the disposal system. The design, which shall be submitted to the Sewage Enforcement Officer after the deep probe analysis and percolation tests are completed, shall be prepared by a certified Sewage Enforcement Officer or registered professional engineer.

<u>Section 18.02</u> A registered professional engineer shall be a person certified by the Pennsylvania State Registration Board for Professional Engineers.

<u>Section 18.03</u> Any persons or entity performing design services shall present proof to the Township of coverage under adequate professional liability insurance.

# Section 18.04 Percolation test holes

- A. The applicant has the option of digging the percolation test holes himself or having the holes dug by the Sewage Enforcement Officer.
- B. An additional fee, as established in the fee schedule, shall be paid by the applicant at the time of application for each six-hole percolation test if the Sewage Enforcement Officer is to dig the holes.
- C. If additional holes must be dug by the Sewage Enforcement Officer, an additional fee as established in the fee schedule shall be paid by the applicant prior to the Sewage Enforcement Officer's review of the system design.

#### Article XIX. Construction

#### Section 19.01 Requirements

- A. The easement for the Replacement Area noted upon the Plan and recorded with the Berks County Recorder of Deeds shall state that no permanent or temporary improvements of any character, other than shallow-rooted plant matter, shall be constructed upon the Replacement Area.
- B. This provision shall be enforced by the Township unless the person who desires to construct such improvements shall demonstrate to the satisfaction of the SEO that an alternate Replacement Area, which complies with all applicable regulations of the DEP, this ordinance and all other applicable Township ordinances, exists upon the lot. If such an alternate Replacement Area shall be identified, the alternate Replacement Area may be considered to be the Replacement Area required by this ordinance and shall be designated as the Replacement Area. The newly designated Replacement Area shall thereafter be considered the Replacement Area for the purposes of this Ordinance.

# C. Relief from Replacement Area Requirements:

- 1. If any lot held in single and separate ownership as of the effective date of this Ordinance does not contain land suitable for a Replacement Area, the applicant submitting a Land Development Plan or a Planning Module for Land Development or desiring to install an individual On-lot Sewage Disposal System may request that the Board grant an exception to the requirement of providing a Replacement Area. The applicant for such an exception shall present credible evidence to the Board demonstrating (a) that the lot was held in single and separate ownership on the effective date of this Ordinance; (b) the size of the lot; (c) inability of the applicant to acquire adjacent land or the unsuitability of adjacent land which might be able to be acquired; and (d) the testing conducted to determine that the lot is not suitable to provide a Replacement Area.
- At all times the burden to present credible evidence and the burden of persuasion shall be upon the Applicant for an exception from the terms of this Requirement.

#### Article XX. Inspections and Enforcement

<u>Section 20.01</u> Any On-lot Sewage Disposal System may be inspected by the Township's Authorized Agent at any reasonable time as of the effective date of this Section.

- A. The 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 wastewater generated in the structure. A copy of the inspection report shall be furnished to the Owner and current resident which shall include all of the following information which is reasonably available to the individual or agency responsible for pumping the septic tank; date of inspection; name and address of system Owner; description and diagram of the location of the system including location of access hatches, risers, and markers; sizes of tanks and disposal fields; current occupant's name and number of users; indication of any system malfunction observed; results of any and all soils and water tests; and any remedial action required.
- B. The Township's Authorized Agent shall have the right to enter upon land for the purposes of inspections described above. In the event that access to inspect the property is denied, the following steps shall be taken:
  - 1. The matter will be officially referred to the Board for action.
  - 2. The Board may schedule a review at the next scheduled meeting of the Board, or, if the situation threatens the health or safety of the residents of the

Township, the Board may commence an immediate procedure to obtain a search warrant from the District Justice.

C. Upon receipt of a search warrant to inspect the property, the Authorized Agent of the Township shall be accompanied by an officer of the Township or State Police, and the inspection shall be completed in accordance with this Section. A schedule of routine inspections may be established by the Township, if necessary, to assure the proper function of the systems in the Township.

Section 20.02 Upon written notification from a Township resident presented to a Township official, or its Authorized Agent, OLDS systems known to be, or alleged to be, malfunctioning shall be inspected by the Authorized Agent at a time mutually agreed upon by the Authorized Agent and the Owner of the OLDS, but in no case, no later than 30 days from receipt of the written notification. Should said inspections reveal that the system is malfunctioning; the Township shall take action to require the correction of the malfunction. If total correction is not technically or financially feasible in the opinion of the Township and a representative of the DEP, action by the Owner to mitigate the malfunction shall be required.

Section 20.03 There may arise geographic areas within the Township where numerous On-lot Sewage Disposal Systems are malfunctioning. A resolution of these area-wide problems may necessitate detailed planning and a Township sponsored revision to that area's Act 537 Official Sewage Facilities Plan. When a DEP authorized Official Sewage Facilities Plan Revision has been undertaken by the Township, mandatory repair or replacement of individual malfunctioning sewage disposal systems within the study area may be delayed, at the direction of the Township, pending the outcome of the plan revision process. However, the Township may compel immediate corrective action whenever a malfunction, as determined by Township officials and the Pennsylvania DEP, represents a serious public health or environmental threat.

#### Article XXI. Operation

<u>Section 21.01</u> Only normal domestic wastes shall be discharged into any On-lot Sewage Disposal System. The following shall not be discharged into the On-lot Sewage Disposal System:

#### A. Industrial waste

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

#### Article XXII. Maintenance

<u>Section 22.01</u> Any person owning a building served by an On-lot Sewage Disposal System shall have the septic tank pumped by a qualified Pumper/Hauler after the effective date of this Ordinance based on the following schedule:

- A. Properties located in Marion Township, identified as follows:
  - 1. SA NORTHWEST; Map-3
    - a) Within one (1) year of the effective date of this Ordinance.
  - 2. SA EAST; Map-3
    - a) Within two (2) years of the effective date of this Ordinance.
  - 3. SA South; Map-3
    - a) Within three (3) years of the effective date of this Ordinance.
  - Thereafter that person shall have the tank pumped at least once every four (4) years. Receipts from the Pumper/Hauler shall be submitted to the Township as required in Section 22.03.
- B. Any person providing a receipt or other written evidence, showing that their tank had been pumped within three (3) years of the first year anniversary of the effective date of this Ordinance, then the Township may delay that person's initial required pumping to conform to the general four (4) year frequency requirement.
- C. The Township may allow septic tanks to be pumped out at less frequent intervals when the Owner can demonstrate to the Township that the system can operate properly without the need for pumping out for a period longer than four (4) years, but in no case shall such period extend beyond six (6) months prior to the date when the next required pumping is to be completed.
  - The request must be in writing with all supporting documents attached.
  - The Township, in making its determination, shall take into account the
    information submitted by the applicant, the sewerage permit issued by the
    Township SEO upon installation or rehabilitation of the system and
    supporting documentation, reports of inspection and maintenance of the
    system, and other relevant information, and may conduct an on-site
    inspection.
  - The applicant shall bear the cost of any inspection, surface or subsurface, and soil or wastes sampling conducted for the purposes of evaluating the request.

- 4. The applicant shall receive a decision within sixty (60) days of accumulation of all necessary information by the Township.
- D. The required pumping frequency may be increased at the discretion of the 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.

<u>Section 22.02</u> Each time a septic tank or other subsurface waste disposal system tank is pumped out, the Township, its Authorized Agent, or a private septage Pumper/Hauler, whichever provides the service, shall provide to the Owner of the sub-surface waste disposal system a signed Pumpers Report/Receipt containing at a minimum the following information:

- A. Date of pumping.
- B. Name and address of system Owner.
- C. Address of tank's location, if different from the Owner's.
- D. Description and diagram of the location of the tank, including the location of any markers, risers, and access hatches and size of the tank.
- E. The date existing system was installed.
- F. Last date of pump out.
- G. List of other maintenance performed.
- H. Any indications of system malfunction observed.
- Amount of septage or other solid or semi-solid material removed.
- J. List of recommendations.
- K. Destination of the septage (name of the treatment facility).

<u>Section 22.03</u> Upon completion of each required pumping, the Township, its Authorized Agent, or a private septage waste hauler, shall fill out and submit a Pumper Report/Receipt, copies of which shall be provided by the Township to all licensed Pumpers/Haulers. The Township's Authorized Agent, or a private septage Pumper/Hauler shall provide one copy of the Pumper's Report/Receipt to the Owner and one copy to the Township. Copies must be received at the Township's business office within thirty (30) days of the date of pumping. The Pumper's Report/Receipt will include verification that the baffles in the septic tank have been inspected and found to be in good working order.

<u>Section 22.04</u> Any person owning a building served by an Alternative System and 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 exceed those for those required for septic tanks.

<u>Section 22.05</u> Any person owning a building served by a cesspool or dry well shall have that system pumped according to the schedule prescribed herein for septic tanks.

<u>Section 22.06</u> The Township may require additional maintenance activity 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 lines, removal of obstructing roots or trees, the diversion of surface water away from the disposal area, etc.

# Article XXIII. System Rehabilitation

<u>Section 23.01</u> No person shall operate and maintain an Alternative System or 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 of Pennsylvania unless a permit to discharge has been obtained from the DEP.

<u>Section 23.02</u> The Township shall issue a written notice of violation to any person who is the Owner of a property in the Township which is found to be served by a malfunctioning Alternative System or an On-lot Sewage Disposal System which is discharging raw or partially treated sewage.

<u>Section 23.03</u> Within seven (7) days of notification by the Township that a malfunction has been identified, the Owner shall make application to the Township's certified SEO 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 seasonal or unique conditions mandate a longer period, in which case the Township shall set an extended completion date.

<u>Section 23.04</u> The Township's certified SEO shall have the authority to require the repair of any malfunction by the following methods: cleaning, repair or replacement of components of the Alternative System or the On-Lot Sewage Disposal 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, other alternatives as appropriate for the specific site.

Section 23.05 In lieu of, or in combination with, the remedies described herein, the SEO 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 and appliances. Wastewater generation in the structure may also be reduced by requiring changes in water usage patterns in the structure served. By way of example the use of laundry facilities may be limited to one load per day or discontinued altogether.

<u>Section 23.06</u> In the event that the rehabilitation measures are not feasible or do not prove effective, the Township may require the Owner to apply for a permit to construct a holding tank in accordance with the Township's ordinances. Upon receipt of said permit, the Owner shall complete construction of the system within thirty (30) days.

<u>Section 23.07</u> Should none of the remedies described above prove totally effective in eliminating the malfunction of an existing On-lot Sewage Disposal System, the 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 that it feels necessary.

#### Article XXIV. Liens

<u>Section 24.01</u> The Township, upon written notice from the SEO that an imminent health hazard exists due to failure of a property Owner to maintain, repair or replace an Alternative System or 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 SEO. The Owner shall be charged for the work performed and, if necessary, a lien shall be entered therefor in accordance with the law.

#### Article XXV. Disposal of Septage

<u>Section 25.01</u> All septage Pumper/Haulers operating within the Township shall be included on an approved list with the Township and shall comply with all reporting requirements established by the Township.

<u>Section 25.02</u> All septage originating within the municipal sewage management area shall be disposed of at sites or facilities approved by the DEP. Approved sites or facilities shall include the following: septage treatment facilities, Wastewater Treatment Facilities (WWTF), composting sites, and approved farm lands.

<u>Section 25.03</u> 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, 35 P.S., paragraphs 6018.101 – 6018.1003), and Regulations adopted pursuant to such Act.

- A. Any septage Pumper/Hauler who violates any of the provisions of this Ordinancet shall be guilty of a summary offense and, upon conviction thereof, shall be sentenced to pay a fine not exceeding one thousand dollars (\$1,000.00), 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.
- B. If any Pumper/Hauler shall have been convicted on two (2) occasions of any violation of this Ordinance, 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.

<u>Section 25.04</u> Upon the discontinuance of the use of any tank for sewage disposal purposes, whether by mandatory or voluntary connection to a community sewage system or abandonment for any other reason, the Owner thereof shall have the tank pumped and flushed by a Pumper/Hauler and, at the Owner's option, either physically removed from the premises or filled with soil and/or stone.

<u>Section 25.05</u> When the Owner elects to have the tank filled with stone as permitted above, said tank may then be used for the discharge of storm water, sump pump discharge, or other effluent not qualifying for discharge into the community sewage system, providing said discharge is otherwise permitted by applicable law.

#### Article XXVI. Administration

<u>Section 26.01</u> The Township shall fully utilize those powers it possesses through enabling statutes and ordinances to effect the purposes of this Ordinance.

<u>Section 26.02</u> The Township shall employ qualified individuals to carry out the provisions of this Ordinance. Those employees shall include a certified SEO, a CEO, a secretary, administrator or other persons as required. The Township may also contract with private qualified persons or firms as necessary to carry out the provisions of this Ordinance.

<u>Section 26.03</u> All permits, records, reports, files and other written material relating to the installation, operation and maintenance and malfunction of the Alternative System or the On-lot Sewage Disposal Systems shall become the property of the Township. Existing and future records shall be available for public inspection upon written request. All records pertaining to sewage permits, building permits, occupancy permits and all other aspects of the Township's OLDS Management Program shall be made available, upon request, for inspection by representatives of the DEP.

<u>Section 26.04</u> The Board shall establish all administrative procedures necessary to properly carry out the provisions of this Ordinance.

<u>Section 26.05</u> The Board may establish a fee schedule, and subsequently collect fees, to cover the cost to the Township of administering this program.

- A. The cost of the Township's office or administration expense shall be as established in the fee schedule.
- B. The sewage permit fees to be paid by the applicant for the following services for an already existing system and/or permit shall be as established in the adopted fee schedule:
  - 1. When a property has been transferred to a new Owner where a permit was previously issued and all data remains the same (one inspection included).
  - 2. When land has been transferred and where the system is to be revised due to more or less sewage flow.
  - To renew a permit prior to its expiration, and if no construction has begun, a site visit will be necessary to observe that the physical condition of the site has not been altered.
  - 4. To renew a permit which has expired (i.e., more than two years from the date issued) and where no construction has begun. A site visit will be necessary to observe that the physical condition of the site has not been altered. It is at the Sewage Enforcement Officer's discretion to determine if a new application must be made, in which event the fee will be applied to the actual application fee.

# C. Attendance at municipal meetings

1. The fee for attendance at municipal meetings shall be at the current rate of the Sewage Enforcement Officer, payable by whoever requests attendance.

#### D. Consideration of land subdivisions

- The fee for the consideration of any proposed land subdivision shall be the current rate of the Sewage Enforcement Officer, plus out-of-pocket expenses, for the work required.
- 2. This fee shall be payable by the applicant to the Township.
- The Sewage Enforcement Officer's duties for this fee may include a site review; performing a deep probe hole analysis and a six-hole percolation test per lot; reviewing subdivision modules; correspondence; and all necessary filing of plans.
- The applicant shall make a deposit as established in the adopted fee schedule, before any work has commenced. This deposit will be credited to the final bill.
- 5. The applicant is responsible to pay the Township for the total of all costs at completion of the work.

- E. Equipment and costs for deep probe holes
  - The applicant shall be responsible at his sole expense for equipment appropriate for digging the deep probe hole and shall pay all bills resulting from such digging directly to the operator.
- F. The required pumping frequency may be increased at the discretion of the 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.

# Section 26.06 Payment of fees

A. Fees shall be paid to the Township at the time of application and/or upon receipt of a bill for any excess charges. The Sewage Enforcement Officer shall bill the Township at the normal hourly rate for services, plus out-of-pocket expenses.

# Section 26.07 Permits for single-family residential dwellings

- A. The fee for the consideration of and issuance of sewage permits for a single-family residential dwelling employing a conventional or alternate disposal system shall be as established in the fee schedule as adopted by resolution. The Sewage Enforcement Officer's duties for this fee may include performing a site review, deep probe hole analysis, and six-hole percolation test; reviewing the applicant's design; issuing or denying the permit; and performing any necessary field observation of the actual system installation and such other duties as described in PA DEP regulations Chapters 71, 72 & 73.
- B. In the event the cost of the required time by the Sewage Enforcement Officer exceeds the established fee, minus the cost of the Township's office or administration expenses, the applicant shall pay the current rate of the Sewage Enforcement Officer to the Township for the excess time involved. The Township shall claim a portion of the permit fee for office or administration expenses, and this shall not be considered as an additional charge. The cost of the Township's office or administration expenses shall be as established in the fee schedule.

<u>Section 26.08</u> Permit for any other than single-family residential structure and/or Community Disposal system.

A. The fee for the consideration of and issuance of a sewage permit for any other than single-family residential structure and/or community disposal system, either a conventional system or an alternate system, shall be as listed in the fee schedule. The Sewage Enforcement Officer's duties for this fee shall be as described in PA DEP regulations Chapters 71, 72, & 73. In the event the cost of the required time by the Sewage Enforcement Officer exceeds the established fee, minus the cost of the Township's office or administration expenses, the applicant shall pay the current rate of the Sewage Enforcement Officer to the Township for the excess time involved. The Township shall claim a portion of the permit fee for office or administration expenses, and this shall not be considered as an additional charge. The cost of the Township's office or administration expenses shall be as established in the fee schedule. All fees shall be paid before the permit is issued.

# Section 26.09 Permit for single family residential development with prior tests

A. The fee for the consideration and issuance of a sewage permit for any lot for single family residential development which had a satisfactory six-hole percolation test and deep probe hole analysis completed at an earlier time, but within one year of the current application for permit, will be as established in the adopted fee schedule. The Sewage Enforcement Officer's duties for this fee may include reviewing the applicant's design; issuing or denying the permit; and performing any necessary field observation of the actual system installation. If said analysis or tests were performed more than one year prior to the current application, the applicant must proceed according to PA DEP regulations. In the event the cost of the required time by the Sewage Enforcement Officer exceeds the established fee, minus the cost of the Township's office or administration expenses, the applicant shall pay the current rate of the Sewage Enforcement Officer for the excess time involved. The Township shall claim a portion of the permit fee for office or administration expenses, and this shall not be considered as an additional charge.

# Section 26.10 Permit for a system repair

A. The fee for the consideration and issuance of a sewage permit for the repair of any existing sewage system shall be computed at the current rate of the Sewage Enforcement Officer for the time required, payable by the applicant. The applicant shall pay a deposit as established in the adopted fee schedule, before any work has commenced. This deposit will be credited to the final bill.

#### Section 26.11 Report to Sate and State reimbursement to Sewage Enforcement Officer

A. The Annual Report completed by the appointed Sewage Enforcement Officer and submitted to PA DEP.

B. If approved by the Board of Supervisors, the certified Sewage Enforcement Officer(s) appointed by the Township shall apply for state reimbursement for the net expenses incurred by the Township and reimbursable mileage traveled by the Officer at the end of each calendar year for application serviced by each Officer during the year. The fee for the Annual State Report completed by each officer will be billed to the Township at the rate as set by resolution and amended from time to time.

<u>Section 26.12</u> Percolation test holes: The applicant has the option of digging the percolation test holes himself or having the holes dug by the Sewage Enforcement Officer. An additional fee, as established in the fee schedule, shall be paid by the applicant at the time of application for each six-hole percolation test if the Sewage Enforcement Officer is to dig the holes. If additional holes must be dug by the Sewage Enforcement Officer, an additional fee as established in the fee schedule shall be paid by the applicant prior to the Sewage Enforcement Officer's review of the system design.

# Article XXVII. Appeals

<u>Section 27.01</u> Appeals from decisions of the Township or its Authorized Agent under this Ordinance shall be made to the Zoning Hearing Board in writing within thirty (30) days from the date of the decision in question.

Section 27.02 The appellant shall be entitled to a hearing before the Zoning Hearing Board which shall be scheduled within sixty (60) days of receipt of the Appeal by the Zoning Hearing Board. The Zoning Hearing Board 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.

Section 27.03 A decision shall be rendered in writing within forty-five (45) days of the date of the hearing. If a decision is not rendered within forty-five (45) days of the date of the Hearing, the relief sought by the Appellant shall be deemed granted unless an extension is consented to in writing or as part of public record by the Appellant.

#### Article XXVIII. Penalties

<u>Section 28.01</u> Any person, other than a Pumper/Hauler, who violates any of the provisions of this Ordinance shall be guilty of a summary offense and, upon conviction thereof, shall be sentenced to pay a fine of not less than five hundred dollars (\$500.00) and costs, and not more than five thousand dollars (\$5,000.00) 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.

# PART 3 INDUSTRIAL / COMMERCIAL WASTEWATER

# Article XXIX. Discharge of Industrial/Commercial Wastes

Section 29.01 Purpose and Policy

- A. The Ordinance <a href="http://www.ecode360.com/10743611">http://www.ecode360.com/10743611</a> 10743611 establishes uniform requirements for direct and indirect contributors into the Marion Township wastewater collection system ("Collection System"), the wastewater interceptor systems, and the wastewater treatment facilities operated by the Enforcement Authority (collectively the "Wastewater System") and these provisions assist Marion Township and the Enforcement Authority in complying with all applicable State and federal laws including but not limited to the Clean Water Act of 1977 (33 United States Code § 1251 et seq.) and the Federal General Pretreatment Regulations (40 CFR, § 403). The objectives of these provisions are:
  - 1. To prevent the introduction of pollutants into the Wastewater System which will interfere with the operation of the Wastewater System or contaminate the resulting sludge and biosolids;
  - To prevent the introduction of pollutants into the Wastewater System that will
    pass through the Wastewater System, inadequately treated, into receiving
    waters or the atmosphere or otherwise be incompatible with the Wastewater
    System;
  - http://www.ecode360.com/10743614 10743614To help protect both personnel
    who work at the Wastewater System and to help protect the public from
    unnecessary biological or chemical hazards;
  - 4. To improve the opportunity to recycle and reclaim wastewater, sludge and biosolids from the Wastewater System;
  - 5. To provide for fees and surcharges for equitable distribution of the cost of the Wastewater System and the cost of operation of the Wastewater System;
  - 6. To enable the Enforcement Authority to comply with its National Pollution Discharge Elimination System Permit conditions, use, biosolids use and disposal requirements, and any other federal or State Laws to which the Wastewater System are subject;
  - 7. To provide a database for future facility designs and operation work.

<u>Section 29.02</u> Establishes the requirements for the regulation of direct and indirect contributors to the Wastewater System through the issuance of permits to certain nondomestic Users; and

- A. Through enforcement of general requirements for the other Users; and
- B. Authorizes monitoring, inspection, and enforcement activities; and

- C. Requires User testing and reporting; and
- D. Provides for the setting the fees for the equitable distribution of costs resulting from the treatment of nondomestic wastewater and of the costs resulting from the program established herein.

<u>Section 29.03</u> Establishes the requirements for the regulation of direct and indirect contributors to the Wastewater System through the issuance of permits to certain nondomestic Users; and

Section 29.04 Establishes fees that shall apply to all Users of the Wastewater System

<u>Section 29.05</u> Establishes fines and penalties for noncompliance with the Ordinance and further establishes additional provisions for corrective action in cases of such noncompliance.

# Article XXX. The Township of Marion Ordinance Governing the Admission of Industrial/Commercial Wastes into the Womelsdorf Authority Treatment Facilities

<u>Section 30.01</u> Establishes the requirements for the regulation of direct and indirect contributors to the Wastewater System through the issuance of permits to certain nondomestic Users; and **Section 30.02** Enforcement Authority

A. Marion Township designates and authorizes Womelsdorf Authority to serve as "Enforcement Authority" as defined in this article. Administration of this article is hereby delegated to and vested in Enforcement Authority with all the necessary authority and delegation thereof so that such Enforcement Authority may fully and completely administer this article in order to provide efficient and economic administration and to protect the POTW and the Authority's Collection System.

Article XXXI. The Township of Marion Ordinance Governing Admission of Industrial/Commercial Wastes into the Tulpehocken Township Treatment Facilities

<u>Section 31.01</u> Establishes the requirements for the regulation of direct and indirect contributors to the Wastewater System through the issuance of permits to certain nondomestic Users; and <u>Section 31.02</u> Enforcement authority

A. Marion Township hereby expressly designates and authorizes Tulpehocken Township to serve as "Enforcement Authority" as defined in this article. Administration of this article is hereby delegated to and vested in Enforcement Authority with all the necessary authority and delegation thereof so that such Enforcement Authority may fully and completely administer this article in order to provide efficient and economic administration and to protect the POTW and the Township's Collection System.

# Article XXXII. Definitions and Word Usage; Abbreviations Section 32.01 Scope:

- A. The following words, terms and phrases when used in this article shall have the meaning described in this section, except where the context specifically indicates otherwise. Whenever there is a conflict between any definitions found in a Township ordinance, law, or Marion Township Authority General Sewer Rates, Rules and Regulations and this article, the definition containing the strictest requirements, construed as in favor of the Enforcement Authority, Marion Township, and/or the Authority, shall apply.
  - ACT or THE ACT: The Federal Water Pollution Control Act, also known as the "Clean Water Act," as amended, 33 U.S.C. § 1251 et seq.
  - ACT 537: The Pennsylvania Sewage Facilities Act, Act of January 24, 1966, 35 P.S. § 750.1 et he Federal Water Pollution Control Act, also known as the "Clean Water Act," as amended, 33 U.S.C. § 1251 et seq. as amended from time to time.
  - 3. APPROVAL AUTHORITY: The Regional Administrator of the EPA.
  - 4. AUTHORITY: The Marion Township, Berks County, Pennsylvania, a municipal corporation of the commonwealth; as well as the duly qualified and acting members of the Board thereof, or its authorized deputy, agent, manager, delegate or representative, a body politic and corporate.
  - 5. AUTHORIZED REPRESENTATIVE OF AN INDUSTRIAL/COMMERCIAL USER
    - a) <a href="http://www.ecode360.com/10743635">http://www.ecode360.com/10743635</a> 10743635</a> For a corporation:
      - A responsible corporate officer of the level of president, vice
        president, secretary or treasurer of the corporation in charge of a
        principal business function, or any other person who performs similar
        policy or decision-making functions for the corporation; or
      - 2) Alternatively, the manager of one or more manufacturing, production or operation facilities employing seven (7) or more persons or having gross annual sales or expenditures exceeding \$500,000, if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

#### http://www.ecode360.com/10743635 - 10743635

- b) A general partner or proprietor if the Industrial/Commercial User is a partnership or proprietorship, respectively;
- For a federal, state, or local government, a director or the highest official appointed or designated to oversee the operation and performance of the activities of the government facility;
- d) A duly authorized representative of the individual designated above if the authorization is made in writing by the individual; or the authorization specifies either an individual or position having responsibility for the overall operation of the facilities from which the Indirect Discharge originates, such as the position of plant manager, operator of a well, or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and the written authorization is submitted to the Enforcement Authority.
- AVERAGE DAILY FLOW: A measurement of the wastewater flow calculated by dividing the total wastewater flow under consideration for the 30 days, immediately preceding the date of the calculation by the number 30.
- 7. BEST MANAGEMENT PRACTICES or BMP's: Schedules of activities, prohibitions of practices, maintenance procedures and other management practices to implement the prohibitions. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.
- BIOSOLIDS: Nutrient-rich organic material resulting from the reclamation of Wastewater.
- 9. BOD (BIOCHEMICAL OXYGEN DEMAND): The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures, for five days at 20° C. usually expressed as a concentration in milligrams per liter (mg/l). The standard laboratory procedure shall be that found in the latest EPA approved edition of "Standard Methods" published by the American Public Health Association, et al.
- 10. BYPASS: The intentional diversion of waste streams from any portion of an Industrial/Commercial User's treatment facility.
- 11. CATEGORICAL PRETREATMENT STANDARD or CATEGORICAL STANDARD: Any regulation containing Pollutant discharge limits promulgated by EPA in accordance with Sections 307(b) and (c) of The Act (33 U.S.C. § 1317) which apply to a specific category of Users and which appear in 40 CFR Chapter I, Subchapter N, Parts 405-471.
- 12. COLLECTION SYSTEM: All of the wastewater collection facilities constructed or to be constructed, owned and operated by Marion Township, which conveys

- wastewater toward the facilities, not limited to, sewers, interceptors, force mains, metering devices, pumping stations and other appurtenances.
- 13. COMPOSITE WASTEWATER SAMPLE: A combination of individual samples of water or wastewater collected at selected intervals, generally hourly for some specific period, to minimize the effect of the variability of the individual sample. Individual samples may have equal volume or may be roughly proportioned to the flow at the time of sampling.
- 14. CONTROL AGENCIES: The DEP, EPA and any and all governmental agencies including the Enforcement Authority and/or the Township, who have a right to control treatment, transportation and disposal of wastewater.
- 15. COOLING WATER: The water discharged from any recirculating, evaporative type cooling tower system or evaporative cooling pond for any use such as air-conditioning, refrigeration, process cooling system, or combination cooling and process air scrubbing water system, and in which the makeup water impurity concentrations have been elevated due to evaporation, and/or to which antiscaling chemicals, corrosion inhibition chemicals, and/or EPA approved antimicrobial chemicals have been added.
- 16. DEP: The Department of Environmental Protection of the Commonwealth or any successor thereto.
- 17. DIRECT DISCHARGE: The discharge of treated or untreated Wastewater directly to the Waters of the Commonwealth.
- 18. DISSOLVED SOLIDS: Anhydrous residues of the dissolved constituents in water or wastewater as determined by the standard laboratory procedure set forth in the latest edition of "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, et al.
- 19. ENFORCEMENT AUTHORITY: That person or entity designated by Marion Township to administer and enforce these articles.
- 20. ENVIRONMENTAL PROTECTION AGENCY or EPA: The U.S. Environmental Protection Agency, or, where appropriate, the term may also be used as a designation for the Administrator or other duly authorized official of said agency.
- 21. EXISTING SOURCE: Any source of discharge from the construction or operation of a facility which commences prior to the publication by EPA of Proposed Categorical Pretreatment Standards, which will be applicable to such source if the standard is thereafter promulgated in accordance with Section 307 of the Act.
- 22. FACILITIES: Plant No. 1, Plant No. 2 and the interceptor, collectively, together with all capital additions.
- 23. GARBAGE: The animal and vegetable solid waste resulting from the domestic and commercial preparation, cooking and dispensing of food and from handling, storage, and sale of produce.

- 24. GRAB SAMPLE: A sample which is taken from a waste stream without regard to the flow in the waste stream and over a period of time not to exceed 15 minutes.
- 25. GROUNDWATER: Water which is contained in or passing through the ground.
- 26. HOLDING TANK WASTE: Any waste from tank trucks, pump trucks, holding tanks, septic tanks, chemical toilets, campers, trailers or similar devices delivering waste of a sanitary and/or domestic origin.
- 27. IMPROVED PROPERTY: Any property upon which there is erected a structure intended for continuous or periodic habitation, occupancy or use by human beings or animals and from which structure Sanitary Wastewater and/or Industrial Wastewater shall be or may be discharged.
- 28. INDIRECT DISCHARGE: The introduction of Pollutants into the POTW from any nondomestic source regulated under Section 307(b), (c) or (d) of The Act.
- 29. INDUSTRIAL PRETREATMENT PROGRAM: A program administered by the Owner of the POTW that meets the criteria established in 40 CFR §§ 403.8 and 403.9, and which has been approved by a regional administrator or State director in accordance with 40 CFR § 403.11 and which has been approved by the Enforcement Authority.
- 30. INDUSTRIAL USERS and INDUSTRIAL/COMMERCIAL USERS: A source engaged in commercial or industrial activities of Indirect Discharge which does not constitute a "discharge of Pollutants" under regulations issued pursuant to Section 402 of The Act (33 U.S.C. § 1342).
- 31. INDUSTRIAL WASTE/INDUSTRIAL WASTEWATER: Solid, liquid or gaseous substances, waterborne waste or form of energy discharged or escaping in the course of any industrial, manufacturing, trade, or business process or in the course of development, recovering or processing of natural resources, but not Sanitary Wastewater. Including any and all wastes, other than Sanitary Wastewater, discharged from industrial establishments, certain commercial establishments, including but not limited to hospitals and restaurants, and other similar business or institutional activities, and additionally in any other respects as such term is defined in the Pennsylvania Clean Streams Law, Act of June 22, 1937, as amended, 35 P.S. § 691.1 et seq. (the "Clean Streams Law").
- 32. INSTANTANEOUS MAXIMUM ALLOWABLE DISCHARGE LIMIT: The maximum concentration of a Pollutant allowed to be discharged at any time, determined from the analysis of any discrete or composite sample collected, independent of the industrial flow rate and the duration of the sampling event.
- 33. INTERCEPTOR: The Interceptor Sewer owned by the Womelsdorf Authority and leased to the Womelsdorf Borough and Marion Township commencing at a point of connection with Womelsdorf Collection System and extending in and through portions of the Borough of Womelsdorf and Marion Township discharging at Plant No. 1. This Interceptor is a gravity sewer main.
- 34. INTERFERENCE: A discharge which, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the POTW, its treatment

processes or operations, or its Sludge processes and/or Biosolid's processes, use or disposal; and, therefore, is a cause of:

- a) A violation of any Requirement of the NPDES Permit (including an increase in the magnitude or duration of a violation); and/or
- The prevention of Sludge and/or Biosolids use or disposal by the POTW in accordance with Section 405 of The Act, or any criteria, guidelines, or
- c) the regulations developed pursuant to the Solids Waste Disposal Act (SWDA) including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), the Clean Air Act, the Toxic Substances Control Act, the Marine Protection, Research and Sanctuaries Act, or more stringent State criteria, including those contained in any State Sludge management plan prepared pursuant to Title IV (Subtitle D) of SWDA applicable to the method of disposal or use employed by the POTW.
- 35. INTERMUNICIPAL GROUP (or THE "IMG"): The committee made up of appointees of the Municipalities which are parties to the Sewer Service Agreements (or as may be amended from time to time), with respect to the Womelsdorf Borough Authority Wastewater Facilities and the Tulpehocken Township Wastewater Facilities.
- 36. MANHOLE: A structure leading from the surface of the ground to a Sewer, permitting access to the Sewer.
- 37. MGD: A million gallons per day, based on Average Daily Flow.
- 38. mg/l: Milligrams per liter.
- 39. MUNICIPALITY: Any county, county authority, municipal authority, city, borough, township, or school district, or any general purpose unit of local government.
- 40. MUNICIPAL OWNER: The Municipality that owns any portion of any Collection System that may be used for the conveyance of Sanitary Wastewater and/or Industrial Wastewater from a User.
- 41. NATIONAL CATEGORICAL PRETREATMENT STANDARD or PRETREATMENT STANDARD: Any regulation containing Pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of The Act (33 U.S.C. § 1317) which applies to a specific category of Industrial Users and which appears in 40 CFR, Chapter I, Subchapter N, §§ 405-471. (Same as Categorical Pretreatment Standard or Categorical Standard.)
- 42. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT or NPDES PERMIT: A permit issued pursuant to § 402 of The Act (33 U.S.C. § 1342).

43. NATIONAL PROHIBITIVE DISCHARGE STANDARD or PROHIBITIVE DISCHARGE STANDARD: Any regulation developed under the authority of § 307(b) of The Act and 40 CFR § 403.5.

#### 44. NEW SOURCE:

- a) any building, structure, facility or installation from which there is or may be a discharge of Pollutants, the construction of which commenced after the publication of proposed Pretreatment Standards under Section 307(c) of The Act which will be applicable to such source if such Standards are thereafter promulgated in accordance with that section provided that:
- b) <a href="http://www.ecode360.com/10743682">http://www.ecode360.com/10743682</a> 10743682
   The building, structure, facility or installation is constructed at a site at which no other source is located; or
- The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of Pollutants at an Existing Source; or
- d) The production or Wastewater generating processes of the building, structure, facility or installation are substantially independent of an Existing Source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is engaged in the same general type of activity as the Existing Source should be considered.
- e) Construction on a site at which an Existing Source is located results in modification rather than a New Source if the construction does not create a new building, structure, facility or installation meeting the criteria described herein but otherwise alters, replaces or adds to existing process or production equipment.
- f) <a href="http://www.ecode360.com/10743681">http://www.ecode360.com/10743681</a>- 10743681 Construction of a New Source as defined under this subsection has commenced if the Owner or operator has:
  - Begun, or caused to begin as part of a continuous on-site construction program:
  - 2) Any placement, assembly, or installation of facilities or equipment; or
  - Significant site preparation work including clearing, excavation or removal of existing buildings, structures or facilities which is necessary for placement, assembly or installation of New Source facilities or equipment; or

- 4) Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used within a reasonable time. Options to purchase or contracts, which can be terminated or modified without substantial loss, and contracts of feasibility, engineering and design studies do not constitute a contractual obligation under this subsection.
- 45. NEW USER: A new connection generating a new Wastewater flow and/or an existing consumer and point of connection that is one or more of the following:
  - a) <a href="http://www.ecode360.com/10743692">http://www.ecode360.com/10743692</a> 10743692 Applying for an increase in building size or sewer usage by way of land development approval or planning module approval or application for reserved sewer capacity; and
  - b) An existing consumer at an existing point of connection or a new point of connection who is or is not expanding or modifying their building but who is expanding, changing or intensifying the use of their property in such a way as to add residential dwelling units or commercial or industrial establishments or portions thereof or change or intensify the use of the property served by the POTW;
  - c) An existing consumer at an existing point of connection who is not expanding their building or changing their usage but is generating a substantial increase in flow, with their existing facilities.
  - 46. NONCONTACT COOLING WATER: Water used for cooling to which the only Pollutant added is heat and which does not come into direct contact with any raw material, chemicals added for scale and corrosion inhibition, antimicrobial chemicals, intermediate product, waste product, or finished product.
  - 47. OWNER: Any Person vested with ownership, legal or equitable, sole or partial, of an Improved Property.
  - 48. PASS THROUGH: A discharge which exits the POTW into the waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any Requirement of any applicable NPDES Permit (including an increase in the magnitude and duration of violation).
  - 49. PEAK FLOW: Any flow which exceeds 1.7 times the Average Daily Flow.
  - 50. PERSON: Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity or their legal representatives, agents or assigns. The masculine gender shall include the feminine and/or neuter, and the singular shall include the plural where indicated by the context.

- 51. pH: The reciprocal of the logarithm, Base 10, of the hydrogen ion concentration, and is used as an indicator of the acidity or alkalinity of a solution, expressed in standard units.
- 52. PLANT: Plant No. 1 or Plant No. 2, as applicable.
  - a) PLANT NO. 1: The Sewage treatment Plant and facilities, located in Heidelberg Township, owned by Womelsdorf Authority and operated by Womelsdorf Authority, together with any capital additions thereto.
  - b) PLANT NO. 2: The Sewage treatment Plant and facilities located in Mt. Aetna Village, Tulpehocken Township, owned by Tulpehocken Township, and operated by Tulpehocken Township, together with any capital additions thereto.
- 53. POLLUTANT: Any dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, biosolids, munitions, filter backwash, medical wastes, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste and certain characteristics of Wastewater (e.g., pH, temperature, SS, turbidity, color, BOD, COD, toxicity, or odor).
- 54. POLLUTION: The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.
- 55. POTW: See "Publicly Owned Treatment Works."
- 56. POTW TREATMENT PLANT: That portion of the POTW designed to provide treatment of Wastewater.
- 57. PRETREATMENT: The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to, or in lieu of, discharging or otherwise introducing such pollutants into the Facilities and/or a POTW. The reduction or alteration can be obtained by physical, chemical or biological processes; by process changes; or by other means, except by diluting the concentration of the Pollutants unless allowed by an applicable Pretreatment Standard.
- 58. PRETREATMENT REQUIREMENTS: Any substantive or procedural Requirement related to Pretreatment imposed on a User, other than a National Pretreatment Standard.
- 59. PRETREATMENT STANDARDS or STANDARDS: Prohibited Discharge Standards, Categorical Pretreatment Standards, and local limits.
- 60. PUBLICLY OWNED TREATMENT WORKS or POTW: A "treatment works" as defined by Section 212 of The Act (33 U.S.C. § 1292), which is owned by the Womelsdorf Borough, the Womelsdorf Borough Authority or Tulpehocken Township, the Municipal Owners. This definition includes any devices and systems used in the collection, transfer, storage, treatment, recycling and reclamation of Sewage or Industrial Wastes of a liquid nature. It also includes

- pipes, sewers, and other conveyances only if they convey Wastewater to a POTW Treatment Plant.
- 61. REQUIREMENT(S): Any and all local, State and federal laws, case law, statutes, regulations (including but not limited to this article), rules, guidelines, policies, permits, approvals, and other Standards or Requirements of Control Agencies, as amended and/or changed.
- 62. SANITARY SEWER: A Sewer which carries Sanitary Wastewater and/or authorized Industrial/Commercial wastes and to which stormwater, surface water, and groundwater are not intentionally admitted.
- 63. SANITARY WASTEWATER: All normal water-carried household and toilet waste from kitchens, water closets, lavatories, laundries and bathrooms, especially, but not limited to, wastes typical to households, from sanitary conveniences wherever located or existing.
- 64. SEPTIC TANK WASTE: Waste from a settling tank in which settled Sludge is in immediate contact with the wastewater flowing through the tank and the organic solids are decomposed by anaerobic bacterial action.
- 65. SEWAGE: All water-carned waste defined as Sewage in Act 537, including sanitary wastewater and industrial wastewater.
- 66. SEWER: A pipe or conduit for carrying sanitary wastewater, or authorized industrial wastewater.
- 67. SEWER SERVICE AGREEMENT (or THE "AGREEMENT"): The Intermunicipal Agreement setting forth the provisions for providing conveyance and treatment of sanitary wastewater and industrial wastewater by the Borough of Womelsdorf and providing for the sharing of costs and responsibilities of the Municipal Owners, including the Borough of Womelsdorf and Womelsdorf Borough Authority for this conveyance and treatment.
- 68. SIGNIFICANT INDUSTRIAL USER (SIU):
  - a) A User subject to Categorical Pretreatment Standards; or
  - b) A User that:
    - Discharges an average of 25,000 gallons per day or more of process Wastewater to the Facilities and/or POTW (excluding Sanitary, noncontact cooling and boiler blow down Wastewater); or
    - Contributes a process waste stream which makes up 5% or more of the average dry weather hydraulic or organic capacity of any individual POTW Treatment Plant; or

- 3) Has in its wastes toxic Pollutants as defined pursuant to § 307 of The Act or Pennsylvania statutes and rules; or
- 4) Is designated as such by the Enforcement Authority, DEP, or the EPA on the basis that it has a reasonable potential for adversely affecting the Facilities operation and/or the POTW's operation or for violating any Pretreatment Standard or Requirement.
- e) Upon a finding that a User has no reasonable potential for adversely affecting the Facilities; and/or the POTW's operation or for violating any Pretreatment Standard or Requirement, the Enforcement Authority may at any time, on its own initiative or in response to a petition received from a User, and in accordance with procedures in 40 CFR 403.8(f)(6), determine that such User should not be considered a Significant Industrial User.

# 69. SIGNIFICANT NONCOMPLIANCE (SNC) FOR SIGNIFICANT INDUSTRIAL USERS (SIUs):

- a) Chronic violations of Wastewater discharge limits, defined here as those in which 66% or more of all of the Wastewater measurements, including laboratory analyses taken during a six-month period, exceed a numeric pretreatment standard or requirement or instantaneous limits by any amount;
- b) Technical Review Criteria (TRC) violations, defined here as those in which 33% or more of all of the wastewater measurements, including laboratory analyses for each pollutant parameter taken during a six-month period, equals or exceeds the product of the numeric pretreatment standard or requirement including instantaneous limits multiplied by the applicable factors listed herein. The TRC factors are listed as follows: 1.4 for BOD, SS and fats, oils and grease and 1.2 for all other Pollutants except pH;
- c) Any other discharge violation of a pretreatment standard or requirement that the Enforcement Authority determines has caused, alone or in combination with other discharges, Interference or Pass Through or has endangered the health of POTW personnel or the general public;
- d) Any discharge of a Pollutant that has caused an imminent endangerment to the public or to the environment or has resulted in the Enforcement Authority's exercise of its emergency authority to halt or prevent such a discharge;

- e) Failure to meet, within 90 days after the scheduled date, a compliance schedule milestone contained in an Industrial Waste Discharge Permit or enforcement order for starting construction, completing construction or attaining final compliance;
- f) Failure to provide, within 45 days after the due date, any required reports, including baseline monitoring reports, compliance reports, periodic selfmonitoring reports and reports on compliance with compliance schedules;
- g) Failure to accurately report noncompliance; or
- h) Any other violation or group of violations which may include a violation of best management practices which the Enforcement Authority determines will adversely affect the operation of the Facilities or the implementation of the Enforcement Authority's Pretreatment Program.
- 70. SLUDGE: The accumulated solids separated from liquids, such as Wastewater, during processing, and/or the precipitate resulting from coagulation or sedimentation of Wastewater.
- 71. SLUG or SLUG LOAD: A discharge at a flow rate or concentration which could cause a violation of the prohibited Discharge Standards, including, but not limited to, an accidental spill or noncustomary batch discharge.
- 72. STANDARD INDUSTRIAL CLASSIFICATION (SIC): A classification pursuant to the Standard Industrial Classification Manual issued by the United States, Office of Management and Budget.
- 73. STANDARD METHODS: An abbreviated expression used to denote "Standard Methods for the Examination of Water and Waste Water," a manual published by the American Public Health Association specifying official analytical procedures for the measurement of Wastewater parameters.
- 74. STATE: Commonwealth of Pennsylvania.
- 75. STORMWATER: Any flow occurring during or following any form of natural precipitation and resulting from such precipitation, including snow melt.
- 76. SUPERINTENDENT: The person(s) designated by the Enforcement Authority to supervise the operation of the Facilities and who is charged with certain duties and responsibilities by this article, or his duly authorized representative.
- 77. SUSPENDED SOLIDS (SS): The total suspended matter, that floats on the surface or is suspended in the water, wastewater or other liquids and is removable by laboratory filtering.
- 78. TOTAL SOLIDS: The sum of dissolved and undissolved constituents in water or wastewater, as determined by laboratory analysis in accordance with "Standard Methods."
- 79. TOXIC SUBSTANCES: Any substance or combination of substances that:

- a) Is listed as toxic in regulations promulgated by the Administrator of the Environmental Protection Agency under the provision of Section 307(a) of The Act, or other Acts; or
- b) Is present in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with the operation of the POTW including any Wastewater treatment process, to constitute a hazard to humans or animals, to create a public nuisance, or to create any hazard in the POTW or in the receiving waters of the POTW.
- 80. UNAUTHORIZED WASTE: Any waste which is not in compliance with the provisions of this article, or which is discharged into the POTW by a Person in violation of any provision contained in this article.
- 81. USER: A source of Indirect Discharge or Wastewater into the POTW and/or any Person who contributes, causes or permits contribution of discharge or Wastewater into the POTW.
- 82. WASTEWATER: The liquid and water-carried industrial or domestic wastes from dwellings, commercial buildings, industrial facilities, and institutions, together with any Groundwater, surface water, and Stormwater that may be present, whether treated or untreated, which is contributed into or permitted to enter the POTW.
- 83. WASTEWATER SYSTEM: The wastewater Collection Systems, pumping stations, Interceptor systems and treatment Plants, operated by the Municipalities and/or their Authorities and which directs flow to the Womelsdorf Borough Authority or the Tulpehocken Township wastewater treatment plants.
- 84. WATERS OF THE COMMONWEALTH: All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulation of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the commonwealth or any portion thereof.
- B. Whenever the first letter of a defined term is capitalized in this article, it shall be used as defined. Un-capitalized terms defined herein shall have their common and ordinary meaning.
- C. Whenever the term "shall" is used in this article, it is mandatory; "may" is permissive.
- D. Any other term used herein shall be defined by the definitions established in the following documents:
  - The Marion Township general Sewer Rates, Rules and Regulations, and if none appear the;
  - 2. The Sewer Service Agreement;
  - 3. The Department of Environmental Protection of the Commonwealth of Pennsylvania Regulations, and if none appear there;

- 4. The U.S. Environmental Protection Agency Regulations
- E. The first letters of all references to Enforcement Authority forms and all fees are also capitalized, but such terms are not defined.

#### F. Interpretations

- 1. The words "hereof," "herein," "hereto," "hereby," and "hereunder" refer to this article.
- Every "request," "requisition," "order," "demand," "application," "notice,"
  "statement," "certification," "consent" or similar action hereunder shall, unless
  the form thereof is specifically provided, be in writing signed by a duly
  authorized officer of the Person making, sending, issuing or publishing the
  item.
- 3. Words importing Persons include firms, associations, corporations, and all parties hereto and all words imparting the singular number include the plural number and vice versa.

4. The following abbreviations shall have the designated meanings:

ВМР	Best Management Practice
BOD	Biochemical Oxygen Demand
CFR	United States Code of Federal Regulations
COD	Chemical Oxygen Demand
DEP	Department of Environmental Protection
EPA	United States Environmental Protection Agency
GPD	Gallons Per Day
ı	Liter
mg	Milligrams
MGD	Million Gellons Per Day
mg/l	milligrams Per Liter
NPDES	National Pollutant Discharge Elimination System
POTW	Publicly Owned Treatment Works
sic	Standard Industrial Classification
ss	Suspended Solids
U.S.C.	United States Code

#### Section 32.02 Regulation of discharge of industrial/commercial wastes

# A. General prohibitions

- No User shall introduce or cause to be introduced, directly or indirectly, into
  the POTW any Pollutant or Wastewater which will Pass Through or interfere
  with the operation or performance of the POTW. These general prohibitions
  apply to all Users of the POTW, whether or not the User is subject to National
  Categorical Pretreatment Standards or any other National, State, or local
  Pretreatment Standards or Requirements.
- B. No User shall introduce or cause to be introduced, directly or indirectly, any stormwater, surface water, spring water, groundwater, roof runoff, subsurface drainage, building foundation drainage, or cellar drainage, into the POTW. No User shall introduce or cause to be introduced, directly or indirectly, into the POTW any of the following pollutants, substances, or wastewater.
  - 1. Any liquids, solids, or gases which by reason of their nature or quantity are, or may be, sufficient, either alone or by interaction with other substances, to cause fire or explosion or be injurious in any other way to the POTW or their operating personnel, or to the operation of the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 140° F. or 60° C. using the test methods specified in 40 CFR § 261.21. At no time shall two successive readings on an explosion hazard meter, at the point of discharge into the system (or at any point in the system) be more than 5% nor any single reading be over 10% of the lower explosive limit (LEL) of the meter.
  - Prohibited materials include, but are not limited to: gasoline, fuel oil, kerosene, naphtha, benzene, toluene, xylene, paint products, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides, and any other substances which the Enforcement Authority, the State or EPA has notified the User is a fire hazard or a hazard to the POTW.
  - Wastewater having a stabilized pH, as defined in Subsection C(4) (Table 1)
    or Wastewater having any other corrosive or scale forming property capable
    of causing damage or hazard to structures, equipment, biological and/or
    bacterial action or, damages to process, and/or injury to personnel of the
    POTW.
  - 4. Any solids or viscous substances which may cause obstruction to the flow in a Sewer or Collection System or other interference with the operation of the POTW such as, but not limited to, fats, oils and grease, garbage with particles greater than 1/2 inch in any dimension, animal guts or tissues,

paunch manure, bones, hair, hides or fleshings, entrails, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, cotton, wool, plastics, gasoline, tar, asphalt residues, residues from refining, or processing of fuel or lubricating oil, mud, glass grinding or polishing wastes, bentonite, lye, building materials, rubber, leather, porcelain, china, ceramic wastes, polishing wastes, or other solid or viscous substances capable of causing obstruction or other interference with the operation of the POTW.

- Pollutants, including oxygen-demanding Pollutants (BOD, etc.) released in a discharge at a flow rate and/or Pollutant concentration which, either singly or by interaction with other Pollutants, will cause Interference with the POTW.
- 6. Wastewater having a temperature at the point of User discharge higher than 150° F., or any Wastewater which will inhibit biological activity at the POTW(s) but in no case may Wastewater which causes the temperature at the influent of the POTW to exceed 104° F. (40° C.), or is less than 32° F. (0° C.).
- Pollutants containing any petroleum oil, non-biodegradable cutting oil or products of mineral oil origin in an amount that will cause Interference or Pass Through.
- 8. Pollutants which result in the presence of toxic gases, vapors, or fumes, within the POTW in a quantity that may cause acute worker health and safety problems.
- Trucked or hauled pollutants, except at discharge points and except using procedures as approved by the Enforcement Authority, in accordance with this article.
- 10. Noxious or malodorous liquids, gases, or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance, or to prevent entry into the POTW for maintenance and repair, or that may cause acute worker health and safety problems.
- 11. Liquids, gases or solids which impart color which cannot be removed by normal methods or the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions, which consequently impart color to the POTW's effluent, thereby violating the NPDES Permit. Color (in combination with turbidity) shall not cause the POTW effluent to reduce the depth of the compensation point for photosynthetic activity by more than 10% from the seasonably established norm for aquatic life.
- 12. Any radioactive materials or isotopes of such half-life or concentration as may exceed applicable local, State or federal regulations.

- 13. Stormwater, surface water, spring water, contaminated or uncontaminated Groundwater, artesian well water, remediated contaminated groundwater, roof runoff, subsurface drainage, building foundation drainage, or cellar drainage.
- 14. Any Toxic Substances in sufficient quantity which, either singly or by interaction with other Wastewater or Pollutants, may injure or interfere with any Wastewater treatment process, may constitute a hazard to humans or animals, or may create a toxic effect in the receiving waters of the POTW.
- 15. Any substance which may cause the POTW's effluent or any other product of the POTW, such as residues, Sludge, Biosolids, or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case shall a substance discharged to the POTW cause the POTW to be in noncompliance with Sludge and/or Biosolids recycling or disposal criteria 40 CFR (503), guidelines or regulations developed under § 405 of The Act; any criteria, guidelines or regulations affecting Sludge and/or Biosolids use or disposal developed pursuant to the SWDA, the Clean Air Act, the Toxic Substance Control Act or State criteria applicable to the Sludge and/or Biosolids management method being used.
- 16. Any substance which will pass through, and as a result cause the POTW(s) to violate its NPDES Permit, or its DEP Permit or the receiving stream's water quality Standards.
- 17. Any lagoon wastes.
- 18. Wastewater of such character and quantity that unusual attention or expense is required to handle such materials in the POTW, as determined by the Enforcement Authority, or in the case of the portions of the POTW owned by Municipal Owners or as determined by the Municipal Owner of an applicable Collection System.
- 19. Any Wastewater of such character and quantity that unusual attention or expense is required to handle it at the Facilities, except as may be subject to a "Surcharge" and approved by the Enforcement Authority.
- 20. Any waste listed as hazardous or having the characteristics of hazardous waste as listed in 40 CFR 261.
- C. No User shall introduce or cause to be introduced whole blood, directly or indirectly, into the POTW unless specifically authorized by the Enforcement Authority.
  - 1. Such authorization shall be limited to a maximum of 12 gallons per day allowable flow from any User.
  - Such authorization shall be by way of a permit condition for those Users that require Industrial Waste Discharge Permits (i.e., Major or Minor Industrial

Users) or by way of written letter of authorization for permit exempt Industrial Users.

- D. No User shall introduce or cause to be introduced boiler blow down, directly or indirectly, into the POTW unless specifically authorized by the Enforcement Authority. Such authorization shall be limited to only those Users that can demonstrate to the Enforcement Authority that their boiler blow down will not cause a violation of any discharge criteria listed in this article, including but not limited to temperature and pH criteria. Such authorization shall be by way of permit conditions for those Users that require Industrial Waste Discharge Permits (i.e., Major or Minor Industrial Users) or by way of written letter of authorization for permit exempt Industrial Users.
- E. No User shall introduce or cause to be introduced non-contaminated and/or Noncontact Cooling or process water and/or condensate into the POTW unless specifically authorized by the Enforcement Authority. Such authorization shall be limited to a maximum of one quarter gallon per minute or 360 gallons per day allowable flow from any User. Such authorization shall be by way of a permit condition for those Users that require Industrial Waste Discharge Permits (i.e., Major or Minor Industrial Users) or by way of written letter of authorization for permit exempt Industrial Users.

# Article XXXIII.National Categorical Pretreatment Standards - The Categorical Pretreatment Standards Found at 40 CFR Chapter I, Subchapter N, Parts 405-471, are Hereby Incorporated.

<u>Section 33.01</u> Where a Categorical Pretreatment Standard is expressed only in terms of either the mass or the concentration of a Pollutant in Wastewater, the Enforcement Authority may impose equivalent concentration or mass limits in accordance with 40 CFR 403.6(c).

<u>Section 33.02</u> When Wastewater subject to a Categorical Pretreatment Standard is mixed with Wastewater not regulated by the same standard, the Enforcement Authority shall impose an alternate limit using the combined waste stream formula in 40 CFR 403.6(e).

<u>Section 33.03</u> A User may obtain an EPA variance from a Categorical Pretreatment Standard if the Industrial User can prove, pursuant to the procedural and substantive provisions in 40 CFR 403.13, that factors relating to its discharge are fundamentally different from the factors considered by EPA when developing the Categorical Pretreatment Standard.

<u>Section 33.04</u>. An Industrial User may obtain a net gross adjustment to a Categorical Standard in accordance with 40 CFR 403.15.

#### Article XXXIV. Local limits

<u>Section 34.01</u> Local limits on the concentration of special Pollutants are hereby established for all Industrial Users as listed in Table 1 in this section. These limits were established in accordance with 40 CFR 403.5(C).

<u>Section 34.02</u> The Enforcement Authority reserves the right to establish alternate special Pollutant discharge limitations in individual Industrial Waste Discharge Permits, but only in accordance with regulatory Requirements.

<u>Section 34.03</u> At no time will the summation of the Industrial Users' discharges be greater than the allowable industrial headworks loading as defined in 40 CFR Part 403.

<u>Section 34.04</u> Pollutant discharge limitations, if more stringent than the National Categorical Pretreatment Standard shall immediately supersede that National Categorical Pretreatment Standard.

<u>Section 34.05</u> To the extent that any federal or State Requirements and limitations on discharges are more stringent than the local limits, the most stringent Requirement and limitations shall apply.

<u>Section 34.06</u> The Pollutant concentrations shall be measured in a representative sample collected at the point of discharge of the Industrial User to a public Collection System. The concentrations shall be based on a twenty-four-hour Composite Wastewater Sample, except, however, for certain Pollutants the Industrial User may request and the Enforcement Authority may allow that this concentration be determined by analyses of Grab Sample. Certain Pollutants such as temperature and grease must be determined on the basis of a Grab Sample. Sampling criteria shall be described in the Industrial Waste Discharge Permit.

# Section 34.07 Maximum allowable monthly average concentration

Maximum Allowable Month	ly Average Concentration**[	local limit (mg/l)]
	Service Area	
Pollutant(Total)	WWTP#1	WWTP#2
Arsenic	0.05	0.077
Cadmium	0.05	0.144
Chromium (Hex)	0.14	1.27
Chromium (Total)	2.41	-
Copper	0.54	2.82
Lead	0.36	0.99
Mercury	0.007	0.043
Molybdenum	0.145	0.61
Nickel	0.848	4.06
Oil and grease	100	100
Selenium	0.032	0.41
Silver	1.01	-
Zinc		-
pH*	Standard units 5.0 - 12.5	
NOTES:		
pH is expressed as an uppe	r and lower limit, not a maxi	mum allowable concer

<u>Section 34.08</u> If the Pollutant concentrations or loads in excess of those specified in this article are discharged, or are proposed to be discharged to the POTW, or which, in the judgment of the Enforcement Authority, Pollutant concentrations and/or loads may have a deleterious effect upon the POTW, the Enforcement Authority may do any or all of the following and/or take additional actions as may be provided herein upon giving notice to the Industrial User and/or discharger:

- A. Require, by way of informal notice, by telephone, to the Industrial User, immediate discontinuance of the waste discharge until such time as it meets the Requirements.
  - Reject the waste.
  - 2. Require Pretreatment to reduce characteristics to maximum limits permitted by this article.
  - 3. Require control over the quantities and rates discharge.

<u>Section 34.09</u> In no circumstance shall an Industrial User discharge or cause to be discharged into the POTW any of the substances listed or referenced herein, without first filing an Industrial Waste Discharge Permit Application and receiving written approval by the Enforcement Authority.

<u>Section 34.10</u> Whenever a Person has received written authorization from the Enforcement Authority to discharge any polluted water, Wastewater or Industrial Waste containing any of the substances or possessing any of the characteristics described or referred to herein, such discharge shall be subject to the continuing approval, inspection and review of the Enforcement Authority.

Section 34.11 The Industrial User is also subject to the Regulations of the Authority. If, in the opinion of the Enforcement Authority or, if applicable, the Authority, such discharges are causing or will cause damage to the POTW, the Enforcement Authority, or, if applicable, the Authority shall order the Person causing such discharge to cease doing so forthwith, or take other appropriate action, as may be required by the Enforcement Authority or, if applicable, the Authority, to eliminate the harmful discharge.

<u>Section 34.12</u> No Industrial User shall ever increase the use of process water, or in any way attempt to dilute a discharge, as a partial or a complete substitute for adequate treatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable Pretreatment Standard or Requirement. The Enforcement Authority may impose mass limitations on Industrial Users who are using dilution to meet applicable Pretreatment Standards or requirements; or in other cases when the imposition of mass limitations is appropriate

#### Article XXXV. Pretreatment Requirements

<u>Section 35.01</u> Industrial Users shall design, construct, operate and maintain Pretreatment facilities whenever necessary to reduce Pollutant concentrations and/or amounts or Industrial Users shall modify their Wastewater to achieve compliance with this article. The review or approval of Pretreatment facility plans, specifications and operating procedures by the Township, the Enforcement Authority and its consulting engineer's shall not excuse, mitigate or provide any defense to any violations by the Industrial User, of this article or any federal, State or local Requirements.

<u>Section 35.02</u> The construction of required Pretreatment facilities shall be accomplished in accordance with a responsible completion schedule prepared by the Industrial User and approved by the Township and the Enforcement Authority. If, in the opinion of the Township and the Enforcement Authority, the schedule prepared by the Industrial User is not reasonable, a completion schedule shall be established by the Township and the Enforcement Authority.

<u>Section 35.03</u> Any Industrial User required by the Township and the Enforcement Authority to provide Pretreatment facilities, or desiring to, or required to modify existing Pretreatment facilities shall not commence construction or modifications of such Pretreatment facilities until:

- Construction drawings, specifications, completion schedule and other pertinent information relating to the proposed facilities have been submitted to the Township and the Enforcement Authority; and
  - 1. The Township and the Enforcement Authority provide written approval for the construction of the proposed facilities.

<u>Section 35.04</u> When approved in writing by the Township and the Enforcement Authority and placed in operation, Pretreatment facilities shall be continuously maintained in satisfactory and effective operation by the Industrial User, at his sole expense. The Township and the Enforcement Authority shall have the right to inspect said Pretreatment facilities at any reasonable time to insure such are being properly maintained and operated.

<u>Section 35.05</u> Industrial Users with the potential to discharge flammable substances may be required to install and maintain an approved combustible gas detection meter.

Section 35.06 Accidental discharge/slug load control plans.

- A. The Township and the Enforcement Authority shall evaluate at least once which Industrial Waste Discharge Permit holders need an Accidental Discharge/Slug Control Plan with reevaluations as necessary. The Township and the Enforcement Authority may require any Industrial User to develop, submit for approval, and implement such a plan. Alternatively, the Township and the Enforcement Authority may develop such a plan for any Industrial User. An accidental discharge/Slug control plan shall address, at a minimum, the following:
  - Description of discharge practices, including nonroutine batch discharges;
  - Description of stored chemicals;

- 3. Procedures for immediately notifying the Enforcement Authority of any accidental spill or Slug discharge;
- 4. Procedures to prevent adverse impact from any accidental or Slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic Pollutants, including solvents, and/or measures and equipment for emergency response.

#### Article XXXVI. Miscellaneous Regulations

<u>Section 36.01</u> Drainage of swimming pools: filter backwash lines shall be discharged to the POTW as follows:

- A. Sand filter backwash may be discharged directly to the POTW.
- B. Diatomaceous earth filter backwash shall be prohibited from discharge to the POTW.

Section 36.02 Fats, grease, oil or sand traps: Fats, grease, oil, or sand traps shall be installed by the Industrial User when, in the opinion of the Township and the Enforcement Authority, they are necessary for the proper handling of liquid wastes containing floatable grease in such amounts as are likely to cause obstruction to the flow in a Sewer or Collection System or other Interference with the operation of the POTW, or are necessary for the proper handling of any flammable waste, sand, or other harmful ingredients. All such traps shall be of a type and capacity acceptable to the Enforcement Authority and/or the Authority and shall be located as to be readily and easily accessible for cleaning and inspection. In maintaining the fats, grease, oil or sand traps, the Industrial User and the Owner(s) (if different Persons) shall be responsible for the proper removal and disposal by appropriate means of the captured material and shall maintain records of the dates and means of disposal which are subject to review by the Enforcement Authority and/or the Authority. Any removal and hauling of the collected materials not performed by Industrial User's and/or Owner's personnel must be performed by currently licensed waste disposal firms.

<u>Section 36.03</u> Garbage grinders: The use of mechanical Garbage grinders producing a finely divided mass, properly flushed with an ample amount of water, shall be discouraged but may be permitted. However, no such mechanical Garbage grinder to serve premises used for nonresidential purposes shall be installed until permission for such installation is obtained from the Township and the Enforcement Authority.

A. No Garbage grinder shall be connected so as to discharge through a grease trap. Use of mechanical Garbage grinders to serve commercial purposes may result in surcharges. <u>Section 36.04</u> Flow equalization: The Township and the Enforcement Authority shall have the right to require Industrial Users having large variations in the rate or strength of waste discharged to install suitable regulating devices for equalizing flows and/or loads to the POTW.

#### Section 36.05 Hauled wastewater

- A. Septic Tank Waste may be introduced into a POTW only at locations designated by the Township and the Enforcement Authority, and at such times as are established by the Township and the Enforcement Authority. Such waste shall not violate this article, requirements, or any other rules established by the Enforcement Authority. The Township and the Enforcement Authority shall require Septic Tank Waste haulers to obtain Industrial Waste Discharge Permits.
- B. The Township and the Enforcement Authority shall require haulers of Industrial Waste to obtain Industrial Waste Discharge Permits and the Township and the Enforcement Authority may require generators of hauled Industrial Waste to obtain Industrial Waste Discharge Permits. The Township and the Enforcement Authority also may prohibit the disposal of hauled Industrial Waste. The discharge of hauled Industrial Waste is subject to all other Requirements and this article.
- C. No load may be discharged without prior consent of the Township and the Enforcement Authority. Industrial Waste haulers may discharge loads only at locations designated by the Township and the Enforcement Authority. The Township and the Enforcement Authority may collect samples of each hauled load to ensure compliance with applicable Standards. The Enforcement Authority may require the Industrial Waste hauler to provide a waste analysis of any load prior to discharge.
- D. Industrial Waste haulers must provide a waste-tracking form for every load. This form shall include, at a minimum, the name and address of the Industrial Waste hauler, permit number, truck identification, names and addresses of sources of waste, and volume and characteristics of waste. The form shall identify the type of industry, known or suspected waste constituents, and whether any wastes are RCRA hazardous wastes.

#### Article XXXVII. Administration and Permits

# Section 37.01 Industrial Waste Discharge Permit

#### A. General

 All Industrial Users connected to and using the POTW or proposing to connect and use the POTW including New Users and New Sources (as defined herein) shall apply to the Township and the Enforcement Authority for an Industrial Waste Discharge Permit. The Industrial User is required to check with the Authority to make sure the regulations are also followed.

- Certain Industrial Users will be required to obtain Industrial Waste Discharge Permits. Certain small Industrial Users will be eligible for permit exemptions, as specifically set forth herein.
- B. Permit application. All Industrial Users or proposed Industrial Users shall complete and file with the Township and the Enforcement Authority an application in the form prescribed, and accompanied by a permit application fee as may be established by the Enforcement Authority. Existing Industrial Users shall apply for an Industrial Waste Discharge Permit within 60 days after the effective date of this article. New Users shall apply at least 90 days prior to the anticipated date for connecting to and/or using a Collection System served by the Facilities. In support of the application, the User shall submit the following information:
  - Name and address of Industrial User and location of discharge, and (if different) the name and address of the Owner of the Improved Property being served;
  - 2. The name of the Municipal Owner proposed for the initial receipt of the proposed discharge of wastes;
  - 3. The wastewater's characteristics and the relationship to National Categorical Pretreatment Standards and the local limits established by Regulation.
  - 4. Sampling and analysis for this information shall be performed in accordance with techniques prescribed in 40 CFR Part 136, unless otherwise specified in an applicable Categorical Pretreatment Standard. If 40 CFR Part 136 does not contain sampling or applicable techniques for the Pollutant in question, sampling and analysis shall be performed in accordance with procedures approved by EPA Standard Industrial Classification (SIC) codes of Wastewater characteristics;
  - Time and duration of Industrial Waste discharge;
  - Average daily and peak flow rates (including daily, monthly and seasonal variations if appropriate);
  - Site plans, floor plans, mechanical and plumbing plans, and details to show all Sewers, Sewer connections and appurtenances by size, location and elevation;
  - 8. Description of process producing Industrial Waste;
  - 9. Description of product and approximate rate of production;
  - 10. Description of raw materials processed;
  - Number of employees, hours of operation, and projected hours of operation of Pretreatment system (if applicable);

- 12. Additional information required by the Township and the Enforcement Authority as necessary to evaluate the permit application.
- Application signatories and certification
- 14. All Industrial Waste Discharge Permit applications and Industrial User reports must be signed by an authorized representative of the Industrial User and contain the following certification statement: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the Person or Persons who manage the system, or those Persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
- C. The procedure to be followed by the Township and the Enforcement Authority in acting on Industrial Waste Discharge Permit Applications shall be as follows. Within 90 days of receipt of the application, the Township and the Enforcement Authority shall notify the applicant in writing by First Class mail to the address appearing on the application.
- D. That the Wastewater proposed to be discharged is acceptable and a permit will be issued by the Township and the Enforcement Authority upon receipt of a permit issuance fee as may be established by resolution; or
- E. That the Wastewater proposed to be discharged is acceptable and a permit will be issued by the Enforcement Authority upon receipt of a permit issuance fee as may be established by resolution; or
- F. That based upon the current facts as set forth in the application and accompanying data the applicant is currently exempt from permit and reporting Requirements; or
- G. That the Wastewater proposed to be discharged is unacceptable; or
- H. That the Wastewater proposed to be discharged will be acceptable and a permit will be issued by the Township and the Enforcement Authority, provided certain action is taken and maintained by the applicant, specifying the terms and conditions thereof and upon receipt of a permit issuance fee as may be established by resolution; or
- The Township and the Enforcement Authority require further information, studies or tests, specifying the Requirements thereof, before it can determine whether the proposed discharge is or is not acceptable.

#### Section 37.02 Permit classification and permit waivers.

- A. Industrial Users shall be classified for the purposes of this article into one of three categories, as follows: Major Industrial User, Minor Industrial User, Permit Exempt Industrial User.
- B. Major Industrial Users are those Industrial Users that meet any of the following conditions:
  - 1. Are Significant Industrial Users (see definition);
  - 2. Discharges more than 25,000 gpd of Industrial Wastewater;
  - Discharges more than 50 pounds per day of BOD;
  - 4. Discharges more than 50 pounds per day of Suspended Solids;
  - Discharges more than 20 pounds per day of fats, oil, or grease;
  - 6. Discharges more than three pounds per day of total Phosphorus (P);
  - 7. Discharges more than 10 pounds per day of Ammonia Nitrogen.
- C. Minor Industrial Users are those Industrial Users that do not meet the criteria to be classified as either a "Major Industrial User" or a "Permit Exempt Industrial User."
- D. Permit Exempt Industrial Users are those Industrial Users that meet all of the following criteria:
  - 1. Discharges less than 2,500 gpd;
  - Discharges less than five pounds per day of BOD;
  - Discharges less than five pounds per day of SS;
  - Discharges less than two pounds per day of fats, oils and/or grease;
  - 5. Discharges less than 0.3 pounds per day of total Phosphorus (P);
  - 6. Discharges less than one pound per day of Ammonia Nitrogen.
- E. The Township and the Enforcement Authority will determine the classification of the Industrial User based upon the information provided by the Industrial Waste Discharge Permit Application and any other information available to the Enforcement Authority.

- F. If the Industrial User is determined by the Township and the Enforcement Authority to be a Permit Exempt Industrial User, the Industrial User shall be exempt only from the permit and annual or quarterly reporting requirements (Subsection B of this section), inspection Manhole requirements (Subsection C of this section) and the surcharge payment requirements. Permit Exempt Industrial Users shall not be exempt from any other Requirements.
- G. If the Industrial User is determined by the Township and the Enforcement Authority to be a Minor Industrial User, the Industrial User shall be allowed to utilize the reduced reporting requirements specified in Subsection B herein.
- H. If upon information received from the Industrial Users and/or available to the Township and the Enforcement Authority based upon on-site inspection, flow tests or Wastewater sampling and testing, and/or available to the Township and the Enforcement Authority from other reliable sources, determines that an Industrial User's classification should change then (in that event) the Township and the Enforcement Authority shall serve notice upon the Industrial User of the proposed change(s), at least 30 days prior to the effective date of that change(s) and the Industrial User, thereafter, shall be required to comply with all Requirements imposed upon that revised classification of Industrial User.
- The flow and loading criteria set forth in this section shall be based on peak day conditions as estimated or measured.

<u>Section 37.03</u> Permit conditions. Industrial Waste Discharge Permits shall be issued subject to all provisions of this article and all other applicable Requirements, User charges and surcharges (if applicable) and fees established. Permits shall include any or all of the following:

- A. A statement that indicates Industrial Waste Discharge Permit duration, which in no event shall exceed five years;
- B. A statement that the Industrial Waste Discharge Permit is nontransferable without prior written notification to Township and the Enforcement Authority and their approval and provisions for furnishing the new Owner or operator with a copy of the existing Industrial Waste Discharge Permit;
- The unit charge or schedule of User charges and/or surcharges for the Wastewater to be discharged to the POTW;
- D. Limits on the average and maximum Wastewater characteristics;
- E. Limits on average and maximum rates and time of discharge or Requirements for flow regulation and equalization:
- F. Requirements for installation and maintenance of inspection and sampling facilities;

- G. Specifications for monitoring programs which may include sampling locations, frequency of sampling, number, types and Standards for tests and reporting schedule;
- H. Compliance schedules;
- Requirements for submission of discharge reports;
- J. Requirements for maintaining operating records relating to Wastewater discharge and affording the Township and the Enforcement Authority and the access thereto;
- K. Requirements for the installation of Pretreatment technology, Pollution control, or construction of appropriate containment devices, designed to reduce, eliminate, or prevent the introduction of Pollutants into the POTW;
- L. Requirements for the development and implementation of spill/slug control plans or other special conditions, including management practices necessary to adequately prevent accidental, unanticipated or non-routine discharge.
- M. Requirements for the development and implementation of waste minimization plans to reduce the amount of Pollutants discharged to the POTW;
- N. A statement that compliance with the Industrial Waste Discharge Permit does not relieve the permittee of responsibility for compliance with all applicable federal and State Pretreatment Standards, including those which become effective during the term of the Industrial Waste Discharge Permit;
- O. Other conditions as deemed appropriate by the Township and the Enforcement Authority for individual permittees to ensure compliance with Requirements; and;
- P. A statement that the conditions of the permit incorporate this article, as amended from time to time, and a copy of this article, as of the date of the permit issuance shall be delivered with the permit, but the lack of delivery or receipt of this article shall not be considered a defect in the permit. The Users and permittees have the availability of this article and amendment thereto at the Township and the Enforcement Authority.
- Q. Requirements for the development and implementation of best management practices necessary to ensure compliance with applicable Requirements.

Section 37.04 Permit duration: An Industrial Waste Discharge Permit shall be issued for a specified time period, not to exceed five years, or it may be issued to expire on a specific date. The Industrial User shall apply in writing for permit reissuance a minimum of 180 days prior to the expiration of an existing permit. The terms and conditions of the permit shall be subject to modification by the Township and the Enforcement Authority during the term of the permit as limitations or Requirements are modified or other just cause exists. The Township and the Enforcement Authority shall serve notice on the Industrial User of that proposed change(s) at least 30 days prior to the effective date of that change(s). Any changes or new conditions in the permit shall include a reasonable time schedule for compliance.

<u>Section 37.05</u> Permit transfer: Industrial Waste Discharge Permits are issued to a specific User for a specific operation. A permit may not be reassigned, transferred or sold to a new Owner, new User, different premises or a new or changed operation, such as a New User, without the previous written approval of the Township and the Enforcement Authority. Any application for a permit transfer must include a written certification that the new User (or new Owner, as applicable):

- A. States that the User (or Owner) has no immediate intent to change the facility's operations and processes;
- B. Identifies the specific date on which the transfer is to occur; and
- C. Acknowledges full responsibility for complying with the existing Industrial Waste Discharge Permit
- D. Waste characteristic change

<u>Section 37.06</u> Any User or Owner who is discharging Industrial Waste into the POTW and who contemplates a change in the method of operation or in the Pretreatment facilities which will alter the type of Industrial Waste then being discharged into the POTW shall apply for a new Industrial Waste Discharge Permit at least 30 days prior to such change. The revised Industrial Waste Discharge Permit will be subject to a Permit Modification Issuance Fee as may be established by resolution. Approval or disapproval of a modified permit shall be regulated by the procedures established hereunder for the issuance of an original permit.

<u>Section 37.07</u> Separation of wastes: Where the User can prove to the satisfaction of the Township and the Enforcement Authority that there is a complete separation of Sanitary Wastewaters from Industrial Wastes within an industrial establishment, with only the Sanitary Wastewater discharged to the POTW and submits a written certification that no Industrial Waste Discharge Permit will be required.

<u>Section 37.08</u> Public notification: The Township and the Enforcement Authority, at the expense of the applicant for an Industrial Waste Discharge Permit, shall publish a notice of intent to issue any initial or major modifications to an Industrial Waste Discharge Permit in a newspaper of general circulation, at least 14 days prior to issuance. The notice shall indicate a location where the application for the permit may be reviewed and an address where written comments may be submitted.

<u>Section 37.09</u> Permit appeals: Upon receipt by the Township and the Enforcement Authority of written request from an interested party, the Township and the Enforcement Authority will provide the interested party with written notice of a final permit decision by first-class mail to the address provided by that party. Any Person so notified, including the permittee, may appeal the terms of the Industrial Waste Discharge Permit, in writing, to the Township and the Enforcement Authority within 30 days of the date of notice of its issuance, subject to the following:

- A. No appeal shall be considered complete unless accompanied by the appeal fee established by resolution.
- B. Failure to submit a timely appeal shall be deemed to be a complete waiver of all rights which could have been included in the appeal.
- C. The effectiveness of the Industrial Waste Discharge Permit shall not be stayed pending final decision on the appeal.
- D. The appeal must be in writing and the Person so appealing must state the grounds for their appeal. If the appellant is the permittee, the permittee shall indicate the provisions of the permit to which objection is made, the reasons for the objection, and the alternative conditions, if any, permittee seeks to be placed in the permit.
- E. If the appellant desires a hearing on the appeal, the appellant must request a hearing in their appeal notice. Any hearing will be conducted in accordance with the provisions of the Local Agency Law, 2 Pa.C.S.A. § 551 et seq.
- F. The Township and the Enforcement Authority shall issue a written decision granting or denying the appeal, as appropriate. If, after reviewing the appeal and any evidence which may be presented, the Township and the Enforcement Authority determines that the appeal should be granted, the Township and the Enforcement Authority shall reissue the permit, as modified, or revoke the permit if the appeal requested revocation. Appeals from all final determinations of the Enforcement Authority shall be made to Berks County Court of Common Pleas in accordance with the provisions of the Local Agency Law, 2 Pa.C.S.A. § 751 et seq.

<u>Section 37.10</u> Industrial Waste Discharge Permit modifications by the Township and the Enforcement Authority: The Township and the Enforcement Authority may modify an Industrial Waste Discharge Permit for good cause, including, but not limited to, the following reasons:

To incorporate any new or revised federal, State, or local Pretreatment Standards or Requirements;

- A. To address significant alterations or additions to the Industrial User's operation, processes, or Wastewater volume or character since the time of Industrial Waste Discharge Permit issuance;
- B. A change in the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;

- Information indicating that the permitted discharge poses a threat to POTW, personnel, or the receiving waters;
- D. Violation of any terms or conditions of the Industrial Waste Discharge Permit or this article;
- E. Misrepresentations or failure to fully disclose all relevant facts in the Industrial Waste Discharge Permit application or in any required reporting;
- F. Revision of, or a grant, of variance from Categorical Pretreatment Standards pursuant to 40 CFR 403.13;
- G. To correct typographical or other errors in the Industrial Waste Discharge Permit; or,
- H. To reflect a transfer of the facility ownership or operation to a new Owner or operator,

<u>Section 37.11</u> Industrial Waste Discharge Permit revocation: The Enforcement Authority may revoke an Industrial Waste Discharge Permit for good cause, including, but not limited to, the following reasons:

- A. Failure to notify the Township and the Enforcement Authority of significant changes to the Wastewater prior to the changed discharge;
- Failure to provide prior notification to the Township and the Enforcement Authority of changed conditions;
- Misrepresentation or failure to fully disclose all relevant facts in the Industrial Waste Discharge Permit Application;
- D. Falsifying self-monitoring reports;
- E. Tampering with monitoring equipment;
- F. Refusing to allow the Township and the Enforcement Authority and/or their agents timely access to the facility premises and records;
- G. Failure to meet effluent limitations;
- H. Failure to pay fines;
- Failure to pay sewer charges and costs;
- Failure to meet compliance schedules;
- K. Failure to complete a Wastewater survey or the Industrial Waste Discharge Permit Application;
- L. Failure to provide a completed application for a permit transfer to a new User or Owner;

M. Violation of any Pretreatment Standard, requirement or any terms of the Industrial Waste Discharge Permit or this article: Industrial Waste Discharge permits shall be voidable upon cessation of operations or transfer of business ownership. All Industrial Waste Discharge Permits issued to a particular User are void upon the issuance of a new Industrial Waste Discharge Permit to that Industrial User.

#### Section 37.12 General reporting requirements for the permittee

- A. Each Major Industrial User permittee shall submit to Township and the Enforcement Authority, 10 days prior to the first day of March, June, September and December, an Industrial Waste Contribution Report.
- B. Each Minor Industrial User permittee shall submit such a report only once per year, prior to the anniversary date of its permit. The Township and the Enforcement Authority may require more than one report per year, however, as a permit condition.
- C. The Industrial Waste Contribution Report shall be on a form provided by the Township and the Enforcement Authority and shall indicate the nature and concentration of Pollutants in the Industrial Waste effluent.
- D. The waste characteristics shall be based on the results of analysis of the waste performed by a qualified laboratory acceptable to the Township and the Enforcement Authority.
- E. Upon specific approval of the Township and the Enforcement Authority the Permittee may elect to employ laboratories owned by the Industrial User or facility Owner for the analysis of certain parameters being monitored. However, at least once per year, a split sample shall be analyzed for all parameters being monitored in-house by both the in-house laboratory and a qualified independent laboratory. The results of both laboratories shall then be submitted to the Enforcement Authority for review.
- F. The Township and the Enforcement Authority may deny and/or withdraw the approval for the use of laboratories owned by the Industrial User or Owner at any time. This report shall also include the Average Daily Flow for the reporting period.
- G. At the discretion of the Township and the Enforcement Authority and in consideration of such factors as production schedules, budget cycles, etc., the Township and the Enforcement Authority may agree to alter the months during which the above reports are to be submitted.
- H. Significant Industrial Users shall also be subject to the reporting Requirements.

Section 37.13 Sampling, flow measurement, testing and inspection

- A. All Major Industrial Users and Minor Industrial Users shall install at their expense a suitable control Manhole (together with meters if required by the Township and the Enforcement Authority as a condition of the permit) and other appurtenances in the private connecting Sewer lateral to provide for inspection, sampling and measurement of the waste.
- B. The control Manhole should normally be situated on the User's premises, but the Township and the Enforcement Authority may, when such a location would be impractical or cause undue hardship on the User, allow the control Manhole to be constructed in the public street or sidewalk area and located so that it will not be obstructed by landscaping or parked vehicles.
- C. There shall be ample room in or near the control Manhole to allow accurate sampling and preparation of samples for analysis. The control Manhole, sampling and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the User.
- D. Construction of the control Manhole shall be completed within 90 days following the date of written notice by the Township and the Enforcement Authority.
- E. In the event that no control Manhole has been constructed, the control Manhole shall be considered to be the nearest downstream Manhole in the POTW to the point at which the building Sewer is connected.
- F. Users discharging Industrial Waste to the POTW shall provide the Township and the Enforcement Authority and its representatives the opportunity of access at any time, upon reasonable notice, to any Improved Property served by the POTW as shall be required for purposes of inspection, measurement, sampling, testing and records examination to ascertain whether the purpose of this article is being met and all Requirements are being complied with, and for performance of other functions relating to service rendered by the Township and the Enforcement Authority. The Township and the Enforcement Authority shall have the right to set up on the Industrial User's property such devices as are necessary to conduct sampling inspection, compliance monitoring and/or metering operations.
- G. All measurements, samplings, tests, and analysis of the characteristics of waters and wastes to which reference is made in this article shall be performed in accordance with the techniques prescribed in 40 CFR, Part 136, unless otherwise specified in an applicable Categorical Pretreatment Standard. If 40 CFR, Part 136 does not contain sampling or analytical techniques for the Pollutant in question, sampling and analysis must be performed in accordance with procedures approved by EPA.

- H. Twenty-four (24) hour Composite Wastewater Samples shall be considered the standard for all sampling performed in accordance with the Regulation, except where Grab Samples are specified in the permit. However, other appropriate sampling procedures may be acceptable at the discretion of the Enforcement Authority, if previously approved and included as part of the permit conditions.
- 1. The costs of all measurement, sampling, testing, inspection and other monitoring activities incurred by the Township and the Enforcement Authority while enforcing the provisions of this article shall be the sole responsibility of and paid by the applicable Industrial User. Such costs shall be additional User charges and shall be charged directly to the Industrial User using the same procedures for billing and collection as used for the billing and collection of surcharges.

### Section 37.14 Pretreatment charges, fees and surcharges

- A. The basis for determining charges, fees and surcharges shall be fair and equitable.
- B. Certain Users of the Facilities, however, discharge Wastewater with concentrations of BOD, Suspended Solids, Phosphorus and Ammonia Nitrogen that are significantly greater than average concentrations of these Pollution parameters. Since the Enforcement Authority has provided certain equipment and expends certain operating costs that are provided to accommodate the treatment of BOD. Suspended Solids, Phosphorus and Ammonia Nitrogen, it has been determined that those costs of equipment and operation should be allocated onto the Users on a pro rata basis for those Users that discharge their wastes with concentrations of BOD, Suspended Solids, Phosphorus and Ammonia Nitrogen that exceed the average wasteload concentrations. This allocation is hereby imposed by Surcharges as described by these Regulations. Because of the high cost of analyzing BOD, Suspended Solids, Phosphorus and Ammonia Nitrogen concentrations these Surcharges will only be imposed upon Users that generate large Wastewater flows. These surcharges are imposed only on Major and Minor Industrial Users. Discharges generated by Major Industrial Users and Minor Industrial Users containing concentrations of BOD and/or Suspended Solids in excess of 250 mg/l shall be subject to a surcharge factor. Discharges generated by Major Industrial Users and Minor Industrial Users containing concentrations of Phosphorus in excess of 15 mg/l and/or Ammonia Nitrogen concentrations in excess of 50 mg/l shall be subject to a surcharge factor. This surcharge factor shall be applied to the Standard User Fee.
- C. For the purposes of this section, the term "Standard User Fee" shall be that fee that Municipalities and/or Municipal Authorities pay to the Enforcement Authority for the pro rata cost of operation and the pro rata payment of total annual capital cost as established in accordance with the procedures of the Sewer Service Agreement.

- D. The Major Industrial User and Minor Industrial User shall be charged their regular customer charge for Wastewater. All additional charges, fees and surcharges must be paid to the Township in accordance with the Rates, Rules and Regulations of the Township.
- E. The surcharges imposed by this article, on Major and Minor Industrial Users will be imposed on the Standard User Fees as described herein, and not on the regular customer charges.
- F. The surcharge factors shall be imposed on the Standard User Fees and not on any base minimum quarterly charge.
- G. The surcharge factors shall be imposed on Standard User Fees calculated on existing Industrial User flows and not projected or future flows and, and therefore, no surcharge shall be imposed upon any User Reservation Fee or Tapping Fee that may be required by other Regulations.
- H. Surcharge factors shall be computed on the basis of the measured or estimated concentration of Pollutants for data as may be available to the Enforcement Authority. The basis for the calculation of these factors shall be average daily loading concentrations based upon 30 day averages. If the data is available and is based upon an analysis of daily testing of twenty-four-hour Composite Wastewater Samples, that data will be used to compute the surcharge factor. If less detailed data is available, the Township and the Enforcement Authority shall select the loading concentration based upon the best available information. This concentration data may, therefore, only be based upon an analysis of periodic Grab Samples. If the Industrial User objects to the loading concentration used for the calculation of these factors the Industrial User can provide the Township and the Enforcement Authority with more complete test data.
- I. The establishment of revised concentration loads for surcharge billing purposes shall be made no more frequently than annually, unless otherwise established for Major Industrial Users, as quarterly as a condition of the Industrial Waste Discharge Permit. That is, the Township and the Enforcement Authority shall establish the surcharge factor annually (except as noted) and bill for the following year using that factor.
- J. Collection: Any and all charges, costs, fees, surcharges, expenses, etc., shall in addition to other methods provided herein or in other Requirements be due and collectible by the Township and the Enforcement Authority in the same manner as Sewer charges are due and collectible by the Township and the Enforcement Authority Baseline Monitoring Report
  - Within either 180 days after the effective date of a Categorical Pretreatment Standard, or the final administrative decision on a category determination under 40 CFR 403.6(a)(4), whichever is later, existing categorical Industrial Users currently discharging to or scheduled to discharge to the POTW shall submit to the Township and the Enforcement Authority a report which

contains the required information described herein. At least 90 days prior to commencement of their discharge, New Sources, and sources that become categorical Industrial Users subsequent to the promulgation of an applicable Categorical Standard shall submit to the Enforcement Authority a report.

<u>Section 37.15</u> A New Source shall report the method of Pretreatment it intends to use to meet applicable Categorical Standards. A New Source also shall give estimates of its anticipated flow and quantity of Pollutants to be discharged.

- A. Industrial Users described above shall submit the information set forth below:
  - 1. Identifying information: The name and address of the facility, including the name of the operator and Owner.
  - 2. Environmental permits: A list of any environmental control permits held by or for the facility.
  - Description of operations: A brief description of the nature, average rate of
    production, and Standard Industrial Classifications of the operation(s) carried
    out by such Industrial User. This description should include a schematic
    process diagram which indicates points of discharge to the POTW from the
    regulated processes.
  - 4. Flow measurement: Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process streams and other streams, as necessary, to allow use of the combined waste stream formula set out in 40 CFR 403.6(e).
  - Measurement of pollutants:
    - The Categorical Pretreatment Standards applicable to each regulated process
    - b) The results of sampling and analysis identifying the nature and concentration, and/or mass, where required by the Standard or by the Township and the Enforcement Authority, of regulated Pollutants in the discharge from each regulated process. Instantaneous, daily maximum, and long-term average concentrations, or mass, where required, shall be reported. The sample shall be representative of daily operations and shall be analyzed in accordance with required analytical procedures.
    - Sampling must be performed in accordance with specified procedures.
    - d) In cases where the Standard requires compliance with a Best Management Practice or pollution-prevention alternative, the User shall submit documentation as required by the Township and the Enforcement Authority or the applicable Standards to determine compliance with the Standard.

- 6. Certification: A statement, reviewed by the Industrial User's authorized representative and certified by a qualified professional, indicating whether Pretreatment Standards are being met on a consistent basis, and, if not, whether additional operation and maintenance (O&M) and/or additional Pretreatment is required to meet the Pretreatment Standards and Requirements.
- 7. Compliance schedule, if additional Pretreatment and/or O&M will be required to meet the Pretreatment Standards, the shortest schedule by which the User will provide such additional Pretreatment and/or O&M. The completion date in this schedule shall not be later than the compliance date established for the applicable Pretreatment Standard.
- 8. A compliance schedule pursuant to this section must meet the Requirements set out in Subsection B hereof.
- Signature and certification: All baseline monitoring reports must be signed and certified.

<u>Section 37.16</u> Compliance schedule progress reports shall be submitted. The following conditions shall apply to the compliance schedule

- A. The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional Pretreatment required for the Industrial User to meet the applicable Pretreatment Standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, and beginning and conducting routine operation);
- B. No increment referred to above shall exceed nine months;
- C. The User shall submit a progress report to the Township and the Enforcement Authority no later than 14 days following each milestone date in the schedule and after final compliance is achieved.
- D. At no time shall more than nine (9) months elapse between successive compliance reports.

#### Section 37.17 Categorical Pretreatment Standard deadline for reports

Within 90 days following the date for final compliance with applicable Categorical Pretreatment Standards, or in the case of a New Source following commencement of the introduction of Wastewater into the POTW, any Industrial User subject to such Pretreatment Standards and Requirements shall submit to the Township and the Enforcement Authority a report containing the information described herein. For Users subject to equivalent mass or concentration limits established in accordance with the procedures in 40 CFR 403.6(c), this report shall contain a reasonable measure of the Industrial User's long-term production rate. For all other Industrial Users subject to Categorical Pretreatment Standards expressed in terms of allowable Pollutant discharge per unit of production (or other measure of operation), this report shall include the Industrial User's actual production during the appropriate sampling period. All compliance reports must be signed and certified.

# Section 37.18 Periodic compliance reports

- A. All Major Industrial Users shall cause to be submitted to the Township and the Enforcement Authority original monitoring results from an independent laboratory at a frequency determined by the Township and the Enforcement Authority but in no case less than four times per year (by March, June, September and December). The monitoring results shall indicate the nature and concentration of Pollutants in the discharge which are limited by Pretreatment Standards.
- B. The independent laboratory shall be of the User's choice and approved by the Township and the Enforcement Authority and will conduct all sampling without prior notice to the User. Measured or estimated average and, if required, maximum daily flows for the reporting period shall be obtained from the municipality and cause to be submitted to the Enforcement Authority quarterly. In cases where the Standard requires compliance with a Best Management Practice or pollution-prevention alternative, the User shall submit documentation as required by the Township and the Enforcement Authority or the applicable Standards to determine compliance with the Standard at least quarterly. All periodic compliance reports must be signed and certified.
- C. All Wastewater samples must be representative of the Industrial User's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working order at all times. Wastewater meters shall be calibrated at least annually, water meters shall be calibrated at least once every 10 years. The failure of an Industrial User to keep its monitoring facility(ies) in good working order shall not be grounds for the Industrial User to claim that sample results are unrepresentative of its discharge.

D. If an Industrial User subject to the reporting Requirement in this section monitors any Pollutant more frequently than required by the Enforcement Authority, using the procedures prescribed in Subsection K hereof, the results of this monitoring shall be included in the report.

#### Section 37.19 Reports of changed conditions

- A. Each User must notify the Township and the Enforcement Authority of any planned changes to the User's operations or system which might affect the potential for a slug discharge or has the potential to alter the nature, quality or volume of its Wastewater at least 30 days before the change.
- B. The Township and the Enforcement Authority may require the User to submit such information as may be deemed necessary to evaluate the changed condition including the submission of an Industrial Waste Discharge Permit application.
- C. The Township and the Enforcement Authority may issue an Industrial Waste Discharge Permit or modify an existing Industrial Waste Discharge Permit in response to changed conditions or anticipated changed conditions.
- D. For purposes of this Requirement, the term "changes" includes, but is not limited to, flow increases of 20% or greater and the discharge of any previously unreported Pollutants.

# Section 37.20 Reports of potential problems

- A. In the case of any discharge, including, but not limited to, accidental discharges, discharges of a non-routine, episodic nature, a non-customary batch discharge, or a Slug Load, that may cause potential problems for the POTW, a User shall immediately telephone and notify the Enforcement Authority of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume, if known, and corrective actions taken by the User.
- B. Within five days following such discharge, the User shall, unless waived by the Enforcement Authority, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the User to prevent similar future occurrences. Such notification shall not relieve the User of any expense, loss, damage, or other liability which may be incurred as a result of damage to the POTW, natural resources, or any other damage to Person or property; nor shall such notification relieve the User of any fines, penalties, or other liability which may be imposed pursuant to this article.
- C. A notice shall be permanently posted on the User's bulletin board or other prominent place advising employees who to call in the event of a problem discharge. Employers shall ensure that all employees, who may cause such a discharge to occur, are advised of the emergency notification procedure.

#### Section 37.21 Reports from unpermitted users

A. All Industrial Users not required to obtain an Industrial Waste Discharge Permit shall provide appropriate reports to the Township and the Enforcement Authority.

#### Section 37.22 Notice of violation/repeat sampling and reporting

- A. If sampling performed by an Industrial User indicates a violation, the Industrial User must notify by telephone the Township and the Enforcement Authority within 24 hours of becoming aware of the violation and shall provide written notice within five days. The Industrial User shall also repeat the sampling and analysis and submit the results of the repeat analysis to Township and the Enforcement Authority within 30 days after becoming aware of the violation.
- B. The Industrial User is not required to resample if the Township and the Enforcement Authority monitors at the Industrial User's facility at least once a month, or if the Enforcement Authority samples between the Industrial User's initial sampling and when the Industrial User receives the results of this sampling.

# Section 37.23 Analytical requirements

A. All Pollutant analyses, including sampling techniques, to be submitted as part of an Industrial Waste Discharge Permit application or report shall be performed in accordance with the techniques prescribed in 40 CFR Part 136, unless otherwise specified in an applicable Categorical Pretreatment Standard. If 40 CFR Part 136 does not contain sampling or analytical techniques for the Pollutant in question, sampling and analyses must be performed in accordance with procedures approved by EPA.

# Section 37.24 Sample collection

- A. Except as indicated herein, the Industrial User must collect Wastewater samples using flow-proportional twenty-four-hour Composite Wastewater Sample collection techniques. The Township and the Enforcement Authority may authorize the use of time-proportional sampling or a Grab Sample where the Industrial User demonstrates that this will provide a representative sample of the effluent being discharged. In addition, Grab Samples may be required to show compliance with instantaneous discharge limits.
- B. Samples for fats, oil and grease, temperature, pH, cyanide, phenols, sulfides, and volatile organic compounds must be obtained using Grab Sample collection techniques.

#### Section 37.25 Timing

A. Unless otherwise indicated, written reports shall be deemed to have been submitted on the date postmarked. For reports which are not mailed, postage prepaid, into a mail facility serviced by the United States Postal Service, the date of actual receipt of the report shall govern.

#### Section 37.26 Recordkeeping:

- A. Industrial Users subject to the reporting Requirements of this article shall retain and make available for inspection and copying all records of information obtained pursuant to any monitoring activities or BMPs required by this article and any additional records of information obtained pursuant to monitoring activities or BMPs undertaken by the Industrial User independent of such Requirements.
- B. Records shall include the date, exact place, method and time of sampling and the name of the Person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.
- C. Also, records necessary to demonstrate compliance with applicable BMPs must be kept.
- D. This may include records of pH or flow meter calibration. These records shall remain available for a period of at least three years.
- E. This period shall be automatically extended for the duration of any litigation concerning the User or the Township and the Enforcement Authority, or applicable Municipal Owner of a Collection System used by the Industrial User, or where the User has been specifically notified of a longer retention period by the Township and the Enforcement Authority Industrial Users subject to the reporting Requirements of this article shall retain and make available for inspection and copying all records of information obtained pursuant to any monitoring activities or BMPs required by this article and any additional records of information obtained pursuant to monitoring activities or BMPs undertaken by the Industrial User independent of such Requirements.
- F. Records shall include the date, exact place, method and time of sampling and the name of the Person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.
- G. Also, records necessary to demonstrate compliance with applicable BMPs must be kept.
- H. This may include records of pH or flow meter calibration. These records shall remain available for a period of at least three years.

I. This period shall be automatically extended for the duration of any litigation concerning the User or the Enforcement Authority, or applicable Municipal Owner of a Collection System used by the Industrial User, or where the User has been specifically notified of a longer retention period by the Enforcement Authority.

#### Section 37.27 Compliance monitoring

- A. Right of entry; inspection and sampling: The Township, the Enforcement Authority and/or their designated agents shall have the right to enter the premises of any User to determine whether the User is complying with all Requirements and any Industrial Waste Discharge Permit or order issued hereunder.
- B. Users shall allow the Township, the Enforcement Authority and/or their designated agent's access to all parts of the premises for the purposes of inspection, sampling, records examination and copying, and the performance of any additional duties.
- C. Where a User has security measures in force which require proper identification and clearance before entry into its premises, the User shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the Township, the Enforcement Authority and/or their designated agents will be permitted to enter without delay for the purposes of performing specific responsibilities.
- D. The Township, the Enforcement Authority and/or their designated agents shall have the right to set up on the User's property, or require installation of, such devices as are necessary to conduct sampling and/or metering of the User's operations.
- E. The Township, the Enforcement Authority and/or their designated agents may require the User to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the User at its own expense.
- F. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the User at the written or verbal request of the Township, the Enforcement Authority and/or their designated agents and shall not be replaced. The costs of clearing such access shall be borne by the User.
- G. Unreasonable delays in allowing the Enforcement Authority and/or the Authority access to the User's premises shall be a violation of this article.

H. Search warrants: If the Township, the Enforcement Authority and/or their designated agents has been refused access to a building, structure, or property, or any part thereof, and is able to demonstrate probable cause to believe that there may be a violation of this article, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the Township and the Enforcement Authority designed to verify compliance with Requirements, this article or any permit or order issued hereunder, or to protect the overall public health, safety and welfare of the community, then the Township and the Enforcement Authority may seek issuance of a search warrant from the Court of Common Pleas of Berks County.

#### Section 37.28 Confidential information

- A. Information and data on a User obtained from reports, surveys, Industrial Waste Discharge Permit applications, Industrial Waste Discharge Permits, and monitoring programs from the Township's and the Enforcement Authority's inspection and sampling activities, shall be available to the public without restriction, unless the User specifically requests, and is able to demonstrate to the satisfaction of the Township and the Enforcement Authority, that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets under applicable State law. Any such request must be asserted in writing requested and demonstrated by the User furnishing a report that such information should be held confidential, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public, but shall be made available immediately upon request to governmental agencies for uses related to the NPDES program or Pretreatment program, and in enforcement proceedings involving the Person furnishing the report.
- B. Wastewater constituents and characteristics and other "effluent data" as defined by 40 CFR 2.302 will not be recognized as confidential information and will be available to the public without restriction.

### Section 37.29 Publication of users in significant noncompliance

A. The Township or the Enforcement Authority shall publish annually, in a newspaper of general circulation published in Berks County, a list of the Users which, during the previous 12 months, were in Significant Noncompliance (SNC) with applicable Industrial Waste Pretreatment Standards and/or Requirements.

#### Section 37.30 Administrative enforcement remedies

#### A. Notification of violation

1. When the Township and the Enforcement Authority finds that a User has violated, or continues to violate, any provision of this article, an Industrial Waste Discharge Permit or order issued hereunder, or any other Pretreatment Standard or Requirement, the Township and the Enforcement Authority may serve upon that User a written Notice of Violation.

- Within 30 days of the receipt of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted in writing by the User to the Township and the Enforcement Authority.
- 3. Submission of this plan in no way relieves the User of liability for any violations occurring before or after receipt of the Notice of Violation.
- 4. Nothing in this section shall limit the authority of the Township and the Enforcement Authority to take any other action, including emergency actions or any other enforcement action, without first issuing a Notice of Violation.

#### B. Consent orders

1. The Township and the Enforcement Authority may enter into Consent Orders, assurances of voluntary compliance, or other similar documents establishing an agreement with any User responsible for noncompliance. Such documents will include specific action to be taken by the User to correct the noncompliance within a time period specified by the document. Such documents shall have the same force and effect as the administrative orders issued and shall be judicially enforceable. Issuance of a consent order shall not be a bar against, or a prerequisite for, taking any other action against the User.

#### C. Show cause hearing

- The Township and the Enforcement Authority may order a User which has violated, or continues to violate, any provision of this article, an Industrial Waste Discharge Permit or order issued hereunder, or any other Pretreatment Standard or Requirement, to appear before the Marion Township Zoning Hearing Board and show cause why the proposed enforcement action should not be taken.
- Notice shall be served on the User specifying the time and place for the
  meeting, the proposed enforcement action, the reasons for such action, and a
  request that the User show cause why the proposed enforcement action
  should not be taken.
- The notice of the meeting shall be served at least 10 days prior to the hearing. Such notice may be served on any authorized representative of the User. A show cause hearing shall not be a bar against, or prerequisite for, taking any other action against the User.
- 4. The Zoning Hearing Board shall conduct the hearing and is authorized to issue notices of hearings requesting the attendance and testimony of witnesses and production of evidence relevant to any matter involved in such hearings; take evidence; and transmit a report of the evidence and hearing, including transcripts and other evidence together with recommendations to the Enforcement Authority for action thereon.

- D. At any hearing pursuant to this section, testimony shall be under oath and recorded stenographically.
- E. The transcript so recorded will be made available to any member of the public or any party to the hearing upon payment of the usual charges therefor.
- F. After the Zoning Hearing Board has reviewed the evidence, it may issue an order to the User responsible for the violation, directing that following a specific time period, the sewer service shall be discontinued unless adequate treatment facilities, devices or other related appurtenances have been installed and existing treatment facilities, devices or other related appurtenances are properly operated. Further orders and directives deemed necessary and appropriate may be issued by the Zoning Hearing Board, including the assessment of cost associated with the hearing.
- G. Compliance orders: When the Township and the Enforcement Authority find that a User has violated, or continues to violate, any provision of this article, an Industrial Waste Discharge Permit or order issued hereunder, or any other Pretreatment Standard or Requirement, the Township and the Enforcement Authority may issue an order to the User responsible for the discharge directing that the User come into compliance within a specified time. If the User does not come into compliance within the time provided by installing and properly operating adequate treatment facilities. devices, or other related appurtenances, sewer service may be discontinued. Compliance orders also may contain other requirements to address the noncompliance, including additional self-monitoring and management practices designed to minimize the amount of Pollutants discharged to the POTW. A compliance order may not extend the deadline for compliance established for a Pretreatment Standard or Requirement, nor does a compliance order relieve the User of liability for any violation, including any continuing violation. Issuance of a compliance order shall not be a bar against or prerequisite for taking any other action against the User.

#### H. Cease and desist orders.

1. When the Township and the Enforcement Authority finds that a User has violated, or continues to violate, any provision of this article, an Industrial Waste Discharge Permit or order issued hereunder, or any other Pretreatment Standard or Requirement, or that the User's past violations are likely to recur, the Township and the Enforcement Authority may issue an order to the User directing it to cease and desist all such violations and directing the User to:

- b) Immediately comply with all Requirements; and
- a) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and/or terminating the discharge.
- 2. Issuance of a cease and desist order shall not be a bar against, or a prerequisite for, taking any other action against the User.

#### Section 37.31 Administrative fines

- A. Notwithstanding any other provision in this article, when any User has violated or continues to violate any provision of this article, the Industrial Waste Discharge Permit, any order issued hereunder or any other Pretreatment Standard or Requirement, said User shall be assessed an amount not to exceed \$2,500 for each violation. Each day on which a violation shall occur or continue shall be deemed a separate and distinct offense.
- B. In addition to the penalties provided herein, the Township and the Enforcement Authority may recover reasonable attorney's fees, court costs, court reporter's fees and other expenses of litigation by appropriate suit at law against the Person found to have violated this article or the orders, rules, regulations and permits issued hereunder. Unpaid charges, fines and penalties shall constitute a lien against an individual User's property.
- C. Users desiring to appeal such fines must file a written appeal along with payment in full of the fine assessed within 10 days of being notified of the fine. The Township and the Enforcement Authority shall convene a hearing on the matter within 15 days of receiving the appeal and payment, in full, of the fine assessed from the User.
- D. The Township and the Enforcement Authority may add the costs of preparing administrative enforcement actions, such as notices and orders, to the fine.
- E. Issuance of an administrative fine shall not be a bar against, or a prerequisite for, taking any other action against the User

- F. The Township and the Enforcement Authority may add the costs of preparing administrative enforcement actions, such as notices and orders, to the fine.
- G. Issuance of an administrative fine shall not be a bar against, or a prerequisite for, taking any other action against the User

#### Section 37.32 Emergency suspensions

- A. The Township and the Enforcement Authority may immediately suspend a User's discharge, after attempted telephone call to the User, whenever such suspension is necessary to stop an actual or threatened discharge which reasonably appears to present or cause an imminent or substantial endangerment to the health or welfare of persons.
- B. The Township and the Enforcement Authority may also immediately suspend a User's discharge, after notice by telephone and opportunity to respond, that threatens to interfere with the operation of the POTW, or which presents, or may present an endangerment to the environment, and/or cause or may cause a violation of the NPDES Permit of the POTW.
- C. Any User notified of a suspension of its discharge shall immediately stop or eliminate its contribution. In the event of a User's failure to immediately comply voluntarily with the suspension order, the Township and the Enforcement Authority may take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW, its receiving stream, or endangerment to any individuals.
- D. The Township and the Enforcement Authority may allow the User to recommence its discharge when the User has demonstrated to the satisfaction of the Township and the Enforcement Authority that the period of endangerment has passed, unless the termination proceedings are initiated against the User.
- E. A User that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful contribution and the measures taken to prevent any future occurrence, to the Township and the Enforcement Authority prior to the date of any show cause or termination hearing.
- F. The Township and the Enforcement Authority may also immediately suspend a User's discharge, after notice by telephone and opportunity to respond, that threatens to interfere with the operation of the POTW, or which presents, or may present an endangerment to the environment, and/or cause or may cause a violation of the NPDES Permit of the POTW.

- G. Any User notified of a suspension of its discharge shall immediately stop or eliminate its contribution. In the event of a User's failure to immediately comply voluntarily with the suspension order, the Township and the Enforcement Authority may take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW, its receiving stream, or endangerment to any individuals.
- H. The Township and the Enforcement Authority may allow the User to recommence its discharge when the User has demonstrated to the satisfaction of the Township and the Enforcement Authority that the period of endangerment has passed, unless the termination proceedings are initiated against the User.
- I. A User that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful contribution and the measures taken to prevent any future occurrence, to the Township and the Enforcement Authority prior to the date of any show cause or termination hearing.
- J. Nothing in this section shall be interpreted as requiring a hearing prior to any emergency suspension under this section.

#### Section 37.33 Termination of discharge

- A. In addition to other provisions of this article, any User who violates the following conditions is subject to discharge termination:
  - 1. Violation of the Industrial Waste Discharge Permit conditions;
  - 2. Failure to accurately report the Wastewater constituents and characteristics of its discharge;
  - 3. Failure to report significant changes in operations or Wastewater volume, constituents, and characteristics prior to discharge;
  - 4. Refusal of reasonable access to the User's premises for the purpose of inspection, monitoring, or sampling;
  - 5. Violation of the required Pretreatment Standards; or
  - 6. Failure to pay surcharges, User charges, applicable costs, penalties or fines.
- B. Such User will be notified of the proposed termination of its discharge and be offered an opportunity to show-cause why the proposed action should not be taken. Exercise of this option by the Township and the Enforcement Authority shall not be a bar to, or a prerequisite for, taking any other action against the User.

#### Section 37.34 Judicial enforcement remedies

#### A. Injunctive relief

- 1. When a User has violated, or continues to violate, any provision of this article, an Industrial Waste Discharge Permit, or order issued hereunder, or any other Pretreatment Standard or Requirement, the Township and the Enforcement Authority may petition the Court of Common Pleas of Berks County through the Enforcement Authority's Attorney for the issuance of a preliminary or permanent injunction, or both, as appropriate, which restrains or compels the specific performance of the Industrial Waste Discharge Permit, order, or other Requirements imposed on activities of the User.
- 2. The Township and the Enforcement Authority may also seek such other action as is appropriate for legal and/or equitable relief, including a Requirement for the User to conduct environmental remediation. A petition for injunctive relief shall not be a bar against, or a prerequisite for, taking any other action against a User.

#### Section 37.35 Civil penalties

- A. In addition to proceeding under any other remedy available at law or equity for violation of this article, the Industrial Waste Discharge Permit, any order issued hereunder or any other Pretreatment Standard or Requirement, the Township and the Enforcement Authority may assess civil penalties against any User who has violated or continues to violate any of the provisions of this article, the Industrial Waste Discharge Permit, any order issued hereunder or any other Pretreatment Standard or Requirement. Civil penalties may be assessed whether or not the violation was willful or negligent.
- B. In addition to proceeding under any other remedy available at law or equity for violation of this article, the Industrial Waste Discharge Permit, any order issued hereunder or any other Pretreatment Standard or Requirement, the Township and the Enforcement Authority may assess civil penalties against any User who has violated or continues to violate any of the provisions of this article, the Industrial Waste Discharge Permit, any order issued hereunder or any other Pretreatment Standard or Requirement. Civil penalties may be assessed whether or not the violation was willful or negligent.
- C. Any User who has violated or continues to violate any of the provisions of this article, the Industrial Waste Discharge Permit, or order issued hereunder, or any other Pretreatment Standard or Requirement shall be liable to the Township and the Enforcement Authority for a total civil penalty not to exceed \$25,000, plus actual damages incurred by the POTW per violation, per day as the violation continues. Each violation for each separate day shall constitute a separate and distinct offense.

- D. In addition to the above-described penalty and damages, the Township and the Enforcement Authority may recover reasonable attorney's fees, court costs, and other expenses associated with enforcement activities, including sampling and monitoring expenses.
- E. The Township and the Enforcement Authority shall petition the court to impose, assess and recover all such sums.
- F. In determining the amount of civil liability, the Court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration of the violation, any economic benefit gained through the User's violation, corrective actions by the User, the compliance history of the User, and any other factor as justice requires.
- G. Filing a suit for civil penalties shall not be a bar against or a prerequisite for taking any other action against a User.

#### Section 37.36 Criminal prosecution

- A. A User who willfully or negligently violates any provision of this article, an Industrial Waste Discharge Permit, or order issued hereunder, or any other Pretreatment Standard or Requirement shall, upon conviction thereof, be punished by a fine of not more than \$1,000 per violation, per day, or imprisonment for not more than one year, or both.
- B. A User who knowingly makes any false statements, representations, or certifications in any application, record, report, plan, or other documentation filed, or required to be maintained, pursuant to this article, an Industrial Waste Discharge Permit, or order issued hereunder, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this article shall, upon conviction, be punished by a fine of not more than \$1,000 per violation, per day, or imprisonment for not more than one year, or both.
- C. As required by the Sewer Service Agreement, the Township and the Enforcement Authority will administer Industrial Waste penalties pursuant to this article and/or pursuant to the "Publicly Owned Treatment Works Penalty Law" (POTW Penalty Law) (35 P.S. § 752.1 et seq.).

#### Section 37.37 Remedies nonexclusive

A. The remedies provided for in this article are not exclusive. The Township and the Enforcement Authority may take any, all, or any combination of these actions against a noncompliant User. Enforcement of Pretreatment violations will generally be in accordance with the enforcement response plan. However, the Enforcement Authority may take other action against any User when the circumstances warrant. Further, the Township and the Enforcement Authority are empowered to take more than one enforcement action against any noncompliant User.

#### Section 37.38 Coordination with wastewater collection system Owner

- A. All Users and Owners shall remain responsible to Marion Township and/or the Authority for all costs and expenses incurred as a result of Wastewater being either directly or indirectly discharged into the Collection System, of such characteristics and/or quantity, resulting in the need to repair, clean, replace and/or maintain the Collection System.
- B. All Industrial Users shall promptly provide to the Authority one copy of all notices, reports, test information and data required by this article to be submitted to the Township and the Enforcement Authority.
- C. Verification of the transmittal of information shall be provided as part of the similar transmittal of information required by this article.

#### Section 37.39 Notice provisions

- A. Whenever the terms of this article provide for any action to be taken including Notice and the service of documentation with respect to enforcement of the terms of this article including termination of discharge, said notices and opportunities to respond shall be provided, in addition to the User, to the Owner of the Improved Property served by the POTW, if the Owner is different than the User.
- B. Every "notice," "request," "requisition," "order," "demand," "application," "statement," "report," "certification," "consent," or similar action hereunder shall, unless the form thereof is specifically provided, be in writing signed by the User or the Authorized Representative of the User making, sending, issuing or publishing the item or in the case of the POTW signed by the Superintendent or his duly authorized representative, and served by personal service or registered or certified mail (return receipt required), unless otherwise specifically indicated. Service upon any Authorized Representatives of a User as defined herein shall constitute service upon the User.

**Section 37.40** Responsibility of Owners of improved property

A. The Owner of each Improved Property connected to the Wastewater System shall be responsible for all acts of tenants or other occupants of such Improved Property insofar as such acts shall be governed by provisions of this article and Requirements.

#### Section 37.41 Waiver of rights

A. The failure of the Enforcement Authority and/or Marion Township and/or the Authority to insist upon strict performance of this article or any of the terms or conditions thereof shall not be construed as a waiver of any of its rights hereunder.

#### Article XXXVIII. Amendments

A. Marion Township reserves the right to adopt, from time to time, such additional ordinances it shall deem necessary and proper in connection with use and operation of the Wastewater System, which ordinances shall become and shall be construed as part of this article.

#### Article XXXIX. Effective Date

A. This Ordinance and any rules and regulations hereunder shall become effective at once, shall be applicable to all properties as soon as they become connected with, and have the right to use the Marion Township Sewer System. The Township reserves the right to make such changes from time to time as, in its opinion, may be desirable or beneficial, and to amend this Ordinance, or to change the rates or charges in such manner and at such time as may be advisable.

#### Article XL. Construction and Severability

A. If any provision, section, sentences, clauses or parts of this Ordinance, or the application of any provision hereof shall be held invalid, such invalidity shall not affect or impair any of the remainder of this Ordinance, it being the intention of the Township that such remainder shall be and remain in full force and effect.

#### Article XLI. Repealer

A. All ordinances or parts of ordinances in conflict, or inconsistent with this Ordinance Together with the amendments and supplements thereto are hereby repealed to the extent necessary to give this Ordinance full force and effect. FREDERICK R. MOGEL
STEPHEN H. PRICE
SEAN J. O'BRIEN
ANDREW S. GEORGE
MARK E. ZIMMER\*
JASON A. ULRICH
JESSE A. KAMMERDEINER
JOSEPH M. BLACKBURN
\* ALSO ADMITTED IN NJ

HARRY W. SPEIDEL DONALD K. BOBB EDWIN H. KERSHNER HENRY A. GASS GENE M. VENZKE RETIRED



A PROFESSIONAL CORPORATION

520 Walnut Street Reading, PA 19601 610-376-1515 610-372-8710 Facsimile www.msbk-law.com GEORGE B. BALMER (1969) GEORGE A. KERSHNER (1969) CARL F. MOGEL (1994)

COUNTY OFFICES
WOMELSDORF
130 WEST HIGH STREET
610-589-5755

ROBESONIA 127 EAST PENN AVENUE 610-693-8881

October 16, 2012

# VIA E-MAIL AND FIRST CLASS MAIL keff@light-heigel.com

Mr. Mike Keffer Light-Heigel & Associates, Inc. Grande Plaza 1103 Rocky Drive, Suite 102 West Lawn, PA 19609

> <u>RE:</u> <u>Marion Township – Ordinance of the Board of Supervisors of Marion</u> <u>Township Governing Municipal Management of Sewage Disposal</u>

Dear Mike:

The following are my comments, questions and concerns regarding the Proposed Sewage Disposal Ordinance:

- 1. I believe that a Table of Contents and section headings would be helpful. In the introductory paragraph, please revise the language as follows: ". . . governing the management of sewage disposal".
- 2. I believe that it would be helpful to have the titles only in bold type or at underlined with the rest of the Ordinance being regular font.
- 3. Please revise Section 1.01 as follows: "... principal building is within 150 feet from the Sanitary Sewer System". I also think that we should add as a defined term, Sanitary Sewer System or Sanitary Sewer Line or Sanitary Sewer Facility, which would be something like "All facilities as of any particular kind, for collecting, pumping, transferring, treating or disposing of sanitary sewage and industrial waste."

- 4. In Section 2.01, we might consider adding as a defined term "Principal Building".
- 5. Please add to the beginning of Section 3.01 "The provisions of this Ordinance are declared to be for the health, safety and welfare of the citizens of the Township, and if any Owner of . . . .".
- 6. In Section 5.01, please add at the end of the paragraph "The Township or its agents may enter the property for purposes of inspection, observation, measurement, sampling, testing or to construct the connection".
- 7. Please change Section 5.03 as follows: "If the Owner fails to pay the bill, the Township may file a claim for a municipal lien for the cost within six (6) months of the date of depletion of the connection, plus reasonable attorney fees, costs and expenses..."
  - 8. Please insert a period after the end of the paragraph in Section 6.01.
- 9. In Paragraph 8.01, the term "Special Service Areas" is not defined and should be if capitalized.
- 10. Please revise Section 8.06 as follows: "Repairing and maintaining the grinder pump, sewer lateral and related facilities shall be subject to the terms and conditions set forth herein.
- 11. In Section 8.07, the Low Pressure Building Sewer Repair/Replacement License Agreement is named differently than in the actual Agreement. The names should be consistent.
- 12. In Section 8.08 and throughout the Agreement, there are references to the Property Owner, which is not a defined term. "Owner" is a defined term and should be used throughout the Agreement and capitalized throughout the Agreement. Also in Section 8.08 and throughout the Agreement, the term Building Sewer does not appear to be a defined term in the Ordinance, however, it is defined in the License Agreement. I think we should add the definition of Building Term to the definition section of the Ordinance.
  - 13. In Section 8.08(c), please change the term Borough to Township.
- 14. In Section 9.01, please change as follows: "If any Owner of the property within the Township or any other person shall violate any terms or conditions of this Ordinance, upon conviction of the same in a summary proceeding . . . ."
- 15. In Section 13.02, should not be defined terms applied to the entire Ordinance as opposed to only part two of the Ordinance, as they appear to apply?
- 16. In Section 22.01(A)(1)(a), please consider changing the word "Part" to "Ordinance".

- 17. In Subsection 4 of 22.01(A), I believe that the reference to paragraph 109.6 should be paragraph 22.03.
- 18. If the term "Part" is changed to Ordinance in Subsection A it should probably be changed in Subsection B.
- 19. Please capitalize Owner in Subsection C and throughout the rest of the Part.
- 20. In Section 22.04, alternative system and on-lot sewage disposal system are defined terms and should be capitalized.
  - 21. Should we add Alternative System to Section 23.01 and Section 23.02?
- 22. In Section 23.04, should we replace "existing system" with "Online Sewage Disposal System" and "Alternative System" to keep the terms consistent?
- 23. In Section 23.05, in the last sentence, please revise as follows: "By way of example, the use of laundry facilities may be limited to one load per day or discontinued altogether."
- 24. In Section 24.01, please replace "Part" with "Ordinance" and capitalize online sewage disposal system and add Alternative System.
- 25. Please consider revising Section 27.02 as follows: "The Appellant shall be entitled to a Hearing before the Zoning Hearing Board, which shall be scheduled within sixty (60) days of receipt of the Appeal by the Zoning Hearing Board. The Zoning Hearing Board shall thereafter affirm, modify or reverse the aforesaid decision".
- 26. Please add the following to the last sentence in the paragraph "If a decision is not rendered within 45 days of the date of the Hearing, the relief sought by the Appellant shall be deemed granted unless an extension is consented to in writing or as part of the public record by the Appellant."
  - 27. Section 28.02 regarding percolation test holes appears to be out of place.
- 28. In Section 29.01, how is the term "Collection System" different from the term "Community Sewage System"? If the terms are the same, we should probably use one term throughout.
- 29. In Section 29.01(A)(1), please capitalize Wastewater System (and capitalize throughout Ordinance) and delete the "'s" after the term sludge.
- 30. In definition number 60 on page 42, there appears to be a comma needed after Tulpehocken Township.

- 31. In Section 37.30 (C), there is a "Hearing Board" mentioned. Is this the Zoning Hearing Board? If not, do we really want to establish another hearing board, which would handle these matters?
- 32. Please add Section 37.43 titled "Effective Date." "This Ordinance and any rules and regulations hereunder shall become effective at once, shall be applicable to all properties as soon as they become connected with, and have a right to use the Marion Township Sewer System. The Township reserves the right to make such changes from time to time as, in its opinion, may be desirable or beneficial, and to amend this Ordinance, or to change the rates or charges in such manner and at such time as may be advisable."
- 33. Please add Section 37.44 titled "Construction and Severability". "If any provision, section, sentences, clauses or parts of this Ordinance, or the application of any provision hereof shall be held invalid, such invalidity shall not affect or impair any of the remainder of this Ordinance, it being the intention of the Township that such remainder shall be and remain in full force and effect."
- 34. Please add Section 37.45 titled "Repealer". "All ordinances or parts of ordinances in conflict, or inconsistent with this Ordinance be, and the same hereby are, repealed".

Very truly yours,

MOGEL, SPEIDEL, BOBB & KERSHNER

Andrew S. George

ASG/tpf 40641.022

## Light-Heigel & Associates, Inc.

ENGINEERS • SURVEYORS • BUILDING CODE INSPECTORS MUNICIPAL SERVICES

November 28, 2012

Mogel Speidel Bobb & Kershner P.O. Box 8581, Reading, PA 19601-8581

Attn. Andrew S. George, Solicitor

Re: Marion Township 537 Plan Ordinance

Dear Mr. George:

We have enclosed a copy of the revised Ordinance which includes the revisions identified in your letter dated October 16, 2012.

- 1. A Table of Contents has been added.
  - The introductory paragraph has been revised.
- Title and Section Heading is bold font and underlined. The rest of the Ordinance is regular font.
- 3. We revised the former Section 1.01. It is now Section 2.01.
  - a. The definitions have been added in the Section 1.01.
  - b. The additional language was added to paragraph.
- The term Principal Building has been defined in Section 1.01.
- 5. The additional language you required in former Section 3.01 is in Section 4.01.
- 6. The change has been made to Section 5.01 as you required. The additional sentence has been added at the end of the paragraph Section 5.01.
- Section 5.03 has also been revised to include the additional information you required.
- The punctuation has been corrected in Section 6.01.
- 9. The term Special Service Areas remains capitalized in Section 8.01. A definition of this term is in Section 1.01.
- Section 8.06 has been revised with the additional language you required.
- 11. The reference to the Low Pressure Building Sewer Repair/Replacement License Agreement in the Ordinance text and the sample Agreement in Appendix have been coordinated using the same term throughout the document.
- 12. In Section 8.08 and elsewhere in the Ordinance the term Property Owner has been replaced with the defined term Owner. Also, the term Building Sewer has been defined in Section 1.01.
- 13. The use of the term Borough has been corrected in Section 8.08 (c).
- Section 9.01 has been revised with the statement you requested on responsibility for violations of the Ordinance.
- 15. The defined terms in Section 13.02 are specific to the OLDS systems in the Township. We recommend that the each PART have a definition section for those terms that apply to the PART. *Corporate Office*

CIVIL

STRUCTURAL

MUNICIPAL

ENVIRONMENTAL

HYDROLOGY

INSPECTIONS

SOILS TESTING

LAND SURVEYS

AERIAL SURVEYS

LAND DEVELOPMENT

STORM WATER DESIGN
ZONING ENFORCEMENT

FARM PRESERVATION

......

BUILDING CODE SERVICES

#### **BERKS**

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

#### BUCKS

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

#### **DAUPHIN**

906 North River Rd. Halifax, 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

805 Estelle Drive Suite 111 Lancaster, PA 17601 717-892-7002 Fax: 717-892-7020

#### LEBANON/ DAUPHIN

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

#### MONTGOMERY

615 West Main St, Lansdale, PA 19446 610-678-7560 Fax: 610-678-7686

### 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

320 PLAZA DRIVE • PALMYRA, PA 17078 • 717-838-5672 • FAX: 717-838-5630 www.light-heigel.com

- 16. The term "Part" has been changed to "Ordinance in Section 22.01(A)(1)(a).
- 17. The reference to paragraph 109.6 in Section 22.01(A) has been corrected to Section 22.03.
- 18. The term "Part" has been corrected to "Ordinance" in Section 22.01(B)
- 19. The term Owner is capitalized throughout the PART.
- 20. The terms Alternative System and On-Lot Disposal System are capitalized in Section 22.04.
- 21. The term Alternative System has been added in Sections 23.01 and 23.02.
- 22. The terms Alternative System and On-Lot Disposal System have replaced "existing system" in Section 23.04.
- 23. The additional language "by way of example ..." has been added into Section 23.05.
- 24. The term "Part" has been replaced with "Ordinance" in Section 24.01 and the term "On-Lot Sewage Disposal System has been capitalized.
- 25. The revision to Section 27.01 has been made as you requested establishing the applicant's right to appeal to the Zoning Hearing Board.
- 26. Section 27.03 includes the required additional language.
- 27. Section 28.02 regarding percolation testing has been removed.
- 28. In Section 29.01 the term Collection System is still used as it refers to an improved sewer system connected to a treatment plant. The term Community System is usually associated with an On-Lot Sewage Disposal System which is not compatible with the discharge if industrial wastewater.
- 29. The term Wastewater System has been capitalized in Section 29.01(A) (1) and elsewhere throughout PART 3.
- 30. The punctuation has been corrected in definition 60.
- 31. In Section 37.30(C) the term "Hearing Board has been revised to "Zoning Hearing Board".
- 32. The "Effective Date" has been added as ARTICLE XXXIX
- 33. "Construction and Severability" is ARTICLE XL.
- 34. The "Repealer" is ARTICLE XLI.

The attached copy presents the corrections in the shaded blocks. If you have any questions, please contact me.

Sincerely,

Michael S. Keffer, P.E.

Encl.

Cc Marion Township, w/ encl.

Appendix F:

Municipal Resolution Adopting this Act 537 Plan

## RESOLUTION NO. 2019 - 4

### A RESOLUTION OF MARION TOWNSHIP, BERKS COUNTY, PENNSYLVANIA APPROVING THE ACT 537 SEWAGE FACILITIES PLAN REVISION

A Resolution of the Board of Supervisors of Marion Township, Berks County, Pennsylvania (the "Township").

WHEREAS, Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the Pennsylvania Sewage Facilities Act, as amended, and the rules and regulations of the Pennsylvania Department of Environmental Protection (DEP) adopted thereunder, Chapter 71 of Title 25 of the Pennsylvania Code, require a municipality to adopt an official sewage facilities plan providing for sewage services adequate to prevent contamination of waters of the Commonwealth of Pennsylvania and / or environmental health hazards from sewage wastes, and to revise said sewage facilities plan whenever it is necessary to meet the sewage disposal needs of the municipality; and

WHEREAS, the Township has prepared an Official Sewage Facilities Plan which provides as the alternative of choice public sewage facilities in a portion of the Township in the areas of Stouchsburg Village, US 422, Edris Road, Sheridan Road, Canal Road, and Shady Cabins Circle through a collection and conveyance system of gravity and low pressure sewers with connection to the Womelsdorf Wastewater Treatment Plant (the "Sewage Facilities Plan"); and

WHEREAS, the remainder of the Township will continue to use existing on-lot sewage facilities with the implementation of an on-lot sewage management ordinance which requires regular pumping of the on-lot septic tanks and periodic inspections of the systems; and

WHEREAS, the alternative choices that have been considered are: no action; continued use of existing on-lot systems; and public sewer system with construction of a Marion Township Treatment Plant; and

### WHEREAS, the key implementation activities / dates include:

<u>Activity</u>	<b>Estimated Completion Date</b>	
Public Notice	Month 1	
Act 537 Approved by Marion Township	Month 6	
Final Submission to DEP	Month 7	
Act 537 Plan Approved by DEP	Month 9	
Identify and Apply to Funding Sources for Project	Month 10	
Township Adopts and Implements OLDS Management Ordinance	Month 12	
Secure Grants & Financing for Project	Month 46	
Prepare Design	Month 52	
Apply for Permits	Month 53	
Obtain Permits	Month 60	
Advertise for Bids for Construction	Month 63	
Award Contract for Construction	Month 68	
Begin Construction	Month 70	
Complete Construction	Month 84	

WHEREAS, the Township finds that the Sewage Facility Plan described above conforms with the applicable Township zoning, subdivision, other ordinances, and plans and with the Township's comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of Marion Township, Berks County, Pennsylvania hereby adopt and submit to the DEP for its approval as a revision to the "Official Plan" of the Township, the above referenced Sewage Facility Plan. The Township hereby assures the DEP of the complete and timely implementation of the said Sewage Facility Plan as required by the Pennsylvania Sewage Facilities Act.

DULY ADOPTED this 28th day of 4through, 2019, by the Board of Supervisors of Marion Township, Berks County, Pennsylvania, in lawful session duly assembled.

MARION TOWNSHIP BERKS COUNTY, PENNSYLVANIA

Peter I. Wallace, Chairman

Peter McCarthy, Vice Chairman

Franklin M. Troutman, Supervisor

I, Susan Staaby, the Secretary of Marion Township hereby certify that the foregoing is a true copy of Resolution No. 2019 - 4 , adopted by the Board of Supervisors of Marion Township on the 28th day of 4through , 2019.