

**APPENDIX 0-6**

**DEPARTMENT OF ENVIRONMENTAL PROTECTION  
CORRESPONDENCE AND PLANNING DOCUMENTS**



RECEIVED AUG 30 2002

Pennsylvania Department of Environmental Protection

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909 Elmerton Avenue  
Harrisburg, PA 17110-8200

August 28, 2002

Southcentral Regional Office

(717) 705-4707  
FAX (717) 705-4760

Amity Township Supervisors  
c/o Kelly J. Yanos, Secretary  
2004 Weavertown Road  
Douglasville, PA 19518-8971

Re: Act 537 Planning (06917)  
Plan of Study and Task/Activity Report  
Amity Township, Berks County

Ladies and Gentlemen:

We received a Task/Activity Report for preparation of an Act 537 Update Revision submitted by LTL Consultants Ltd., under a cover letter dated May 28, 2002.

We have approved your Plan of Study for an estimated total cost of \$58,000. The resulting Act 537 Update Revision must be consistent with Act 537, Chapter 71, Sections 71.21 and 71.31 of DEP regulations, and with information contained in both A Guide for Preparing Act 537 Update Revisions (February 1998), and Sewage Disposal Needs Identification Guidance (March 1996). In accordance with your approved Task/Activity Report, your completed planning package will be submitted to the Department for review by October 2003.

Please remember, following adoption and 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.

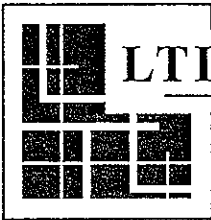
If you have any questions, please call me at 717-705-4766.

Sincerely,

Paul Curry  
Sewage Planning Specialist  
Water Management Program

cc: LTL Consultants Ltd.





**LTL CONSULTANTS, LTD. • ENGINEERS & CODE OFFICIALS**

PO BOX 241 • ONE TOWN CENTRE DRIVE • OLEY, PA 19547  
(610) 987-9290 • FAX: (610) 987-9288

May 28, 2002

Amity Township Board of Supervisors  
Attn: Mr. George Tindall, Township Manager  
2004 Weavertown Road  
Douglassville, PA 19518

RE: Act 537 Plan Revision  
Plan of Study

Dear George:

As requested by the Township, LTL Consultants has prepared the attached Plan of Study for the Amity Township Act 537 Plan Revision. The Plan of Study contains a brief description of what the Plan Revision will include, an outline of the Plan Revision, and a Task/Activity report which establishes a preliminary budget for the Plan Revision.

If the Board finds the Plan of Study acceptable, the Township Manager should sign the bottom of the Task/Activity report and then submit the Plan of Study to PaDEP.

Typically, DEP recommends a meeting with the Township, its consultant and DEP prior to the commencement of an Act 537 Plan. If the Township desires such a meeting, please let me know and I will schedule a meeting with DEP and any Township officials who desire to attend.

If you have any questions, please contact me at 610-987-9290.

Sincerely,

A handwritten signature in black ink, appearing to read "John W. Weber".

John W. Weber, P.E.  
LTL Consultants, Ltd.  
Amity Township Engineer

Attachment

cc: File:F:\Amity\Engineer\2002\Act 537 Plan of Study 052802.wpd

ACT 537 PLAN REVISION

PLAN OF STUDY

FOR

AMITY TOWNSHIP

BERKS COUNTY

Prepared by:

LTL Consultants, Ltd.  
May 28, 2002

Amity Township is a Township of the Second Class located in southeastern Berks County with a population of approximately 8,900. The purpose of the proposed Act 537 Plan Revision will be to update the Township's current Act 537 Plan which is dated June 1989.

The wastewater disposal needs of Amity Township are handled by a combination of public sewer with treatment at the Amity Township Subregional Wastewater Treatment Plant, and on-lot sewage disposal systems. The rated capacity of the wastewater treatment plant is 1.6 MGD. According to the Amity Township 2001 Municipal Wasteland Management Report, the overall average flow to the treatment plan was 1,034 MGD in 2001. The public sewer system of Amity Township served approximately 3,413 EDU's in 2001 comprised of 2,910 residential single unit EDU's and 512 commercial EDU's. The remainder of the Township relies on on-lot sewage disposal systems for wastewater disposal.

Currently, approximately 1,800 EDU's have been reserved for the Amity Township public sewer which have not yet been connected. Connection of these reserved EDU's will bring the sewage treatment plant to or near its rated capacity. Therefore, the Amity Township Board of Supervisors submitted a Rerate Feasibility Evaluation dated December 2001 for the sewage treatment plant to PaDEP. Upon review of this Rerate Feasibility Evaluation, PaDEP determined that the Township's Act 537 Plan also needed to be updated.

The proposed Act 537 Plan Revision which is the subject of this Plan of Study will evaluate the wastewater disposal needs of Amity Township for a 10 year planning period. Specifically, the Plan Revision will analyze the wastewater disposal needs of all areas of the Township that are not currently connected to the public sewer system or have EDU's reserved for future connection to the public sewer system. Such analysis will include: provisions for upgrading the sewage treatment plant; determination of future public sewer service areas based upon in-depth sewage needs analysis and sound land use planning; sewer routing alternatives; analysis of existing testing procedures for on-lot sewage system siting; analysis of the need for an on-lot sewage management program, etc. The Plan Revision will also include all the required background, administration, consistency, and institutional information.

The following is a proposed outline of the Amity Township Act 537 Plan Revision as well as a task/activity report.

**AMITY TOWNSHIP**  
**ACT 537 PLAN REVISION**  
**PLAN OF STUDY**

Plan Summary

- A. Service Areas Evaluated
- B. Selected Alternatives and Costs
- C. Implementation Schedule
- I Previous Planning
  - A. Previous Wastewater Planning Documents
  - B. Summary of Municipal and County Planning Documents
- II Physical Analysis of Planning Area
  - A. Identification of Planning Area
  - B. Identification of Physical Characteristics
  - C. Soils Analysis
  - D. Geologic Features
  - E. Topography
  - F. Potable Water Supplies
  - G. Wetlands
- III Existing Sewage Facilities and Needs Analysis
  - A. Existing Sewage Facilities
  - B. Sewage Needs Analysis

IV Land Development and Future Growth

- A. Subdivisions Approved After 1983
- B. Land Use Designations Established Under the Pennsylvania Municipalities Planning Code
- C. Population Projections
- D. Future Growth Areas

V Alternatives to Provide Wastewater Disposal Facilities

- A. Conventional Public Sewer Alternatives
- B. Individual Sewage Disposal Systems
- C. Small Flow Sewage Treatment Facilities
- D. Community Land Disposal Systems
- E. Retaining Tanks Alternative
- F. Sewage Management Program
- G. Comprehensive Planning Alternative
- H. No-Action Alternative

VI Evaluation of Alternatives

- A. Technically Feasible Alternatives
- B. Consistency Requirements
- C. Immediate or Phase Implementation of Alternatives
- D. Analysis of Funding Methods

VII Institutional Evaluation

A. Existing Wastewater Treatment Authority

B. Need for New Municipal Departments or Authorities

C. Administrative and Legal Activities to be Completed to Ensure Implementation of the Selected Alternatives

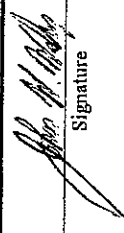
VIII Justification for Selected Alternatives

**TASK/ACTIVITY**  
Amity Township Berks County Amity Township May 28, 2002  
Proposed Planning Area (Attach Map) Date of Report

Date completed plan will be submitted to DEP October 2003 Estimated Cost of Plan \$ 58,000  
Column Headings May Be Changed To Suit The Needs of the Planning Effort Use Additional Sheets if Necessary Sheet 1 of 2

| TASK<br>ACTIVITY<br>NUMBER<br>FROM APPENDIX I<br>////////// | PRINCIPAL   |      | PROJECT ENG. |      | SR. ENG.    |      | ENGINEER    |      | PLANNER     |      | DRAFTSMAN   |        | CLERICAL    |      | LEGAL       |      | SUB<br>TOTAL |
|---|-------------|------|--------------|------|-------------|------|-------------|------|-------------|------|-------------|--------|-------------|------|-------------|------|--------------|
|   | HR/<br>RATE | COST | HR/<br>RATE  | COST | HR/<br>RATE | COST | HR/<br>RATE | COST | HR/<br>RATE | COST | HR/<br>RATE | COST   | HR/<br>RATE | COST | HR/<br>RATE | COST |              |
| I.A   |             |      |              |      | 5           | 370  |             |      |             |      |             |        | 2           | 56   |             |      | 426          |
| I.B   |             |      |              |      | 5           | 370  |             |      |             |      |             |        | 2           | 56   |             |      | 426          |
| II.A  | 5           | 395  |              |      | 4.5         | 333  | 9           | 576  |             |      | 2           | 85     | 1           | 28   |             |      | 1417         |
| II.B  |             |      |              |      | 12          | 888  | 10          | 640  |             |      | 2           | 85     | 1           | 28   |             |      | 1641         |
| II.C  |             |      |              |      | 12          | 888  | 10          | 640  |             |      | 2           | 85     | 1           | 28   |             |      | 1641         |
| II.D  |             |      |              |      | 6           | 444  | 10          | 640  |             |      | 2           | 85     | 1           | 28   |             |      | 1197         |
| II.E  |             |      |              |      | 10          | 740  | 10          | 640  |             |      | 2           | 85     | 1           | 28   |             |      | 1493         |
| II.F  |             |      |              |      | 12          | 888  | 10          | 640  |             |      | 2           | 85     | 1           | 28   |             |      | 1641         |
| II.G  |             |      |              |      | 10          | 740  | 10          | 640  |             |      | 2           | 85     | 1           | 28   |             |      | 1493         |
| III.A   | 5           | 395  |              |      | 9.5         | 703  | 10          | 640  |             |      | 5           | 212.50 | 2           | 56   |             |      | 2006.50      |
| III.B   | 10          | 790  |              |      | 9           | 666  | 20          | 1280 |             |      | 120         | 5100   | 5           | 140  |             |      | 7976         |
| IV.A  |             |      |              |      | 6           | 444  | 10          | 640  |             |      | 24          | 1020   | 4           | 112  |             |      | 2216         |
| IV.B  |             |      |              |      | 5           | 370  |             |      |             |      |             |        | 1           | 28   |             |      | 398          |
| IV.C  |             |      |              |      | 10          | 740  | 10          | 640  |             |      |             |        | 1           | 28   |             |      | 1408         |
| IV.D  |             |      |              |      | 20          | 1480 | 20          | 1280 |             |      |             |        | 2           | 56   |             |      | 2816         |
| V.A   | 20          | 1580 |              |      | 60          | 4440 | 20          | 1280 |             |      | 40          | 1700   | 5           | 140  |             |      | 9140         |

John W. Weber  
Name of Person Completing Report

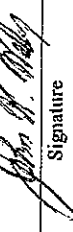
  
Signature

Consulting Engineer  
Title

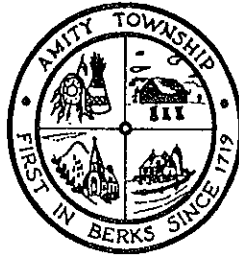
Municipal Secretary Signature

Date completed plan will be submitted to DEP October 2003 Estimated Cost of Plan \$58,000  
 Column Headings May Be Changed To Suit The Needs of the Planning Effort Use Additional Sheets if Necessary Sheet 2 of 2

| TASK<br>ACTIVITY<br>NUMBER | PRINCIPAL   |              | PROJECT ENG. |              | SR. ENG.    |              | ENGINEER    |              | PLANNER     |              | DRAFTSMAN   |              | CLERICAL    |              | LEGAL       |              | SUB<br>TOTAL |
|----------------------------|-------------|--------------|--------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|--------------|
|                            | HR/<br>RATE | HRS.<br>COST | HR/<br>RATE  | HRS.<br>COST | HR/<br>RATE | HRS.<br>COST | HR/<br>RATE | HRS.<br>COST | HR/<br>RATE | HRS.<br>COST | HR/<br>RATE | HRS.<br>COST | HR/<br>RATE | HRS.<br>COST | HR/<br>RATE | HRS.<br>COST |              |
| FROM APPENDIX I            | 79.00       |              |              |              | 74.00       | 54.00        | 42.50       | 28.00        |             |              |             |              |             |              | 1.25        |              |              |
| //////////                 |             |              |              |              |             |              |             |              |             |              |             |              |             |              |             |              |              |
| V.B                        |             |              |              |              | 20          | 5            | 10          | 3            |             |              |             |              |             |              |             |              | 2309         |
| V.C                        |             |              |              |              | 10          | 5            |             | 1            |             |              |             |              |             |              |             |              | 1088         |
| V.D                        |             |              |              |              | 10          | 5            |             | 1            |             |              |             |              |             |              |             |              | 1088         |
| V.E                        |             |              |              |              | 2           |              |             |              |             |              |             |              |             |              |             |              | 176          |
| V.F                        |             |              |              |              | 20          |              |             | 3            |             |              |             |              |             |              |             |              | 1564         |
| V.G                        |             |              |              |              | 5           |              |             | 1            |             |              |             |              |             |              |             |              | 398          |
| V.H                        |             |              |              |              | 1           |              |             | 1            |             |              |             |              |             |              |             |              | 102          |
| VI.A                       |             |              |              |              | 40          | 20           |             | 4            |             |              |             |              |             |              |             |              | 4352         |
| VI.B                       |             |              |              |              | 20          | 10           |             | 2            |             |              |             |              |             |              |             |              | 2801         |
| VI.C                       |             |              |              |              | 5           |              |             | 1            |             |              |             |              |             |              |             |              | 398          |
| VI.D                       | 10          | 790          |              |              | 2           | 148          |             | 1            |             |              |             |              |             |              |             |              | 1606         |
| VII.A                      |             |              |              |              | 2           | 148          |             | 1            |             |              |             |              |             |              |             |              | 176          |
| VII.B                      |             |              |              |              | 2           | 148          |             | 1            |             |              |             |              |             |              |             |              | 801          |
| VII.C                      |             |              |              |              | 2           | 148          |             | 1            |             |              |             |              |             |              |             |              | 1426         |
| VIII                       | 5           | 395          |              |              | 7           | 518          |             | 22           |             |              |             |              |             |              |             |              | 2377         |

Name of Person Completing Report John W. Weber Title Consulting Engineer  
 Signature  Municipal Secretary Signature \_\_\_\_\_  
 362-0300-003 / February 4, 1998 / Appendix A / Page 2

RECEIVED MAY 09 2002



Township Office:  
2004 Weavertown Road  
Douglassville, PA 19518-8971

Phone: 610-689-6000  
Fax: 610-689-9870

AMITY TOWNSHIP  
Board of Supervisors

May 7, 2002

LTL Consultants, LTD.  
P.O. Box 241  
One Town Centre Drive  
Oley, PA 19547  
ATTN: Mr. Dan Weber

Dear Mr. Weber:

This letter is to confirm the actions of the Board of Supervisors at their regular meeting on May 6, 2002. The Board authorized LTL Consultants, LTD. to prepare a full Township Act 537 Plan. I anticipate a recommended Plan of Study be available for review to the Board by May 29, 2002 for the June 3, 2002 Board Meeting.

As always, I am available for meetings and to provide information at your request.

Sincerely,

George Tindall  
Township Manager

GT/lam



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATER SUPPLY AND WASTEWATER MANAGEMENT

## Act 537 Plan Content and Environmental Assessment Checklist

### PART 1 GENERAL INFORMATION

#### A. Project Information

1. Project Name **Amity Township Act 537 Sewage Facilities Plan Update**
2. Brief Project Description **Update to Amity Township, Berks County, 1989 Sewage Facilities Plan**

#### B. Client (Municipality) Information

|   |                        |                                   |                          |                                       |
|---|------------------------|-----------------------------------|--------------------------|---------------------------------------|
| Municipality Name                           | County                 | City                              | Boro                     | Twp                                   |
| <b>Amity Township</b>                       | <b>Berks</b>           | <input type="checkbox"/>          | <input type="checkbox"/> | <input checked="" type="checkbox"/>   |
| Municipality Contact Individual - Last Name | First Name             | MI                                | Suffix                   | Title                                 |
| <b>Sills</b>                                | <b>Dr. Eric</b>        |                                   |                          | <b>Chairman, Board of Supervisors</b> |
| Additional Individual Last Name             | First Name             | MI                                | Suffix                   | Title                                 |
| <b>Lyon</b>                                 | <b>Charles</b>         | <b>E</b>                          |                          | <b>Township Manager</b>               |
| Municipality Mailing Address Line 1         | Mailing Address Line 2 |                                   |                          |                                       |
| <b>2004 Weavertown Road</b>                 |                        |                                   |                          |                                       |
| Address Last Line -- City                   | State                  | ZIP+4                             |                          |                                       |
| <b>Douglassville</b>                        | <b>PA</b>              | <b>19518-8971</b>                 |                          |                                       |
| Phone + Ext.                                | FAX (optional)         | Email (optional)                  |                          |                                       |
| <b>610-689-6000</b>                         | <b>610-689-9870</b>    | <b>Clyon@amitytpw.berksco.org</b> |                          |                                       |

#### C. Site Information

|  |  |
|--|--|
| Site (or Project) Name                       |  |
| <b>Act 537 Sewage Facilities Plan Update</b> | <b>Amity Township, Berks County Act 537 Plan</b> |
| Site Location Line 1                         | Site Location Line 2                             |
|  |  |

#### D. Project Consultant Information

|                                     |                              |                     |              |
|-------------------------------------|------------------------------|---------------------|--------------|
| Last Name                           | First Name                   | MI                  | Suffix       |
| <b>Schwartz</b>                     | <b>Paul</b>                  |                     | <b>L</b>     |
| Title                               | Consulting Firm Name         |                     |              |
| <b>Senior Planner</b>               | <b>LTL Consultants, Ltd.</b> |                     |              |
| Mailing Address Line 1              | Mailing Address Line 2       |                     |              |
| <b>P.O. Box 241</b>                 | <b>1 Town Centre Dr</b>      |                     |              |
| Address Last Line -- City           | State                        | ZIP+4               | Country      |
| <b>Oley</b>                         | <b>PA</b>                    | <b>19547</b>        | <b>Berks</b> |
| Email                               | Phone + Ext.                 | FAX                 |              |
| <b>pschwartz@ltlconsultants.com</b> | <b>610-987-9290</b>          | <b>610-987-9288</b> |              |

**PART 2 ADMINISTRATIVE COMPLETENESS CHECKLIST**

|                     |                                   |  |
|---------------------|-----------------------------------|--|
| <b>DEP Use Only</b> | <b>Indicate Page #(s) in Plan</b> | In addition to the main body of the plan, the plan must include items one through eight listed below to be accepted for formal review by the department. Incomplete Plans will be returned unless the municipality is clearly requesting an advisory review. |
|---------------------|-----------------------------------|--|

- |       |  |  |
|-------|--|--|
| <hr/> | <u><b>i - viii</b></u>                   | <b>1. Table of Contents</b>  |
|       | <u><b>0-1</b></u>                        | <b>2. Plan Summary</b>   |
| <hr/> | <u><b>0-1</b></u>                        | A. Identify the proposed service areas and major problems evaluated in the plan. (Reference - Title 25, §71.21.a.7.i).   |
| <hr/> | <u><b>0-1</b></u>                        | B. Identify the alternative(s) chosen to solve the problems and serve the areas of need identified in the plan. Also, include any institutional arrangements necessary to implement the chosen alternative(s). (Reference Title 25 §71.21.a.7.ii).   |
| <hr/> | <u><b>0-2</b></u>                        | C. Present the estimated cost of implementing the proposed alternative (including the user fees) and the proposed funding method to be used. (Reference Title 25, §71.21.a.7.ii).  |
| <hr/> | <u><b>0-2</b></u>                        | D. Identify the municipal commitments necessary to implement the Plan. (Reference Title 25, §71.21.a.7.iii).   |
| <hr/> | <u><b>0-2</b></u>                        | E. Provide a schedule of implementation for the project that identifies the MAJOR milestones with dates necessary to accomplish the project to the point of operational status. (Reference Title 25, §71.21.a.7.iv).   |
| <hr/> | <u><b>0-3, Appendix 0-1</b></u>          | <b>3. Municipal Adoption: Original</b> , signed and sealed Resolution of Adoption by the municipality which contains, at a minimum, alternatives chosen and a commitment to implement the Plan in accordance with the implementation schedule. (Reference Title 25, §71.31.f) Section V.F. of the Planning Guide.  |
| <hr/> | <u><b>0-3, Appen- dices 0-2, 0-3</b></u> | <b>4. Planning Commission / County Health Department Comments:</b> Evidence that the municipality has requested, reviewed and considered comments by appropriate official planning agencies of the municipality, planning agencies of the county, planning agencies with area wide jurisdiction (where applicable), and any existing county or joint county departments of health. (Reference-Title 25, §71.31.b) Section V.E.1 of the Planning Guide.   |
| <hr/> | <u><b>0-3, Appendix 0-4</b></u>          | <b>5. Publication:</b> Proof of Public Notice which documents the proposed plan adoption, plan summary, and the establishment and conduct of a 30 day comment period. (Reference-Title 25, §71.31.c) Section V.E.2 of the Planning Guide.  |
| <hr/> | <u><b>0-3, Appendix 0-5</b></u>          | <b>6. Comments and Responses:</b> Copies of ALL written comments received and municipal response to EACH comment in relation to the proposed plan. (Reference-Title 25, §71.31.c) Section V.E.2 of the Planning Guide.   |
| <hr/> | <u><b>0-3</b></u>                        | <b>7. Implementation Schedule:</b> A complete project implementation schedule with milestone dates specific for each existing and future area of need. Other activities in the project implementation schedule should be indicated as occurring a finite number of days from a major milestone. (Reference-Title 25, §71.31.d) Section V.F. of the Planning Guide. Include dates for the future initiation of feasibility evaluations in the project's implementation schedule for areas proposing completion of sewage facilities for planning periods in excess of five years. (Reference Title 25, §71.21.c). |
| <hr/> | <u><b>0-5</b></u>                        | <b>8. Consistency Documentation:</b> Documentation indicating that the appropriate agencies have received, reviewed and concurred with the method proposed to resolve identified inconsistencies within the proposed alternative and consistency requirements in 71.21.(a)(5)(i-iii). (Reference-Title 25, §71.31.e). Appendix B of the Planning Guide.  |

**PART 3 GENERAL PLAN CONTENT CHECKLIST**

| DEP<br>Use<br>Only | Indicate<br>Page #(s)<br>in Plan | Item Required  |
|--------------------|----------------------------------|--|
| _____              | <u>1-1</u>                       | <b>I. Previous Wastewater Planning</b>   |
| _____              |                                  | A. Identify, describe and briefly analyze all past wastewater planning for its impact on the current planning effort:  |
| _____              | <u>1-1</u>                       | 1. Previously undertaken under the Sewage Facilities Act (Act 537). (Reference-Act 537, Section 5 §d.1).   |
| _____              | <u>1-1</u>                       | 2. 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.  |
| _____              | <u>1-1</u>                       | 3. 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&B). Section V.D. of the Planning Guide.  |
| _____              | <u>1-2</u>                       | 4. Through planning modules for new land development, planning "exemptions" and addenda. (Reference-Title 25, §71.21.a.5.i.A).   |
| _____              | <u>2-1</u>                       | <b>II. Physical and Demographic Analysis utilizing written description and mapping</b><br>(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>2-1</u>                       | A. Identification of planning area(s), municipal boundaries, Sewer Authority/Management Agency service area boundaries. (Reference-Title 25, §71.21.a.1.i).  |
| _____              | <u>2-1</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>2-2</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>2-5</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>2-8</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>2-8</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.   |

- \_\_\_\_\_ 2-9 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.
- \_\_\_\_\_ 3-1 III. **Existing Sewage Facilities in the Planning Area - Identifying the Existing Needs**
- \_\_\_\_\_ 3-1 A. Identify, map and describe municipal and non-municipal, individual and community sewerage systems in the planning area including:
- \_\_\_\_\_ 3-1 1. Location, size and ownership of treatment facilities, main intercepting lines, pumping stations and force mains including their size, capacity, point of discharge. Also include the name of the receiving stream, drainage basin, and the facility's effluent discharge requirements. (Reference-Title 25, §71.21a.2.i.A).
- \_\_\_\_\_ 3-1 2. A narrative and schematic diagram of the facility's basic treatment processes including the facility's NPDES permitted capacity, and the Clean Streams Law permit number. (Reference-Title 25, §71.21.a.2.i.A).
- \_\_\_\_\_ 3-4 3. A description of problems with existing facilities (collection, conveyance and/or treatment), including existing or projected overload under Title 25, 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).
- \_\_\_\_\_ 3-5 4. Details of scheduled or in-progress upgrading or expansion of treatment facilities and the anticipated completion date of the improvements. Discuss any remaining reserve capacity and the policy concerning the allocation of reserve capacity. Also discuss the compatibility of the rate of growth to existing and proposed wastewater treatment facilities. (Reference-Title 25, §71.21.a.4.i & ii).
- \_\_\_\_\_ 3-5 5. A detailed description of the municipality's operation and maintenance requirements for small flow treatment facility systems, including the status of past and present compliance with these requirements and any other requirements relating to sewage management programs. (Reference-Title 25, §71.21.a.2.i.C).
- \_\_\_\_\_ 3-6 6. Disposal areas, if other than stream discharge, and any applicable groundwater limitations. (Reference-Title 25, §71.21.a.4.i & ii).
- \_\_\_\_\_ 3-7 B. Using DEP's publication titled *Sewage Disposal Needs Identification*, identify, map and describe areas that utilize individual and community onlot sewage disposal and, unpermitted collection and disposal systems ("wildcat" sewers, borehole disposal, etc.) and retaining tank systems in the planning area including:
- \_\_\_\_\_ 3-7 1. The types of onlot systems in use. (Reference-Title 25, §71.21.a.2.ii.A).
- \_\_\_\_\_ 3-8 2. A sanitary survey complete with description, map and tabulation of documented and potential public health, pollution, and operational problems (including malfunctioning systems) with the systems, including violations of local ordinances, the Sewage Facilities Act, the Clean Stream Law or regulations promulgated thereunder. (Reference-Title 25, §71.21.a.2.ii.B).
- \_\_\_\_\_ 3-8 3. A comparison of the types of onlot sewage systems installed in an area with the types of systems which are appropriate for the area according to soil, geologic conditions, topographic limitations sewage flows, and Title 25 Chapter 73 (relating to standards for sewage disposal facilities). (Reference-Title 25, §71.21.a.2.ii.C).

- \_\_\_\_\_ 3-9 4. An individual water supply survey to identify possible contamination by malfunctioning onlot sewage disposal systems consistent with DEP's *Sewage Disposal Needs Identification* publication. (Reference-Title 25 §71.21.a.2.ii.B).
- \_\_\_\_\_ 3-9 5. Detailed description of operation and maintenance requirements of the municipality for individual and small volume community onlot systems, including the status of past and present compliance with these requirements and any other requirements relating to sewage management programs. (Reference-Title 25, §71.21.a.2.i.C).
- \_\_\_\_\_ 3-9 C. Identify wastewater sludge and septage generation, transport and disposal methods. Include this information in the sewage facilities alternative analysis including:
  - \_\_\_\_\_ 3-9 1. Location of sources of wastewater sludge or septage (Septic tanks, holding tanks, wastewater treatment facilities). (Reference-Title 25 §71.71).
  - \_\_\_\_\_ 3-10 2. Quantities of the types of sludges or septage generated. (Reference-Title 25 §71.71).
  - \_\_\_\_\_ 3-10 3. Present disposal methods, locations, capacities and transportation methods. (Reference-Title 25 §71.71).

\_\_\_\_\_ 4-1 **IV. Future Growth and Land Development**

- A. Identify and briefly summarize all municipal and county planning documents adopted pursuant to the Pennsylvania Municipalities Planning Code (Act 247) including:
  - \_\_\_\_\_ 4-1, Fig. 4-2 1. All land use plans and zoning maps that identify residential, commercial, industrial, agricultural, recreational and open space areas. (Reference-Title 25, §71.21.a.3.iv).
  - \_\_\_\_\_ 4-1 2. Zoning or subdivision regulations that establish lot sizes predicated on sewage disposal methods. (Reference – Title 25§71.21.a.3.iv).
  - \_\_\_\_\_ 4-2 3. All limitations and plans related to floodplain and stormwater management and special protection (Ch. 93) areas. (Reference-Title 25 §71.21.a.3.iv) Appendix B, Section II.F of the Planning Guide.
- B. Delineate and describe the following through map, text and analysis.
  - \_\_\_\_\_ 4-1, Table 4-1A 1. Areas with existing development or plotted subdivisions. Include the name, location, description, total number of EDU's in development, total number of EDU's currently developed and total number of EDU's remaining to be developed (include time schedule for EDU's remaining to be developed). (Reference-Title 25, §71.21.a.3.i).
  - \_\_\_\_\_ 4-1 2. Land use designations established under the Pennsylvania Municipalities Planning Code (35 P.S. 10101-11202), including residential, commercial and industrial areas. (Reference-Title 25,§71.21.a.3.ii). Include a comparison of proposed land use as allowed by zoning and existing sewage facility planning. (Reference-Title 25, §71.21.a.3.iv).
  - \_\_\_\_\_ 4-3 3. Future growth areas with population and EDU projections for these areas using historical, current and future population figures and projections of the municipality. Discuss and evaluate discrepancies between local, county, state and federal projections as they relate to sewage facilities. (Reference-Title 25, §71.21.a.1.iv). (Reference-Title 25, §71.21.a.3.iii).

- \_\_\_\_\_ 4-6 4. Zoning, and/or subdivision regulations; local, county or regional comprehensive plans; and existing plans of any other agency relating to the development, use and protection of land and water resources with special attention to: (Reference-Title 25, §71.21.a.3.iv).
  - public ground/surface water supplies
  - recreational water use areas
  - groundwater recharge areas
  - industrial water use
  - wetlands
- \_\_\_\_\_ 4-7 5. Sewage planning necessary to provide adequate wastewater treatment for five and ten year future planning periods based on projected growth of existing and proposed wastewater collection and treatment facilities. (Reference-Title 25, §71.21.a.3.v).

\_\_\_\_\_ 5-1 **V. Identify Alternatives to Provide New or Improved Wastewater Disposal Facilities**

\_\_\_\_\_ 5-1 **A. Conventional collection, conveyance, treatment and discharge alternatives including:**

- \_\_\_\_\_ 5-1 1. The potential for regional wastewater treatment. (Reference-Title 25, §71.21.a.4).
- \_\_\_\_\_ 5-1 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).
- \_\_\_\_\_ 5-2 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).
  - \_\_\_\_\_ 5-2 a. Repair. (Reference-Title 25, §71.21.a.4.ii.A).
  - \_\_\_\_\_ 5-2 b. Upgrading. (Reference-Title 25, §71.21.a.4.ii.B).
  - \_\_\_\_\_ 5-2 c. Reduction of hydraulic or organic loading to existing facilities. (Reference-Title 25, §71.71).
  - \_\_\_\_\_ 5-2 d. Improved operation and maintenance. Reference-Title 25, §71.21.a.4.ii.C).
  - \_\_\_\_\_ 5-2 e. Other applicable actions that will resolve or abate the identified problems. (Reference-Title 25, §71.21.a.4.ii.D).
- \_\_\_\_\_ 5-2 4. Repair or replacement of existing collection and conveyance system components. (Reference-Title 25, §71.21.a.4.ii.A).
- \_\_\_\_\_ 5-2 5. The need for construction of new community sewage systems including sewer systems and/or treatment facilities. (Reference-Title 25, §71.21.a.4.iii).
- \_\_\_\_\_ 5-2 6. Use of innovative/alternative methods of collection/conveyance to serve needs areas using existing wastewater treatment facilities. (Reference-Title 25, §71.21.a.4.ii.B).

\_\_\_\_\_ 5-2 **B. The use of individual sewage disposal systems including individual residential spray irrigation systems based on:**

- \_\_\_\_\_ 5-2 1. Soil and slope suitability. (Reference-Title 25, §71.21.a.2.ii.C).
- \_\_\_\_\_ 5-2 2. Preliminary hydrogeologic evaluation. (Reference-Title 25, §71.21.a.2.ii.C).
- \_\_\_\_\_ 5-4 3. The establishment of a sewage management program. (Reference-Title 25, §71.21.a.4.iv). See also Part "F" below.
- \_\_\_\_\_ 5-2 4. The repair, replacement or upgrading of existing malfunctioning systems in

areas suitable for onlot disposal considering: (Reference-Title 25, §71.21.a.4).

- \_\_\_\_\_ 5-2 a. Existing technology and sizing requirements of Title 25 Chapter 73. (Reference-Title 25, §73.31-73.72).
- \_\_\_\_\_ 5-2 b. Use of expanded absorption areas or alternating absorption areas. (Reference-Title 25, §73.16).
- \_\_\_\_\_ 5-2 c. Use of water conservation devices. (Reference-Title 25, §71.73.b.2.iii).
- \_\_\_\_\_ 5-2 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).
  - \_\_\_\_\_ 5-3 1. Treatment and discharge requirements. (Reference-Title 25, §71.64.d).
  - \_\_\_\_\_ 5-3 2. Soil suitability. (Reference-Title 25, §71.64.c.i).
  - \_\_\_\_\_ 5-3 3. Preliminary hydrogeologic evaluation. (Reference-Title 25, §71.64.c.2).
  - \_\_\_\_\_ 5-3 4. Municipal, Local, Agency or other controls over operation and maintenance requirements through a Sewage Management Program. (Reference-Title 25, §71.64.d). See Part "F" below.
- \_\_\_\_\_ 5-4 D. The use of community land disposal alternatives including:
  - \_\_\_\_\_ 5-4 1. Soil and site suitability. (Reference-Title 25, §71.21.a.2.ii.C).
  - \_\_\_\_\_ 5-4 2. Preliminary hydrogeologic evaluation. (Reference-Title 25, §71.21.a.2.ii.C).
  - \_\_\_\_\_ 5-4 3. Municipality, Local Agency or Other Controls over operation and maintenance requirements through a Sewage Management Program (Reference-Title 25, §71.21.a.2.ii.C). See Part "F" below.
  - \_\_\_\_\_ 5-4 4. The rehabilitation or replacement of existing malfunctioning community land disposal systems. (See Part "V", B, 4, a, b, c above). See also Part "F" below.
- \_\_\_\_\_ 5-4 E. The use of retaining tank alternatives on a temporary or permanent basis including: (Reference- Title 25, §71.21.a.4).
  - \_\_\_\_\_ 5-4 1. Commercial, residential and industrial use. (Reference-Title 25, §71.63.e).
  - \_\_\_\_\_ 5-4 2. Designated conveyance facilities (pumper trucks). (Reference-Title 25, §71.63.b.2).
  - \_\_\_\_\_ 5-4 3. Designated treatment facilities or disposal site. (Reference-Title 25, §71.63.b.2).
  - \_\_\_\_\_ 5-4 4. Implementation of a retaining tank ordinance by the municipality. (Reference-Title 25, §71.63.c.3). See Part "F" below.
  - \_\_\_\_\_ 5-4 5. Financial guarantees when retaining tanks are used as an interim sewage disposal measure. (Reference-Title 25, §71.63.c.2).
- \_\_\_\_\_ 5-5 F. Sewage Management Programs to assure the future operation and maintenance of existing and proposed sewage facilities through:
  - \_\_\_\_\_ 5-5 1. Municipal ownership or control over the operation and maintenance of individual onlot sewage disposal systems, small flow treatment facilities, or other traditionally non-municipal treatment facilities. (Reference-Title 25, §71.21.a.4.iv).
  - \_\_\_\_\_ 5-5 2. Required inspection of sewage disposal systems on a schedule established by the municipality. (Reference-Title 25, §71.73.b.1.).
  - \_\_\_\_\_ 5-5 3. Required maintenance of sewage disposal systems including septic and aerobic treatment tanks and other system components on a schedule

established by the municipality. (Reference-Title 25, §71.73.b.2).

- \_\_\_\_\_ 5-5 4. Repair, replacement or upgrading of malfunctioning onlot sewage systems. (Reference-Title 25, §71.21.a.4.iv) and §71.73.b.5 through:
  - \_\_\_\_\_ 5-5 a. Aggressive pro-active enforcement of ordinances that require operation and maintenance and prohibit malfunctioning systems. (Reference-Title 25, §71.73.b.5).
  - \_\_\_\_\_ 5-5 b. Public education programs to encourage proper operation and maintenance and repair of sewage disposal systems.
- \_\_\_\_\_ 5-6 5. Establishment of joint municipal sewage management programs. (Reference-Title 25, §71.73.b.8).
- \_\_\_\_\_ 5-6 6. Requirements for bonding, escrow accounts, management agencies or associations to assure operation and maintenance for non-municipal facilities. (Reference-Title 25, §71.71).
- \_\_\_\_\_ 5-6 G. Non-structural comprehensive planning alternatives that can be undertaken to assist in meeting existing and future sewage disposal needs including: (Reference-Title 25, §71.21.a.4).
  - \_\_\_\_\_ 5-6 1. Modification of existing comprehensive plans involving:
    - \_\_\_\_\_ 5-6 a. Land use designations. (Reference-Title 25, §71.21.a.4).
    - \_\_\_\_\_ 5-6 b. Densities. (Reference-Title 25, §71.21.a.4).
    - \_\_\_\_\_ 5-6 c. Municipal ordinances and regulations. (Reference-Title 25, §71.21.a.4).
    - \_\_\_\_\_ 5-6 d. Improved enforcement. (Reference-Title 25, §71.21.a.4).
    - \_\_\_\_\_ 5-6 e. Protection of drinking water sources. (Reference-Title 25, §71.21.a.4).
  - \_\_\_\_\_ 5-6 2. Consideration of a local comprehensive plan to assist in producing sound economic and consistent land development. (Reference-Title 25, §71.21.a.4).
  - \_\_\_\_\_ 5-6 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).
  - \_\_\_\_\_ 5-6 4. Evaluation of existing local agency programs and the need for technical or administrative training. (Reference-Title 25, §71.21.a.4).
- \_\_\_\_\_ 5-6 H. A no-action alternative which includes discussion of both short-term and long-term impacts on: (Reference-Title 25, §71.21.a.4).
  - \_\_\_\_\_ 5-6 1. Water Quality/Public Health. (Reference-Title 25, §71.21.a.4).
  - \_\_\_\_\_ 5-7 2. Growth potential (residential, commercial, industrial). (Reference-Title 25, §71.21.a.4).
  - \_\_\_\_\_ 5-7 3. Community economic conditions. (Reference-Title 25, §71.21.a.4).
  - \_\_\_\_\_ 5-7 4. Recreational opportunities. (Reference-Title 25, §71.21.a.4).
  - \_\_\_\_\_ 5-8 5. Drinking water sources. (Reference-Title 25, §71.21.a.4).
  - \_\_\_\_\_ 5-8 6. Other environmental concerns. (Reference-Title 25, §71.21.a.4).

**VI. Evaluation of Alternatives**

- \_\_\_\_\_ 6-1 A. Technically feasible alternatives identified in Section V of this check-list must be evaluated for consistency with respect to the following: (Reference-Title 25, §71.21.a.5.i.).
  - \_\_\_\_\_ 6-1 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.

- \_\_\_\_\_ 6-1      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.
- \_\_\_\_\_ 6-1      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.
- \_\_\_\_\_ 6-2      4. **Comprehensive plans** developed under the Pennsylvania Municipalities Planning Code. (Reference-Title 25, §71.21.a.5.i.D). The municipality's comprehensive plan must be examined to assure that the proposed wastewater disposal alternative is consistent with land use and all other requirements stated in the comprehensive plan. Appendix B, Section II.D of the Planning Guide.
- \_\_\_\_\_ 6-2      5. **Antidegradation requirements** as contained in PA Code, Title 25, Chapters 93, 95 and 102 (relating to water quality standards, wastewater treatment requirements and erosion control) and the Clean Water Act. (Reference-Title 25, §71.21.a.5.i.E). Appendix B, Section II.F of the Planning Guide.
- \_\_\_\_\_ 6-2      6. **State Water Plans** developed under the Water Resources Planning Act (42 U.S.C.A. 1962-1962 d-18). (Reference-Title 25, §71.21.a.5.i.F). Appendix B, Section II.C of the Planning Guide.
- \_\_\_\_\_ 6-3      7. **Pennsylvania Prime Agricultural Land Policy** contained in Title 4 of the Pennsylvania Code, Chapter 7, Subchapter W. Provide narrative on local municipal policy and an overlay map on prime agricultural soils. (Reference-Title 25, §71.21.a.5.i.G). Appendix B, Section II.G of the Planning Guide.
- \_\_\_\_\_ 6-4      8. **County Stormwater Management Plans** approved by DEP under the Storm Water Management Act (32 P.S. 680.1-680.17). (Reference-Title 25, §71.21.a.5.i.H). Conflicts created by the implementation of the proposed wastewater alternative and the existing recommendations for the management of stormwater in the county Stormwater Management Plan must be evaluated and mitigated. If no plan exists, no conflict exists. Appendix B, Section II.H of the Planning Guide.
- \_\_\_\_\_ 6-4      9. **Wetland Protection.** Using wetland mapping developed under Checklist Section II.G, identify and discuss mitigative measures including the need to obtain permits for any encroachments on wetlands from the construction or operation of any proposed wastewater facilities. (Reference-Title 25, §71.21.a.5.i.I) Appendix B, Section II.I of the Planning Guide.
- \_\_\_\_\_ 6-4.  
Appendix  
6-1      10. **Protection of rare, endangered or threatened plant and animal species** as identified by the Pennsylvania Natural Diversity Inventory (PNDI). (Reference-Title 25, §71.21.a.5.i.J). Provide DEP with a copy of the completed Request For PNDI Search document. Also provide a copy of the response letter from the Department of Conservation and Natural Resources' Bureau of Forestry regarding the findings of the PNDI search. Appendix B, Section II.J of the Planning Guide.
- \_\_\_\_\_ 6-4.  
Appendix  
6-2      11. **Historical and archaeological resource protection** under P.C.S. Title 37, Section 507 relating to cooperation by public officials with the Pennsylvania Historical and Museum Commission. (Reference-Title 25, §71.21.a.5.i.K). Provide the department with a completed copy of a Cultural Resource Notice

request of the Bureau of Historic Preservation (BHP) to provide a listing of known historical sites and potential impacts on known archaeological and historical sites. Also provide a copy of the response letter from the BHP. Appendix B, Section II.K of the Planning Guide.

- \_\_\_\_\_ 6-4 B. Provide for the resolution of any inconsistencies in any of the points identified in Section VI.A. of this checklist by submitting a letter from the appropriate agency stating that the agency has received, reviewed and concurred with the resolution of identified inconsistencies. (Reference-Title 25, §71.21.a.5.ii). Appendix B of the Planning Guide.
- \_\_\_\_\_ 6-4 C. Evaluate alternatives identified in Section V of this checklist with respect to applicable water quality standards, effluent limitations or other technical, legislative or legal requirements. (Reference-Title 25, §71.21.a.5.iii).
- \_\_\_\_\_ 6-5 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).
- \_\_\_\_\_ 6-6 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).
- \_\_\_\_\_ 6-6 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).
- \_\_\_\_\_ 6-6 1. 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).
- \_\_\_\_\_ 6-6 2. 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).
- \_\_\_\_\_ 6-6 G. Evaluate administrative organizations and legal authority necessary for plan implementation. (Reference - Title 25, §71.21.a.5.vi.D).
- \_\_\_\_\_ 7-1 **VII. Institutional Evaluation**
- \_\_\_\_\_ 7-1 A. Provide an analysis of all existing wastewater treatment authorities, their past actions and present performance including:
- \_\_\_\_\_ 7-1 1. Financial and debt status. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-1 2. Available staff and administrative resources. (Reference-Title 25, §71.61.d.2)
- \_\_\_\_\_ 7-1 3. Existing legal authority to:
- \_\_\_\_\_ 7-1 a. Implement wastewater planning recommendations. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-1 b. Implement system-wide operation and maintenance activities. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-1 c. Set user fees and take purchasing actions. (Reference-Title 25, §71.61.d.2).

- \_\_\_\_\_ 7-1 d. Take enforcement actions against ordinance violators. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-1 e. Negotiate agreements with other parties. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-1 f. Raise capital for construction and operation and maintenance of facilities. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-1 B. Provide an analysis and description of the various institutional alternatives necessary to implement the proposed technical alternatives including:
- \_\_\_\_\_ 7-1 1. Need for new municipal departments or municipal authorities. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-2 2. Functions of existing and proposed organizations (sewer authorities, onlot maintenance agencies, etc.). (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-2 3. Cost of administration, implementability, and the capability of the authority/agency to react to future needs. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-2 C. Describe all necessary administrative and legal activities to be completed and adopted to ensure the implementation of the recommended alternative including:
- \_\_\_\_\_ 7-2 1. Incorporation of authorities or agencies. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-2 2. Development of all required ordinances, regulations, standards and inter-municipal agreements. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-2 3. Description of activities to provide rights-of-way, easements and land transfers. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-2 4. Adoption of other municipal sewage facilities plans. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-2 5. Any other legal documents. (Reference-Title 25, §71.61.d.2).
- \_\_\_\_\_ 7-2 6. Dates or timeframes for items 1-5 above on the project's implementation schedule.
- \_\_\_\_\_ 7-3 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).

8-1 **VIII. Implementation Schedule and Justification for Selected Technical & Institutional 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:
  - \_\_\_\_\_ 8-1 1. Existing wastewater disposal needs. (Reference-Title 25, §71.21.a.6).
  - \_\_\_\_\_ 8-2 2. Future wastewater disposal needs. (five and ten years growth areas). (Reference-Title 25, §71.21.a.6).
  - \_\_\_\_\_ 8-2 3. Operation and maintenance considerations. (Reference-Title 25, §71.21.a.6).
  - \_\_\_\_\_ 8-2 4. Cost-effectiveness. (Reference-Title 25, §71.21.a.6).
  - \_\_\_\_\_ 8-2 5. Available management and administrative systems. (Reference-Title 25, §71.21.a.6).
  - \_\_\_\_\_ 8-2 6. Available financing methods. (Reference-Title 25, §71.21.a.6).

- \_\_\_\_\_ 8-3 7. Environmental soundness and compliance with natural resource planning and preservation programs. (Reference-Title 25, §71.21.a.6).
  - \_\_\_\_\_ 8-3 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)
  - \_\_\_\_\_ 8-3 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)
- IX. Environmental Report (ER) generated from the Uniform Environmental Review Process (UER)**
- \_\_\_\_\_ NA A. 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.*

**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 | Item Required   |
|--------------|----------------------------|---|
| _____        | _____                      | 1. Environmental Impact Assessment. (Planning Phase)<br>The Uniform Environment Review (UER) replaces the Environmental Impact Assessment that was a previous requirement for PENNVEST projects.  |
| _____        | _____                      | 2. Cost Effectiveness (Planning Phase)<br>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)   |