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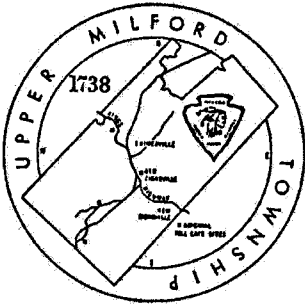
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\* Responses to questions re: Act 537 Plan,  
This packet mailed to above list on 09-23-05.  
Kim Shaah



**UPPER MILFORD TOWNSHIP  
BOARD OF SUPERVISORS**

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Chairman  
Susan J. Smith

Vice-Chairman  
Daniel J. Mohr

Supervisor  
Henry H. Kradjel

September 26, 2005

**RE: Letter to Upper Milford Township Act 537 Plan Comment Providers**

Dear Act 537 Plan Commentators:

The Board of Supervisors of Upper Milford Township wishes to thank you for your written comments on the Township's proposed Act 537 Plan.

Attached for your information is a partial compilation of the Township's response to the written comment received during the Act 537 Plan review period.

It should be noted that the responses to some of the more complex and detailed financial type questions are not part of this mailing, as they are not completed at the time of this mailing. Upon completion of the financial responses that information will be forthcoming.

The comment letters along with the Township's responses will be forwarded to the Pennsylvania Department of Environmental Protection (PA DEP) for their review and consideration during the review and approval process of the Act 537 Plan.

Sincerely,  
Upper Milford Township

A handwritten signature in black ink, which appears to read 'Dan A. DeLong'. The signature is fluid and cursive, with a long tail on the final letter.

Daniel A. DeLong  
Township Manager

Attachments

cc: Board of Supervisors  
Karl Schreiter, Schreiter Engineering Associates, Inc.  
Russ Benner, Schoor DePalma, Inc.  
Frank Leist, Lehigh County Authority  
Brian Miller, Township Sewage Enforcement Officer

**RESPONSES TO WRITTEN COMMENTS SUBMITTED DURING THE 30-DAY COMMENT PERIOD FOR UPPER MILFORD TOWNSHIP'S ACT 537 PLAN. (JULY 29<sup>TH</sup>, 2005 THROUGH AUGUST 31<sup>ST</sup>, 2005)**

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**Response to persons insinuating that the Township Officials should revoke occupancy permits due to the lack of an acceptable on-lot system:**

The Board of Supervisors now or in the past has not adopted a policy or taken a stance to refuse to allow a person or persons to occupy an existing dwelling due to allegations of a malfunctioning septic system.

**Response to questions of refusals of lending institutions to issue a mortgage due to a malfunctioning septic system:**

In recent years, many lending institutions have adopted a policy of on site septic system certification. In many instances, the Township is aware of the septic system issue being negotiated as part of the final condition of settlement with some instances resulting in system replacements or funds being escrowed by the sellers for future repairs or connection to public sewerage if it becomes available.

**Response to allegations that private plumbing costs were grossly underestimated:**

A resident indicated that his private plumbing costs were estimated to be near \$69,000 for him to connect using a pump. The Township's consultants solicited an estimate from a private contractor for the same work and that contractor estimated that he would install the same 275 foot lateral and a pump, and also would include abandoning the existing septic tank for the amount of \$9,150.

Additionally, an owner presented an estimate of \$32,000 for the installation of a 500 foot plus gravity service lateral, which did not include properly abandoning the existing septic tanks. The Township's consultants solicited an estimate from a private contractor experienced in this work and his estimate including abandoning the existing septic tank was \$12,500.

The Township and its consultants are of the opinion that private plumbing costs will vary depending upon unique circumstances but are of the opinion that the current estimates are representative of potential real time costs.

Again, until a detailed design is completed, which will accurately depict pipe locations, depths, connection points, etc. the cost figures presented in the plan are preliminary estimates. Final and more accurate individual costs will be projected at the time of project authorization.

Plumbing cost estimates were derived by using the average of several quotations and real-time costs provided by installers from the Lehigh Valley.

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(JULY 29<sup>TH</sup>, 2005 THROUGH AUGUST 31<sup>ST</sup>, 2005)**

22-Jul-05

**VERA CRUZ AREA PROJECT  
Private Plumbing Cost Estimates**

To be installed by property owner's plumber

**Typical Property Gravity (1)**

Gravity House Connection Installation 4" PVC	L.F	140	\$ 21.00	\$ 2,940.00
Miscellaneous Sewer Related Work	EA	1	200.00	\$ 200.00
Pump-out & Fill Septic Tank / Cesspool (3)	EA	1	360.00	\$ 360.00
<b>Total Estimated Cost - Typical Property Gravity</b>				<b>\$ 3,500.00</b>

**Typical Property Low-Pressure (1)**

Grinder Pump-Installation Only (2)	EA	1	1,000.00	\$ 1,000.00
1-1/2" Force Lateral	L.F	140	20.00	\$ 2,800
Miscellaneous Electric & Sewer Related Work	EA	1	300.00	300.00
Pump-out & Fill Septic Tank / Cesspool (3)	EA	1	360.00	360.00
<b>Total Estimated Cost - Low Pressure</b>				<b>\$ 4,460.00</b>

**Commercial Properties Add**

LCA Water Meter	EA	1	129.00	\$ 129.00
Installation of meter by plumber	EA	1	100.00	\$ 100.00
Grease Trap (if applicable)	EA	1	1,260.00	\$ 1,260.00
<b>Total Addition for Commercial Properties</b>				<b>\$ 1,489.00</b>

(1) Assumes septic system is in rear yard

(2) Grinder Pump Unit provided by Project. Unit installed by property owners plumber

(3) Richard Schmick, \$200 min up to 1,000 gallons + \$15.00 for each 100 gallons thereafter

(4) Monarch Septic Tank: Grease Traps Non-Traffic, 300 gal - \$460.00, 500 gal- \$560.00, 1,000 gal- \$775.00  
add \$200.00 for frame & cover. Use 500 gal cost + \$ 500 for installation

**Response to persons questioning the fairness of the currently stated property assessment costs:**

The Township Officials and consultants are aware that there is no single method of fairly imposing the property assessment costs. It is surely safe to say that the front foot assessment is unacceptable due to the vast differences in property frontages. Additionally, it may be unfair to assess someone with a large tract with severe environmental restriction as though they would have tremendous benefit by the installation of public sewerage. Final assessment values will be determined at the time of the project authorization ordinance, should a project be authorized.

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The Board of Supervisors recognize that there may be larger tracts that are perceived to be undevelopable and they have stated that they would consider using General Township Funds for the purchase of future development rights at the final derived property assessment values. This of course would necessarily require additional evaluation. There is also the perception that the small lots, which appear to be the driving factor for the public system needs, are also the lots that benefit the most. Under the current proposal for assessment the smaller the lot the less the assessment. The Township Officials again could reconsider the minimum assessments and propose increasing the minimum, which could in turn lessen the assessments on the larger lots. Again this is an issue that would be finalized at the time of project authorization.

**Response to persons who have made some type of repair to their on-lot system, which does not meet the current regulatory requirements but seemingly, has resulted in a functioning on-lot septic system:**

Many septic systems were modified or repaired using Best Technical Guidance (BTG) this type of repair or modification was done as a short-term interim fix to resolve some type of major malfunction. This type of repair in some instances may be within the required 100 foot isolation distance from a well, within the required 50 foot isolation distance of surface water, or within the minimum required isolation distance of four feet of suitable soil to the seasonal groundwater level. These repairs or modifications are deemed to be sources of groundwater contamination and as such are not considered long-term functional systems.

**Response to persons questioning the extent of the proposed sewer service area:**

A review of previous proposals back to 1998 indicate that the Moyer I and II Subdivision Areas were included as part of a potential project area.

**Response to concerns of the proposed construction process intersecting or disrupting shallow surface water supplies, such as springs or shallow wells:**

The Township is aware that shallow springs and wells could have their water supply zones interrupted during the construction process. The Township would require its consultants and contractors to be aware of the need to maintain the continuity of the shallow groundwater-bearing zone in the proximity of a shallow well or spring.

**Response to statements that if the sewer project was completed in the past it would have been less costly:**

This is a relative statement due to the fact that most costs escalate as time goes on and it is generally safe to say that as time goes on things will cost more. This

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same concept transfers to the property values and properties now are sold at a higher amount than what they were originally purchased for.

It is a reasonable expectation to suggest that as time goes on the project costs will increase.

**Response to affordability issue:**

The Township Officials are fully in agreement that the recommended "Vera Cruz" project is estimated to be very expensive. The Township Officials are also of the opinion that a long-term solution to this long-standing issue must be pursued. The Township Officials additionally are of the opinion that the Township must follow through on approving the Act 537 Plan so that they are in a position to go onto the next step, which is the development of detailed plans for the purpose of formulating and authorizing a future project. The Township Officials also are aware of the many residents who need public facilities because of their own inability to solve their own situation within the boundary of their own lot.

There is no expectation that there was, in the past, is now, or will be in the future a no or low cost long-term solution to this problem.

Webster's Dictionary defines afford as: "Manage to bear the cost."

It is reasonable to say that some residents or owners will "manage to bear the cost", but it is certain that there are many situations where it will be difficult or impossible for the owners to bear the cost.

It would be an easier task for the Township Officials to just say "its too expensive" and again let this long-standing problem continue to exist.

The current Township Official's, upon approval of the Act 537 Plan, will strive to achieve the most economical method(s) of providing a long-term solution to this problem of substandard and malfunctioning on-lot septic systems. All financial assistance and grant opportunities will be explored leading up to the ultimate goal of construction of public facilities. The Township Officials are aware that there are many instances where residents that had the ability to solve their malfunctioning septic system within the boundary of their own lot or by purchasing additional suitable property have taken it upon themselves to solve their own problem. Some of these instances were in conjunction with the sale or purchase of a particular property and some are because of enforcement actions.

Costs for these types of permitted systems including testing, consultant services, permits, and construction generally ranging from \$20,000 to \$25,000 not placing a valve on the land that must be available for the system to occupy. The Township currently has an agreement with an owner of a single-family residence, within the project area that rather than them installing the on-lot system that they

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hold a permit for, at an estimated cost of \$27,000, they wait until the status of a potential project is determined.

It is the Township Officials sincere desire to find a long-term solution to this, chronic, long-standing problem without the consequences of forcing residents to move out of their homes.

**Response to question of why isn't a public water system also being considered?**

It is reasonable to suggest that if it is already considered "unaffordable" to install a public sewage collection system the added expenses of also installing a public water system would, in all practicality, make it impossible to afford a dual project (water and sewer). It is anticipated that by eliminating or minimizing the current malfunctioning systems the potential for a long-term viable groundwater supply will be greatly enhanced. Additionally, there are very economical individual water treatment systems available, which would allow a resident an affordable on-lot solution for their individual water supply. As a side note, as unique as it might sound or seem, the State of Pennsylvania does not currently have any regulations for individual private groundwater supplies (wells). The State of Pennsylvania and looming Federal requirements have several regulations regarding wastewater disposal and environmental contamination.

**Response to resident requests to pursue additional grant opportunities and perhaps conduct another income survey:**

Officials of the Township have been in discussions with entities that can provide project grants, individual assistance grants, low interest project loans and individual low interest assistance loans. The program requirements may vary somewhat but generally the following scenario applies:

There must be an Income Survey completed by an independent organization. A minimum of 80 % of the households must respond and more than 50 % of the households must fall below the minimum income level. Past surveys and census data provide sufficient data to say that the proposed "Vera Cruz" project will not qualify for a grant based on the income level criteria.

Individuals that can meet the low to moderate-income level criteria may qualify themselves for individual grants, however; these persons would qualify themselves, based on their income at the time of a project. Other low interest loan options and subsidies are also available but they are also based on the situation and conditions at the time of a project being constructed and then on income data that is less than two years old.

Funding sources that previously subsidized the costs of an independent organization to do income surveys are no longer available, due to finding cuts, and at this time a third party income survey would necessarily be authorized by

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the Township's, at a fee for said survey. Due to the timeliness requirement of the income survey it is the Township's opinion not to proceed with the expense of an income survey until such time as it would be likely to be within the two year window of potential project construction.

The outside funding sources, or users of the income data, cautioned the Township on pursuing an income survey, over using the census data due to the condition that, should the median household income level be found to be above the census data level, the new survey data would become the benchmark for the project. (It should be noted that there is no outside agency requirement to do an income survey for the project area; i.e. if the Township would authorize an income survey and the results did indicate that the median household income level was greater than the census projection the Township would not necessarily submit that information to an outside agency.)

The Township is intending to pursue an income survey in a timely manner if or when the Act 537 Plan is approved.

**Response to question about individuals that would necessarily need to cross a "stream" with their private lateral connection:**

Although far from having the final details worked out for each individual situation, the Township and its consultants expect that the project, as a whole, would facilitate the permitting and stream crossings for all those properties within an authorized project. Additionally, it should be noted that the consultants for the Borough of Emmaus have indicated that Emmaus may have limited capacity to potentially accept minimum flows from the small area on the East side of Leibert's Creek (two or three units). The exact connection details, capacity and economics, would be explored as part of the final project process.

**Response to question of the appearance of the pump stations:**

Generally, the size of the pump stations being considered as one of the options for a proposed project is underground with a few pipes and a utility pole with associated control cabinet on the surface. It is highly likely that an emergency backup electric generator will be necessarily located near the pumping station(s). The generator may or may not be located within a building shelter. Most current backup generator units can be configured to set outside in the weather or to be adapted to a building. The final configuration would be decided upon during the detail plan and design process.

**Response to question of why the Mohr's property was not in the project area:**

The "exact" project area remains flexible, plus or minus a few properties which will be finalized at the time of project authorization.



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If the project were extended to include the Mohr's properties it would add an estimated cost of \$106,500 to a gravity project. The Mohr's would pay the same proportional tapping assessment and fees as everyone else. The net result of including the Mohr's as part of the current project area would be an estimated increased cost of \$270 to each of the other EDU connections in the project area.

If a low-pressure system becomes the method of service utilized connecting the Mohr's to the project area would add an estimated cost of \$155 to all the other individual EDU connections in the project area.

**Response to question of will the enactment of the Act 537 Plan cause the entire Township and all properties within the Township to eventually install and connect to expensive public sewerage systems:**

The plan recommends that public facilities be extended to the general area of Shimerville and Mill Road, Vera Cruz Road, Main Road East and West, Acorn Drive to the railroad and the Moyer I and II Subdivisions, (near the area of the intersection of Main Road East and Brunner Road) which includes the area known as the Village of Vera Cruz. This area consists of some of the older homes within the Township that were originally constructed on small lots, many without original internal plumbing or bathroom facilities within a general area of the Township that has a high water table and poor soil drainage (see attached Vera Cruz Project Area Map).

Public sewage facilities are being recommended at this time because this general area, through individual on-site evaluation has demonstrated a substantial failure rate along with the inability for the majority of the individual lot owners to properly and for the long term, repair their malfunctioning system within the boundary of their property.

The plan does allow for and recommend that public sewerage be extended toward the Golf Circle area of the Township as a developer installed extension of the Emmaus system and also that the area of South Seventh Street Extension and Pike Road immediately south of the Emmaus Borough limits be connected to public facilities (approximately 24-homes) through a minor planning module process.

The plan also recommends the Township establish a Septic Management Program for all properties that are not connected to a "public sewer system".

The overall goal of the Septic Management Program is to make sure that owners of on-lot septic systems regularly and routinely inspect and maintain their on-lot system and its components at a maximum interval of approximately three (3) years.

**Response to the question that the "Township" is proposing public sewer systems to allow for and to encourage "more development"!**

The Board of Supervisors are responsible as elected officials, to provide for the long-term sewerage disposal needs for the community and to also, plan for the future needs of the Township. The current plan revisions and update was started in 1996 with primary attention

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focused on the perceived existing problem areas such as the Vera Cruz Area and other similar existing "small lot-high density areas".

The Board of Supervisors have been pursuing a solution to the "existing problem areas" while being fully aware of the concept that public sewerage systems proliferate development.

The Township has, recently this year, adopted a Multi-Municipal Comprehensive Plan that in most locations reduces the overall development densities allowed by the previous plan (1985) and provides the framework, within the State Regulations, for maintaining the existing rural character of the Township. These goals will be implemented by updating the Township's current Zoning Ordinances, which provide the basis of development. The Township Board of Supervisors are proposing public sewerage facilities to solve existing wastewater disposal problems, not for the purpose of encouraging additional development.

**Response to the question that the approval of the Act 537 Plan approves or guarantees that there will be a sewer project.**

If or when the Act 537 Plan is approved by both the Township Board of Supervisors and the PA DEP, the Township must follow procedure to authorize a project or program by way of a public approval process that is specific to the project or program. The process would involve the development of very detailed and site specific plans, costs, cost recovery methods, financing, etc., which all would be included in the ordinance that would authorize a project to go to construction. This process alone would take from 1 to 1 ½ years to complete and would include additional public meetings. The Township is currently in a position of not having the plan approved and therefore not able to pursue additional avenues of funding or funding assistance. Upon approval of the Act 537 Plan the Township will be in a position to develop detailed final plans and programs, generate very accurate cost and financing information, and pursue all potential funding opportunities.

**Response to the questions regarding specific breakdown costs of the project, type of system, number of EDUs in the project, laterals, amount of money the Township has contributed to the project, the Township's intention of soliciting proposals for designs:**

1. Breakdown of the total project cost -	<u>\$7,245,000</u>
Administrative, Financial, Legal, Interest, Engineering, Permits	\$ 771,600
Land / Easements	\$ 60,000
Construction	\$5,144,000
Contingency	\$ 771,600
Capacity Purchase	\$ 497,860

2. What type of system? Gravity or Low-Pressure?

Combination; gravity, pump stations and low-pressure to be determined as part of the final design process

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3. How many EDU's are in the project?

Approximately 299 existing EDU's are within the anticipated project area subject to change at final design. (EDU's reserved for future use – 11 total EDU's)

4. Is the Plan for laterals to be run to the house or to the property line?

Laterals will be run to the property line / right-of-way line.

5. How much capacity is being purchased from LCA?

Non-Project Capacity – 250 Gal / Unit in the Western Lehigh Interceptor, 223 Gal / Unit in the Little Lehigh and LCA

6. How much has the Township paid for the 537 Plan?

\$130,000 ± to date (09/01/05) since 1998

7. Has DEP approved this amount?

DEP has approved all work that currently has been done related to the preparation of the Act 537 Plan.

8. Does the Township intend to solicit proposals for the design and construction of the project?

LCA, as the Township's Agent, will solicit design RFP's in accordance with the EPA Grant requirements. Project construction bids will be coordinated by LCA as the Township's agent in accordance with the grant requirements. At the time a project is authorized to be constructed.

9. What other communities use this assessment process?

In accordance with the law, "an assessment **must always be related to the benefits conferred upon the property owner.** The front foot assessment was created legislatively as a convenient method of apportioning costs. The foot-front rule contemplates an assessment to each property of the same proportion of the cost of the improvement as its frontage on the improvement bears to the total frontage of the lots of private owners on the main. It is intended to be used in urban areas where there is a certain uniformity of lots. ***When the property abutting an improvement is rural, the general rule is that it can be assessed only according to the benefits, and the foot-frontage rule is inapplicable***".

**Final property assessment criteria and amounts will be developed as part of the project authorization process and ordinance.**

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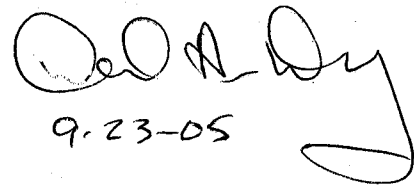
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**Response to question of meeting notes for a site walk of the project area that took place on October 7<sup>th</sup>, 2004.**

The meeting held on October 7<sup>th</sup>, 2004 was attended by representatives of PA Department of Environmental Protection, Lehigh County Authority, Upper Milford Township and Schoor DePalma. The purpose of this meeting was to review the August 7<sup>th</sup>, 2004 Act 537 Plan and to conduct a site visit of the "Vera Cruz" project area. The items discussed at the meeting is referenced in PA DEP's letter dated October 29<sup>th</sup>, 2004 from James A. Ridgik, P.E.

**Response to question as to why the plan "lumped" two zoning districts (R-SR and R-A) into the one study:**

Within the Moyer Subdivision the lot size is on average 21,000 square feet, well below the minimum required lot size of 50,000 square feet for the R-A Zoning District. In addition, there are numerous lots along Main Road East between Vera Cruz and the Moyer Subdivision, which are located in the R-A Zoning District but are much less than the required minimum lot area of 50,000 square feet. Also, per the Urbanized Area Outline Map (Census 2000) for the US Department of Commerce, Economics and Statistics Administration, US Census Bureau, the Moyer Subdivision as well as areas along Main Road East is designated as "Urbanized Area". Even though this service area is located in two separate zoning districts, the similarity of the land uses substantiates the consideration into one study area.

  
9.23-05



**SCHREITER ENGINEERING ASSOCIATES, Inc.**  
7 Raleigh Drive  
Downingtown, PA 19335-1103

September 22, 2005

*REVISION OF  
9-16-05 LETTER  
(TO CORRECT SPELLING ERROR)  
REVD 9-23-05*

Daniel A. DeLong, Township Manager  
Upper Milford Township  
PO Box 210  
Old Zionsville, PA 18068-0210

**Subject:** Upper Milford Township  
Act 537 Plan Revision  
Response to Haigh Comments  
SEA Project 050-001

Dear Dan:

As requested, we have reviewed your memo dated September 2, 2005 regarding the need to provide responses to certain questions contained in correspondence received from Mr. Bruce Haigh of Whittimore and Haigh Engineering, Inc.

We wish to provide the following responses:

**Haigh Letter of August 26, 2005**

**Question No. 5**

As outlined in Section 2.1.3 of the approved Scope of Work, the Needs Analysis was an Update of previous work completed in 1996 and 2000. The Scope clearly defined the methods that were to be used for conducting the Needs Analysis. It was our understanding that this analysis was only to update previous information. This documentation would provide better documentation for future funding from sources such as PennVest. Based on conversations with PennVest representatives, the information contained in the 2005 Act 537 Plan is sufficient to meet their requirements for project funding.

The approved Scope of Work requires the following methodology be used:



Mr. Dan DeLong  
September 22, 2005

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*This survey will be used to identify suspected and potential malfunctions in these areas. This inspection will only include visual observations of surface conditions. These conditions may include presence of lush green grass, marshy areas in the yard at drainfields, evidence of system surfacing, and subsequent runoff. This inspection will be used to identify potential surface failures. This data will be added to the overall needs block database.*

As outlined in PADEP's letter dated October 16, 2001, the Needs Analysis was to be based on the **guidelines** set forth in "Sewage Disposal Needs Identification Guidance, March 1996". Accordingly, our Scope of Work was prepared to meet these requirements. By letter dated October 16, 2001, the Scope of Work for the Needs Analysis updated was approved by PADEP. During the course of the Study, PADEP updated their **guidance** materials regarding Needs Analyses.

The Needs Study, as approved by PADEP in their letter dated March 27, 2002, was to be conducted during the spring and fall of 2002. However, there was a severe drought in the area that was present throughout 2001 and into 2002 severely limiting the validity of the results. Groundwater tables were extremely low and the ability to discover any on-site failures through surface observation as required in the approved Scope of work was limited. As a result, the work was delayed until 2003 when water table levels in the area began to rise. As a result, the initial Needs Study was completed in the spring 2003.

Under the methodology used in this Needs Study, we were able to look at various risk factors associated with use of on-site systems, not just specific factors shown in the Haigh letter. The final conclusions were based on looking at all of the factors, not specific factors for each area. Using this methodology, several areas of the Township were studied for potential sewer service. The results using all of the risk factors resulted in only the Vera Cruz area and Moyer Subdivision areas have a significant high risk to require sewer service. The other areas could remain using on-site systems until a need would develop in the future.

Based on PADEP's comments contained in their letter of October 29, 2004, this data analysis was further refined by the Township's SEO and presented in Appendix M of the 2005 document.

In all cases, the conclusions of the 2005 Act 537 Plan concurred with previous recommendations contained in past 537 Plan documents and Planning Studies prepared by the Lehigh Planning Commission. These studies were conducted as early as the 1970's. Since that time, each study has recommended providing sanitary sewer service to the Village of Vera Cruz Area.



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#### **Question No. 6**

This issue was discussed with PADEP during preparation of the Scope of work. It was determined that well sampling would not provide any significant data that would further define a need in this area. We were instructed to use data generated by the 1996 O'Dell study and incorporate that data into our Plan. Therefore, no well survey was included as part of the approved Scope of Work.

#### **Question No. 7**

As a result of the needs survey, several confirmed system failures were noted. Since these failures are surface failures, any runoff from the area of the failing on-site system was most likely to be discharged to a surface water body at some point. Elimination of this failure and subsequent runoff from the failures area would improve water quality.

The Scope of Work did not include any sampling of area streams or water bodies.

#### **Question No. 9**

As outlined in PADEP's letter dated October 16, 2001, the Needs Analysis was to be based on the **guidelines** set forth in "Sewage Disposal Needs Identification Guidance, March 1996". The document cited was dated April 1, 2002 and was not referenced in the approved Scope of Work.

#### **Question No. 10**

As part of the Needs Analysis, existing density was used as one of the "risk" factors. The density analysis was based on USEPA **guidance** contained in "*Construction Grants 1982 (CG-82), Interim Final*" (USEPA, July 1982). This guidance was based on the 1981 Amendments to the Clean water Act.

Based on this guidance, construction of gravity collection sewers and centralized treatment systems is cost effective for densities of less than one house per ½ acre. Areas with densities of over one house per 2 acres are not cost effective for central collection sewer systems. Those areas between 0.5 and 2.0 homes per acre must be further analyzed.

Based on a review of the "Designated Project Area", only those areas with high density will be serviced. If a sewer line connecting the high-density areas were located in these



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areas in the vicinity of houses situated on lots with a lower density, they would be serviced based on their proximity to the proposed sewer line. In certain cases, existing homes within the Proposed Sewer Service area were eliminated for service under the initial sewer project due to the high cost to provide service along with a lack of existing need at this time.

#### **Question No. 11**

The Lehigh Valley Planning Commission provided the overall population projections. The Township, Schoor DePalma, or SEA did not generate the projections. The population growth was then distributed throughout the entire Township based on factors such as available land, existing or proposed sewer service, and historical trends.

Within the Village of Vera Cruz, future growth was severely limited due to available land. Several of the larger tracts are included in the Agricultural Preservation Program and are not available for development. As a result, growth was very limited. A majority of the projected growth was assigned to areas with existing sewer service in other parts of the Township.

Furthermore, the Act 537 Plan defines the limits of future sewer service to those areas within the Proposed Sewer Service Areas (PSA's). Any requests for sewer service outside of these PSA's will require an amendment to the Township's Act 537 Plan. In addition, any costs related to extending sewer service within the PSA's as a result of new development would be borne by the Developer. Costs of extending sewers to the outer areas of the PSA's would severely limit the practicality of sewerage these areas for new service.

#### **Question No. 18**

This alternative was evaluated as part of Alternative #7. As stated on pages 3-63 and 3-64 of the 2005 Act 537 Plan, further consideration will be given to "low-pressure" sewer systems during the design phase of the project.





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### **Haigh Letter of August 25, 2005**

#### **Comment No. 5**

As outlined in PADEP's letter dated October 16, 2001, the Needs Analysis was to be based on the **guidelines** set forth in "Sewage Disposal Needs Identification Guidance, March 1996". The analysis was completed to meet the needs outlined in this guidance document. The analysis was also based on recently completed and PADEP approved studies for areas in the vicinity of Upper Milford Township.

As pointed out by Mr. Haigh in this comment, current PADEP guidance would require either Best Technical Guidance (BTG) or holding tanks in the higher density areas. It is our understanding that neither of these options is considered adequate long-term solutions for meeting an area's wastewater needs. Therefore, central collection sewers would be the only alternative to provide long-term solutions to meet the existing needs of the high-density areas.

#### **Comment No. 6**

The purpose of the meeting and site visit with PADEP staff was to review the results of the Needs Analysis with Township staff and familiarize the PADEP staff with the existing conditions of the on-site systems and their associated operational problems as documented in the Needs Analysis.

We have addressed the use of community systems in our letter dated August 29, 2005.

#### **Comment No. 8**

As pointed out in Mr. Haigh's comment Number 5, current PADEP guidance would require either Best Technical Guidance (BTG) or holding tanks in the higher density areas. It is our understanding that neither of these options is considered adequate long-term solutions for meeting an area's wastewater needs.



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### **Haigh Letter of August 29, 2005**

#### **Comment No. 2**

The capital cost for a conventional treatment plant was based on costs provided by another engineering firm for a recently constructed WWTP of similar size. It was assumed that this cost included not only the treatment plant, but also all associated facilities at the plant including sludge handling facilities, control building, and other miscellaneous facilities.

#### **Conclusion Comment**

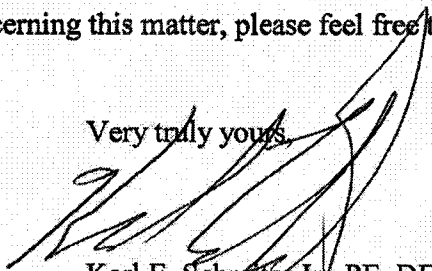
The 2005 Act 537 Plan already addresses the issue regarding use of low-pressure systems. These systems will be further evaluated during design of the system to determine if any cost savings are available without impacting the long-term reliability of the entire collection system.

The Township will address the requirement for connection during the design phase of the project. It must be noted that the Township will be required to comply with connection requirements contained in the Pennsylvania Township Code.

It must be further noted that none of the comments provided have demonstrated that a Need is not present in the designated project Area as presented in the 2005 Act 537 Plan. At best, these comments indicated that holding tanks and/or system repairs using BTG guidance would be a possible solution. In both cases, it is our understanding that PADEP does not consider either answer a reliable long-term solution to meet the needs of the Designated Project Area. It is still our Professional Engineering Opinion that the Selected Alternative as presented in the 2005 Act 537 Plan is the most reliable method to meet the long-term needs of Upper Milford Township.

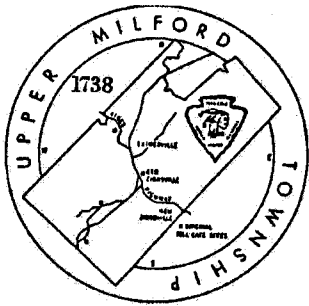
If you should have any further questions concerning this matter, please feel free to contact us.

Very truly yours,



Karl E. Schreffer Jr., PE, DEE  
President

Cc: R. Benner, Shoor DePalma  
J. Boldaz, Shoor DePalma



## UPPER MILFORD TOWNSHIP BOARD OF SUPERVISORS

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Old Zionsville, PA 18068  
Phone: (610) 966 - 3223 ~ Fax: (610) 966 - 5184  
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Chairman  
Susan J. Smith

Vice-Chairman  
Daniel J. Mohr

Supervisor  
Henry H. Kradjel

### UPPER MILFORD TOWNSHIP SEWERAGE FACILITIES PLAN (ACT 537) NOTICE OF PUBLIC MEETING AND FACT SHEET GENERAL INFORMATION AND CLARIFICATION:

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The Upper Milford Township Board of Supervisors is proposing to adopt revisions to its Official Sewerage Facilities Plan for the entire Township.

There will be a Special Meeting of the Township Board of Supervisors to be held on **THURSDAY, SEPTEMBER 29<sup>TH</sup>, 2005 AT 7:00 P.M.** in the **AUDITORIUM OF THE EYER MIDDLE SCHOOL**. Located at **5616 BUCKEYE ROAD, MACUNGIE, PA** at which time questions will be received and answered relative to the Plan content.

The information contained in this communication is for the purpose of summarizing the Plan content and informing the Township's residents of the facts of this plan.

The Plan requirement is authorized by the Pennsylvania Sewage Facilities Act (Act 537, as amended) enacted in 1966.

The primary purpose of the plan is for the purpose for addressing existing sewage disposal problems and planning for long-term wastewater disposal needs for the entire Township.

The Township began the plan revision process in 1996 for the purpose of addressing concerns about potentially failing or malfunctioning septic systems in the area of "Vera Cruz". Over the next several years the study area was enlarged to include 13-areas of similarity which were comprised of the more concentrated built-up areas of the Township. The areas studied in detail were selected primarily by looking at properties with small lot sizes where homes were close together, which included the Township's "Village Areas".

The Township's Sewerage Enforcement Officer met with Township residents over several years and performed on-site evaluations of the existing septic systems. This information was then tabulated and the concentrations of failing systems were analyzed. To no one's surprise the combination of small size lots and concentrated homes combined with the presence of high water tables and poorly drained soils exhibited a high concentration of failures. Many of these residents expressed their frustrations with seasonal problems associated with their malfunctioning on-lot system and how they as individuals, have modified their water usage to compensate for their situation. The majority of those persons also indicated that they would correct the problem on their lot if they could.

The Township's Sewerage Enforcement Officer examined various repair or on-site replacement solutions as viable alternatives to correct the observed malfunctions. It was determined that the combination of small lot size, concentrated housing, on-site wells, high water table and poor soil drainage made it impossible to correct many of these malfunctions via on-site system repair, or modification.

The above combination of limiting factors conclude that some type of public sewage collection system with off site treatment is the only viable long-term solution for wastewater disposal need for this identified area.

It should be noted that there are some areas of the Township that have small size lots without the associated problem of high water table and poor soil drainage that actually have functional or repairable malfunctioning on-lot systems.

After evaluating the Township sewerage needs in its entirety, along with the individual concentrated areas, the plan recommendations are as follows:

1. The Township should pursue the installation of public sewerage facilities to the general area of Shimerville Road and Mill Road, Vera Cruz Road, Main Road East and West, Acorn Drive to the railroad and the area of concentrated homes near the intersection of Main Road East with Brunner and Limeport Road. (The Vera Cruz Project Area)
2. The Township should pursue the extension of public sewerage facilities to the area of South 7<sup>th</sup> Street Extension and Pike Road, just south of the Emmaus Borough municipal limits. This project should be done via a planning module amendment with or without the Act 537 Plan approval.
3. Public sewer service to the Golf Circle Area will be provided in part by developer-installed extensions and / or if a future need is identified by a "public sewer project", both cases will be addressed with applicable PA DEP *Sewage Planning Modules*.
4. At this time there is insufficient demonstration of the need for public sewerage service in other areas of the Township and therefore all areas within the Act 537 Plan's proposed sewer servicing areas will be serviced with public facilities only when the need is demonstrated or justified.
5. The Township shall within nine (9) months of the Plan's approval, initiate the development of an "On-lot Septic Management Program" for all properties within the Township not connected to public sewer facilities. This program will be enabled through the adoption of a "Septic Management Ordinance" that will require that all on-lot systems be periodically maintained and inspected. The primary purpose of the "Septic Management Program" is to assure proper and timely maintenance and repairs of existing on-lot septic systems to assure the long-term functionality of these systems in order to avoid the installation of a very expensive public sewer system.

### **Most frequently asked questions and / or misconceptions about the Upper Milford Township Official Sewage Facilities Plan (Act 537 Plan).**

#### **What is an Act 537 Plan?**

On January 24, 1966, the Pennsylvania Sewage Facilities Act (Act 537, as amended) was enacted to correct existing sewage disposal problems and prevent future problems.

#### **History of the Act 537 Program**

Domestic sewage and wastewater are treated and disposed of by various methods, ranging from large municipally owned sewage treatment plants to community or individual on-lot disposal systems also called "septic systems". Malfunctioning sewage disposal systems, regardless of type, pose a serious threat to public health and the environment. They can pollute public and private drinking water sources, often by discharging directly to the groundwater, and they can expose humans and animals to various bacteria, viruses and parasites.

#### **The Major Provisions of Act 537**

All municipalities must develop and implement an official sewage plan that addresses their present and future sewage disposal needs. These plans are modified as new land development projects are proposed, or whenever a municipality's sewage disposal needs change. Pennsylvania's Department of Environmental Protection reviews and approves the official plans and any subsequent revisions.

## The Planning Process

Municipalities are required to develop and implement official sewage plans that: address existing sewage disposal needs or problems; account for future land development; and provide for future sewage disposal needs of the entire municipality. This document is called an "Official Plan".

"Official Plans" contain comprehensive information, including:

Population figures and projections; Drinking water supplies; Waterways, soil types and geological features; Sanitary survey results; Location, type and operational status of existing sewage facilities; Local zoning and land use designations; Estimates of the future sewage disposal needs; Identification of potential problem-solving alternatives; Cost estimates necessary to carry out those alternatives; and the selection of appropriate problem solving alternatives.

Municipalities are required to revise the "Official Plan" if a new land development project is proposed or if unanticipated conditions or circumstances arise that make the base plan inadequate.

**After Act 537 Plan approval the Municipality must then implement the recommendations of the approved plan. The recommended actions contained within the approved plan are carried out by subsequent enactment of various ordinances that authorize projects and / local municipal programs.**

### Act 537 Sewage Facilities Program Regulations

The DEP regulations that address the administration of the Act 537 planning process are found in the Title 25, Pennsylvania Code, Chapter 71. Rules for the on-lot disposal systems permitting process are found in Chapter 72 and technical standards addressing the design of on-lot disposal systems in Pennsylvania are found in Chapter 73. All three chapters are available online at <http://www.pacode.com>.

### Additional Information:

For more information, visit DEP's website at <http://www.dep.state.pa.us>, keyword: "DEP

Wastewater" or by contacting the Bureau of Water Supply and Wastewater Management, Division of Wastewater Management, 11<sup>th</sup> Floor, Rachel Carson State Office Building, PO Box 8774, Harrisburg, PA 17105-8774, (717) 787 - 8184 or by contacting your local DEP office.

**Misconception No. 1:** The Act 537 Plan will require the entire Township and all properties within the Township to eventually install and connect to expensive public sewerage systems. **NOT SO!** The plan recommends that public facilities be extended to the general area of Shimerville and Mill Road, Vera Cruz Road, Main Road East and West, Acorn Drive to the railroad and the Moyer I and II Subdivisions, (near the area of the intersection of Main Road East and Brunner Road) which includes the area known as the Village of Vera Cruz. This area consists of some of the older homes within the Township that were originally constructed on small lots, many without original internal plumbing or bathroom facilities within a general area of the Township that has a high water table and poor soil drainage (see attached Vera Cruz Project Area Map).

Public sewage facilities are being recommended at this time because this general area, through individual on-site evaluation has demonstrated a substantial failure rate along with the inability for the majority of the individual lot owners to properly and for the long term, repair their malfunctioning system within the boundary of their property.

The plan does allow for and recommend that public sewerage be extended toward the Golf Circle area of the Township as a developer installed extension of the Emmaus system and also that the area of South Seventh Street Extension and Pike Road immediately south of the Emmaus Borough limits be connected to public facilities (approximately 24-homes) through a minor planning module process.

The plan also recommends the Township establish a Septic Management Program for all properties that are not connected to a "public sewer system".

The overall goal of the Septic Management Program is to make sure that owners of on-lot septic systems regularly and routinely inspect and maintain their on-lot system and its components at a maximum interval of approximately three (3) years.

**Misconception No. 2:** The "Township" is proposing public sewer systems to allow for and to encourage "more development"!

The Board of Supervisors are responsible as elected officials, to provide for the long-term sewerage disposal needs for the community and to also, plan for the future needs of the Township. The current plan revisions and update was started in 1996 with primary attention focused on the perceived existing problem areas such as the Vera Cruz Area and other similar existing "small lot-high density areas".

The Board of Supervisors have been pursuing a solution to the "existing problem areas" while being fully aware of the concept that public sewerage systems proliferate development.

The Township has, recently this year, adopted a Multi-Municipal Comprehensive Plan that in most locations reduces the overall development densities allowed by the previous plan (1985) and provides the framework, within the State Regulations, for maintaining the existing rural character of the Township. These goals will be implemented by updating the Township's current Zoning Ordinances, which provide the basis of development. The Township Board of Supervisors are proposing public sewerage facilities to solve existing wastewater disposal problems, not for the purpose of encouraging additional development.

**Misconception No. 3:** Approval of the Act 537 Plan approves or guarantees that there will be a sewer project. **NOT SO!** If or when the Act 537 Plan is approved by both the Township Board of Supervisors and the PA DEP, the Township must follow procedure to authorize a project or program by way of a public approval process that is specific to the project or program. The process would involve the development of very detailed and site specific plans, costs, cost recovery methods, financing, etc., which all would be included in the ordinance that would authorize a project to go to construction. This process alone would take from 1 to 1 ½ years to complete and would include additional public meetings. The Township is currently in a position of not having the plan approved and therefore not able to pursue additional avenues of funding or funding assistance. Upon approval of the Act 537 Plan the Township will be in a position to develop detailed final plans and programs, generate very accurate

cost and financing information, and pursue all potential funding opportunities.

## **THE PROPOSED SEWER PROJECT AREA.**

### **Why is the proposed Vera Cruz public sewerage project needed?**

On-site specific inspections of existing on-lot septic systems within the proposed project area reveal that there is a high percentage rate of on-lot systems that are currently malfunctioning. Most of these systems do not now or cannot, with available technology, in the future meet the minimum requirements for an on-lot system. Some of the existing on-lot limitations for the recommended project area include, lots that are too small and have insufficient area to repair or replace their existing on-lot system, lots that are located in areas where the soils exhibit poor drainage characteristics due to a high water table (the groundwater table level is very close to the surface), some lots contain significant areas that are identified as floodplain, or the lot, or adjacent lots water source (well) precludes the installation of a repair that meets the minimum 100 feet separation distance requirement. Essentially, there is a high percentage of existing lots or properties that cannot solve their wastewater disposal needs on their own lot.

The inability to solve the wastewater disposal needs on-lot is the primary factor driving the need for public facilities.

### **Why is the proposed "Vera Cruz" project expensive?**

Project expense is directly related to the need for a large number of pipes and associated facilities and an overall low density of homes over the entire project area. The existing physical conditions, hills, streams, wetlands, roads being state roads, and The Pennsylvania Historical and Museum Commission requirements all add to the complexity of the project, which increase the total cost.

### **Why doesn't the Township pay for the recommended sewer project?**

The elected officials; (Board of Supervisors), have the authority to spend General Funds as they determine to be in the best interest of the Community or Municipality. Generally, the Board of

Supervisors spend funds on projects that provide direct benefit to every resident such as; Library Services, Parks, Emergency Services, and road work; even though these services may not be used by every resident they are the type of service that is available to everyone. Generally, user specific services, although may be partly subsidized by the Township's General Funds, for the most part are primarily funded through the implementation of user fees. Such user-based services are like; Building Permit fees, individual park facility rentals for private groups, public sewer services, public water services, etc. Similarly, such services may not be available for use by everyone and for the most part, provide a primary benefit or value to the user.

The Township has authorized and implemented several public sewer projects in the past and the residents, who were the users or beneficiaries of the project, have paid for said benefit or improvement. The Township has in the past paid for roadway related expenses or improvements as a method of subsidizing a sewer project with General Township Funds.

Individuals, that implement permitted on-lot septic system repairs to solve their wastewater disposal needs do so at their own expense and responsibility with the realization that they will not be subsidized by the other Township Residents.

**I or we, have already paid to install an expensive sewer project throughout our neighborhood. Will we get a rebate on what we already paid, if the new project connects to "our" pipes?**

No, there will be no direct rebate back to the property owners that paid for the sewer project. However, tapping fees on an Equivalent Dwelling Unit (EDU) basis will be collected from the new project, these tapping fees will be utilized to reduce the principal balance of the monies borrowed to construct the project. If enough new tapping fees were collected the on-going annual user charges would be reduced.

**If my property is in the recommended project area, must I connect if I have a functioning on-lot septic system?**

The financial analysis presented in the Act 537 Plan assumes that all properties within the Project Area will be required to connect. However,

connection requirements, costs, cost recovery methods, etc. will be finalized at a later date upon approval of the project authorization ordinance. The Board of Supervisors has the authority to set exemption limits if they determine the need to do so. The minimum exemption distance could be limited to wastewater generating facilities greater than 150 feet from the public facilities. The drawback is that for every EDU exempted \$16,850 in project revenue is lost, which would need to be recovered from those properties remaining in the project by increasing the tapping fees, or the on-going user charges.

**Will current customers of the Upper Milford Township public sewer system operated by LCA be required to pay additional fees or higher rates to supplement the "Vera Cruz" project?**

There are no plans to levy additional fees or to increase the existing user rates to subsidize the "Vera Cruz" project. Final costs, cost recovery methods and project authorization will be developed during the project authorization ordinance.

**Why didn't PennDOT pave Main Road East and West from Limeport Road to the Turnpike Bridge at the Citizen's Fire Company?**

The area not paved was intentionally left out of the current paving schedule and moved to the July 2007 to June 2008 paving program, at the request of the Township. PennDOT has indicated, that if the Township can have the pipes in place in the area of Main Roads East and West by July 2007, that PennDOT will pave the roadway at no additional expense to the project (a value of approximately \$120,000 or approximately \$425 per property within the project area). If the Township doesn't have the pipes in place by July 2007 it will be an added cost to the project and the roadway paving will need to be included in the project.

**Affordability and Financial Impacts:**

Many questions have been asked about the costs to individuals, the costs to current public sewer system customers, and the costs to the Township's residents who will not be getting public sewers to their residences. How will an owner be able to afford this project? What type of financial assistance or grants will be available? Must I connect now or can I wait until my existing

## VERA CRUZ PROJECT INFORMATION – (A Summary of a Previous Mailing)

functioning system goes bad? The concern of individual owners of large properties with several environmental limitations that would preclude further development with projections of high assessments? What happens if interest rates continue to increase? What about the “sky rocketing” costs of construction and materials?

These questions are all very important and of great concern to everyone.

Although the Township and its consultants have developed preliminary estimates for the general “Vera Cruz” project area, the details must be further refined through extensive engineering design and additional field work in order to determine the final project limits, where the pipes will be physically located, how deep, size, etc. This work logically takes place after the Act 537 Plan is approved. The detailed design will evaluate low-pressure (all properties have an individual pump) systems, gravity flow with several large capacity pumping stations and a possible combination of low-pressure gravity and pumping stations. The detail design will allow the Township and its consultants to evaluate the most economical method of providing a long-term solution for wastewater disposal for this area of the Township.

At a point when the engineering details and options are available, costs will be refined and the Township and its consultants will be in a position to develop final cost projections which would allow the Township to authorize the project and specify the cost recovery methods.

It is also, at that time when the final cost assessments, connection and tapping fees and various schemes for financing will be developed and proposed to the residents impacted by the project. In so much, as we do not know if existing grant programs will be continued or if new grant program opportunities will be available or what interest rates may be at the time of construction, we do know that the majority of grant opportunities become available when the project goes to construction or when the owner qualifies himself/herself for grant funds at the time they must connect to the public facilities.

The final project level financial details will be developed after the Act 537 Plan is approved but prior to a project being constructed.

**The “Vera Cruz” Project Area:** The proposed project will provide sewer service to 251 properties in the Village of Vera Cruz and adjacent areas including properties within the address ranges listed below:

5220-5329 Acorn Drive / All of Barney Avenue  
All of Bow Lane / 2641-2784 Brunner Road  
2462-2540 Chock Road / All of Jarvis Drive  
5161-5251 Limeport Road  
2795-3851 Main Road East  
3883-4093 Main Road West  
All of Marion Place / 4031-4391 Mill Road  
3471-3501 Quarry Drive  
4102-4287 Shimerville Road / All of Sickle Circle  
5123 - 5311 Sickle Road / All of Spruce Road  
4521-5501 Vera Cruz Road

(It should be noted that the final area is subject to be a few properties more or less determined by final detailed design.) A map of the project area is attached for your reference.

This preliminary project area was determined after careful consideration of many alternatives to meet the sewerage needs of this area, including a variety of routes for the sewer system, the use of a gravity system vs. pump stations, constructing a small, local wastewater treatment Plant vs. connecting into the regional system, or doing nothing at all. This proposed project includes providing sewer service to the Vera Cruz area of Leibert’s Creek Basin and connecting to Lehigh County Authority’s (LCA) existing facilities in the area of Route 29 for transmission into the regional sewer system and final treatment at the City of Allentown’s Wastewater Treatment Plant. The project will utilize a combination of gravity and pump stations or low-pressure system to transfer waste into the LCA system.

This project was determined to be the best alternative for the Township because it will address the high concentration of failing septic systems in the Project Area. Nearly 85 % of the homes in the project area were determined to have confirmed, suspected or potential malfunctioning septic systems, according to an analysis based on Pennsylvania’s Department of Environmental Protection (PA DEP) criteria. This proposed project would take advantage of the regional sewer system



and treatment plant already in place, thereby avoiding the high cost of constructing and operating a separate treatment plant in the Township.

In accordance with the Second Class Township Code, all properties that are adjoining or adjacent to the sanitary sewer, or whose principal building is within 150' (feet) of the sanitary sewer, will be required to connect.

**Project Costs and Impacts on Residents:**

The estimated total project cost is \$7,245,000. This is due to the length of pipe (more than six miles), the two pump stations required for this project, restoration of PennDOT roadways, as well as the required precautions that must be taken to preserve historically significant archaeological resources in the project area.

To help pay for this project, the Township will allocate \$924,000 from an EPA Grant received previously for sewer projects. LCA is also contributing \$310,000 to the project. Both Township and LCA Officials are applying for additional grants and loans to help pay for this project, and will continue to seek ways to reduce the cost to residents.

Property Assessment: Property values are expected to increase in this area because this project will solve a major environmental problem in the Township and provide for a much-needed public service. Therefore, the Property Assessment fee is based on the estimated increase in the assessed value of your property based on the availability of public sewer service. The fee will vary from \$40 to \$18,000. The average fee will be \$1,100. All properties within the project area, except those exempted by law will pay an assessment fee.

Equivalent Dwelling Unit Charges (Tapping Fees): An Equivalent Dwelling Unit (EDU) is a single residential unit such as a single-family home or one apartment. Businesses will be assigned multiple EDUs based on their usage. The EDU Charges (also called Tapping Fees) are based on the appropriate share per EDU of the cost to treat the wastewater at Allentown's Treatment Plant, the facility cost to transmit the wastewater through LCA's regional system, and the cost of the project itself. The total per-EDU Charge will be \$3,250. This means that a single-family home (1 EDU)

would pay \$3,250; a single-family home with attached rental unit (2 EDUs) would pay \$6,500; and a three-unit apartment building (3 EDUs) would pay \$9,750. All properties required to connect will pay these fees.

Private Plumbing Connection Costs: Property owners will be responsible for making the physical connection from their property to the public sewer system as well as other required plumbing modifications. These private plumbing costs are estimated between \$3,000 and \$5,000, with the typical property being approximately \$3,500.

In Summary: the one-time, upfront costs to individual property owners is calculated to be:

Property Assessment	\$1,100 (average)
EDU Charges (Tapping Fees)	\$3,250 (1 EDU)
<u>Private Plumbing Costs</u>	<u>\$3,500 (typical)</u>
<u>Total Upfront Cost</u>	<u>\$7,850 (average)</u>

**Ongoing Sewer Rates:** The upfront costs outlined above will significantly offset the project costs. However, remaining project costs must be recovered through the sewer billing rates, which will be calculated on a per-EDU basis.

The sewer rates will be composed of two parts:

- Upper Milford Township Sewer Rate – currently \$451 per year
- Vera Cruz Project Surcharge – estimated at \$927 per year (for approximately 20-years)

This combined rate comes to a total of \$1,378 per EDU per year (or \$115 per month).

These estimated sewer rates will be reduced if additional funding becomes available through grants or other sources that the Township and LCA are currently pursuing.

**Project Schedule:** Following the Township's approval of the Act 537 Plan, PA DEP will review the Plan for approval. Once the Plan is approved, the Vera Cruz project must then be authorized by the Township's Board of Supervisors, and additional public meetings will be held to review a more detailed project analysis at that time. Should all of these steps be successful, then system construction is estimated to begin in early 2007.

**SPECIAL MEETING:**

**Date:**

September 29<sup>th</sup>, 2005

**Time:**

7:00 p.m.

**Place:**

Eyer Middle School  
Auditorium  
5616 Buckeye Road  
Macungie, PA

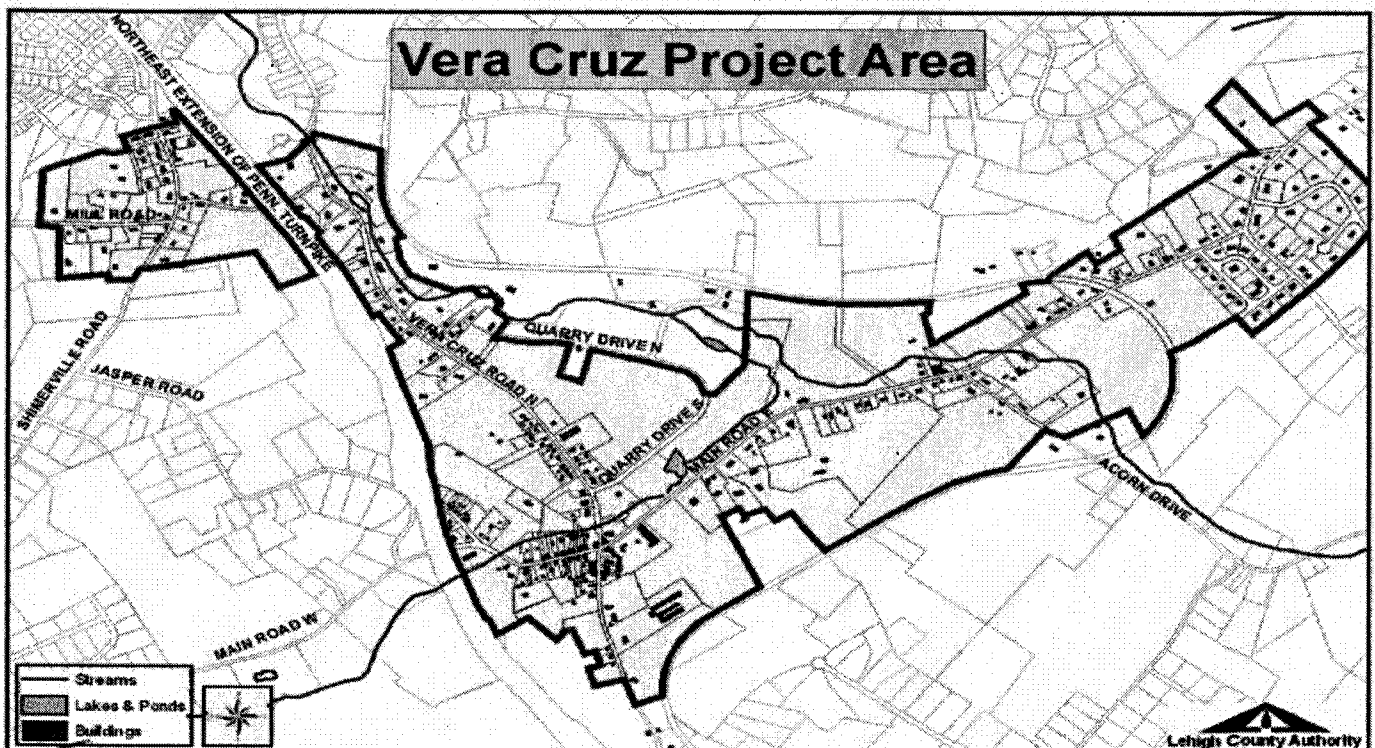
**Presented By:**

Upper Milford Township  
Board of Supervisors

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**IMPORTANT INFORMATION FOR UPPER MILFORD TOWNSHIP RESIDENTS.**

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The complete Act 537 Plan can be viewed on-line at <http://www.uppermilford.net> click on Act 537 Plan.